



Bricsys®

System variable reference (V26)



Bricsys®



Contents

1.		63
1.1	_QUADTABFLAGS system variable	63
1.1.1	Quad tab flags	63
1.2	_VERNUM system variable	63
1.2.1	Version number (Read Only)	63
2.	2	64
2.1	2DCONSTRAINTFLAGS system variable	64
2.1.1	2D Constraint Flags	64
3.	3	65
3.1	3DCOMPAREMODE system variable	65
3.1.1	Compare mode	65
3.2	3DOSMODE system variable	65
3.2.1	3D entity snap mode	65
3.3	3DSNAPMARKERCOLOR system variable	66
3.3.1	3d snap marker color	66
4.	A	67
4.1	ACADLSPASDOC system variable	67
4.1.1	on_start.lsp for each doc	67
4.2	ACADPREFIX system variable	67
4.2.1	Program folder path (Read only)	67
4.3	ACADVER system variable	67
4.3.1	AutoCAD version (Read Only)	67
4.4	ACISHLRRESOLUTION system variable	67
4.4.1	Hidden line removal resolution	67
4.5	ACISSAVEEASMODE system variable	68
4.5.1	Acis save as mode	68
4.6	ACISOUTVER system variable	68
4.6.1	Acisout version	68
4.7	ADAPTIVEGRIDSTEPSize system variable	68
4.7.1	Adaptive grid step size	68
4.8	AFLAGS system variable	69
4.8.1	Attribute options	69
4.9	ALIGNDIMENSIONONISOMETRIC system variable	69
4.9.1	Dimension alignment	69
4.10	ALLOWEDBENDANGLES system variable	70
4.10.1	Allowed bend angles	70
4.11	ALLOWTABEXTERNALMOVE system variable	70
4.11.1	Move tabs externally (Mac & Linux)	70
4.12	ALLOWTABMOVE system variable	70
4.12.1	Move tabs (Mac & Linux)	70
4.13	ALLOWTABSPLIT system variable	71
4.13.1	Split tabs (Mac & Linux)	71
4.14	AMPOWERDIMDISPLAY system variable	71
4.14.1	Mechanical 2D Editor	71
4.15	AMSYMSCALE system variable	71
4.15.1	Mechanical2D annotation scaling	71
4.16	ANGBASE system variable	72
4.16.1	Angle base	72



Contents

4.17	ANGDIR system variable	72
4.17.1	Angle direction	72
4.18	ANNOALLVISIBLE system variable	72
4.18.1	Annotation visibility	72
4.19	ANNOAUTOSCALE system variable	73
4.19.1	Annotation scaling	73
4.20	ANNOMONITOR system variable	73
4.20.1	Annotation monitor	73
4.21	ANNOTATIVEDWG system variable	74
4.21.1	Annotative drawing	74
4.22	ANTIALIASRENDER system variable	74
4.22.1	Anti-alias amount for render	74
4.23	ANTIALIASSCREEN system variable	75
4.23.1	Anti-alias amount for screen	75
4.24	APBOX system variable	75
4.24.1	Entity snap aperture box	75
4.25	APERTURE system variable	76
4.25.1	Entity snap sensitivity	76
4.26	AREA system variable	76
4.26.1	Area (Read Only)	76
4.27	AREAPREC system variable	76
4.27.1	Area precision	76
4.28	AREAUNITS system variable	77
4.28.1	Area units	77
4.29	ARRAYASSOCIATIVITY system variable	77
4.29.1	Associative arrays	77
4.30	ARRAYEDITSTATE system variable	78
4.30.1	Array edit state (Read Only)	78
4.31	ARRAYTYPE system variable	78
4.31.1	Array type	78
4.32	ATTDIA system variable	78
4.32.1	Attribute dialog	78
4.33	ATTFULLUPDATE system variable	79
4.33.1	Reset attributes after editing the block record	79
4.34	ATTMODE system variable	79
4.34.1	Attribute display mode	79
4.35	ATTRACTIONDISTANCE system variable	80
4.35.1	Grips attraction distance	80
4.36	ATTREQ system variable	80
4.36.1	Insertion default settings	80
4.37	AUDITCTL system variable	80
4.37.1	Audit control	80
4.38	AUDITERRORCOUNT system variable	81
4.38.1	Audit Error Count (Read Only)	81
4.39	AUNITS system variable	81
4.39.1	Angular unit type	81
4.40	AUPREC system variable	81
4.40.1	Angular unit precision	81



Contents

4.41	AUTOCOMPLETEDELAY system variable	82
4.41.1	Auto complete delay	82
4.42	AUTOCOMPLETEMODE system variable	82
4.42.1	Auto complete mode	82
4.43	AUTOMATICCONNECTION system variable	83
4.43.1	Automatic connection	83
4.44	AUTOMATICSTAIRSECTIONBEHAVIOR system variable	83
4.44.1	Automatic stair section behavior	83
4.45	AUTOMATICTEES system variable	84
4.45.1	Automatic tees	84
4.46	AUTORESETSCALES system variable	84
4.46.1	Purge unused scales	84
4.47	AUTOSAVECHECKONLYFIRSTBITDBMOD system variable	84
4.47.1	Ignore all but first bit of DBMOD for autosave	84
4.48	AUTOSNAP system variable	85
4.48.1	AutoSnap	85
4.49	AUTOTRACKINGVECCOLOR system variable	85
4.49.1	Auto tracking vector color	85
4.50	AUTOVPFITTING system variable	86
4.50.1	Automatically resize viewports	86
5.	B	87
5.1	BACKGROUNDPLOT system variable	87
5.1.1	Background plotting	87
5.2	BACKZ system variable	87
5.2.1	Back clipping plane offset	87
5.3	BACTIONBARMODE system variable	87
5.3.1	Display Action Bars	87
5.4	BACTIONCOLOR system variable	88
5.4.1	Action Text Color	88
5.5	BASEFILE system variable	88
5.5.1	Template	88
5.6	BCFSOURCEURL system variable	88
5.6.1	BCF source url	88
5.7	BEDITASSOCMODE system variable	88
5.7.1	Associative identifiers in BEDIT	88
5.8	BEDITMODE system variable	89
5.8.1	Block editor mode (Read Only)	89
5.9	BGRIPOBJCOLOR system variable	89
5.9.1	Grip Color	89
5.10	BGRIPOBJSIZE system variable	90
5.10.1	Grip Size	90
5.11	BILLOFMATERIALSSETTINGS system variable	90
5.11.1	Bill of materials defaults	90
5.12	BIMDEFAULTPROPERTIESPATH system variable	90
5.12.1	Default properties path	90
5.13	BIMMATCHPROP system variable	91
5.13.1	Match BIM Properties	91
5.14	BIMOSMODE system variable	91



Contents

5.14.1	BIM snap mode	91
5.15	BIMPROFILESTANDARDS system variable	91
5.15.1	Profile's standards	91
5.16	BINDTYPE system variable	92
5.16.1	Xref bind type	92
5.17	BKGCOLOR system variable	92
5.17.1	Background color	92
5.18	BKGCOLORDBEDIT system variable	92
5.18.1	Background color in the Dynamic Block Editor	92
5.19	BKGCOLORPBEDIT system variable	93
5.19.1	Background color in the Parametric Block Editor	93
5.20	BKGCOLORPS system variable	93
5.20.1	Paper space background color	93
5.21	BLIPMODE system variable	93
5.21.1	Blip mode	93
5.22	BLOCKEDITLOCK system variable	94
5.22.1	Block editor lock	94
5.23	BLOCKEDITOR system variable	94
5.23.1	Block editor (Read Only)	94
5.24	BLOCKIFYMODE system variable	94
5.24.1	Blockify settings	94
5.25	BLOCKIFYSCANNER system variable	95
5.25.1	Blockify scanner	95
5.26	BLOCKIFYTOLERANCE system variable	95
5.26.1	Blockify tolerance	95
5.27	BLOCKLEVELOFDETAIL system variable	95
5.27.1	Block Level of detail	95
5.28	BLOCKSPATH system variable	96
5.28.1	Blocks path	96
5.29	BLOCKTESTWINDOW system variable	96
5.29.1	Block test window (Read Only)	96
5.30	BMAUTOUPDATE system variable	96
5.30.1	Update external components	96
5.31	BMEXTERNALIZEILLEGALSymbols system variable	97
5.31.1	Illegal symbols treatment	97
5.32	BMFORMTEMPLATEPATH system variable	97
5.32.1	BMFORM template path	97
5.33	BMTOOLPATH system variable	97
5.33.1	Assembly Inspect tool search paths	97
5.34	BMUPDATEMODE system variable	98
5.34.1	Assembly components update mode	98
5.35	BOLTINGASMDEFAULTLENGTHINCREMENT system variable	98
5.35.1	Default length increment	98
5.36	BOLTINGASMDEFAULTNUT system variable	98
5.36.1	Default nut	98
5.37	BOLTINGASMDEFAULTNUTSNUMBER system variable	99
5.37.1	Default nuts number	99
5.38	BOLTINGASMDEFAULTSTUD system variable	99



Contents

5.38.1	Default stud	99
5.39	BOMFILTERSETTINGS system variable	99
5.39.1	Default BOM filter settings	99
5.40	BOMPROPERTYSET system variable	100
5.40.1	Default BOM property set	100
5.41	BOMTEMPLATE system variable	100
5.41.1	Default template	100
5.42	BOMTHUMBNAILHEIGHT system variable	101
5.42.1	Default thumbnail height, px	101
5.43	BOMTHUMBNAILWIDTH system variable	101
5.43.1	Default thumbnail width, px	101
5.44	BOUNDARYCOLOR system variable	101
5.44.1	Detected Boundary Color	101
5.45	BPARAMETERCOLOR system variable	102
5.45.1	Parameter Color	102
5.46	BPARAMETERFONT system variable	102
5.46.1	Font Name	102
5.47	BPARAMETERSIZE system variable	102
5.47.1	Parameter Size	102
5.48	BPTEXTHORIZONTAL system variable	102
5.48.1	Parameter Text Alignment	102
5.49	BSYSLIBCOPYOVERWRITE system variable	103
5.49.1	Bsyslib copy overwrite	103
5.50	BTMARKDISPLAY system variable	103
5.50.1	Display Tickmarks for Parameters With Value Sets	103
5.51	BVMODE system variable	104
5.51.1	Block Visibility Mode	104
6.	C	105
6.1	CACHELAYOUT system variable	105
6.1.1	Cache layout	105
6.2	CAMERADISPLAY system variable	105
6.2.1	Camera display	105
6.3	CAMERAHEIGHT system variable	105
6.3.1	Camera height	105
6.4	CANNOSCALE system variable	106
6.4.1	Annotation scale name	106
6.5	CANNOSCALEVALUE system variable	106
6.5.1	Annotation scale value (Read Only)	106
6.6	CDATE system variable	106
6.6.1	Calendar date (Read Only)	106
6.7	CECOLOR system variable	106
6.7.1	Entity color	106
6.8	CELTSCALE system variable	107
6.8.1	Entity linetype scale	107
6.9	CELTYPE system variable	107
6.9.1	Entity linetype	107
6.10	CELWEIGHT system variable	107
6.10.1	Entity linewidth	107



Contents

6.11	CENTERCROSSGAP system variable	108
6.11.1	Center mark cross gap	108
6.12	CENTERCROSSSIZE system variable	108
6.12.1	Center mark cross size	108
6.13	CENTEREXE system variable	109
6.13.1	Centerline extension length	109
6.14	CENTERLAYER system variable	109
6.14.1	Default layer for center mark or centerline	109
6.15	CENTERLTSCALE system variable	110
6.15.1	Linetype scale for center mark or centerline	110
6.16	CENTERLTYPE system variable	110
6.16.1	Center mark/centerline linetype	110
6.17	CENTERLTYPEFILE system variable	110
6.17.1	Linetype file for center mark or centerline	110
6.18	CENTERMARKEXE system variable	111
6.18.1	Automatic extension for center mark or centerline	111
6.19	CETRANSAPRENCY system variable	111
6.19.1	Transparency	111
6.20	CHAMFERA system variable	112
6.20.1	Chamfer first distance	112
6.21	CHAMFERB system variable	112
6.21.1	Chamfer second distance	112
6.22	CHAMFERC system variable	112
6.22.1	Chamfer length	112
6.23	CHAMFERD system variable	112
6.23.1	Chamfer angle	112
6.24	CHAMMODE system variable	113
6.24.1	Chamfer mode	113
6.25	CHECKDWLPRESENCE system variable	113
6.25.1	Check DWL file existence before open	113
6.26	CIRCLERAD system variable	114
6.26.1	Circle radius	114
6.27	CIRCULARARROWHEADLENGTH system variable	114
6.27.1	Default head length	114
6.28	CIRCULARARROWHEADWIDTH system variable	114
6.28.1	Default head width	114
6.29	CIRCULARARROWLEADERRADIUS system variable	115
6.29.1	Default leader radius	115
6.30	CIRCULARARROWLEADERROTATION system variable	115
6.30.1	Default leader rotation	115
6.31	CIRCULARARROWTHICKNESS system variable	115
6.31.1	Default thickness	115
6.32	CLAYER system variable	116
6.32.1	Current layer	116
6.33	CLEANSCREENOPTIONS system variable	116
6.33.1	Clean screen options	116
6.34	CLEANSCREENSTATE system variable	116
6.34.1	Clean screen state (Read Only)	116



Contents

6.35	CLIPBOARDFORMAT system variable	117
6.35.1	Clipboard DWG format	117
6.36	CLIPBOARDFORMATS system variable	117
6.36.1	Clipboard Formats	117
6.37	CLIPROMPTLINES system variable	118
6.37.1	Prompt Lines	118
6.38	CLISTATE system variable	118
6.38.1	Command line state (Read Only)	118
6.39	CLOSECHECKONLYFIRSTBITDBMOD system variable	119
6.39.1	Ignore all but first bit of DBMOD for close	119
6.40	CLOUDDOWNLOADPATH system variable	119
6.40.1	Cloud download path	119
6.41	CLOUDLOG system variable	119
6.41.1	Cloud log	119
6.42	CLOUDLOGVERBOSE system variable	120
6.42.1	Cloud log verbose	120
6.43	CLOUDONMODIFIED system variable	120
6.43.1	Cloud on modified	120
6.44	CLOUDSERVER system variable	120
6.44.1	Cloud server	120
6.45	CLOUDSSOCLIENTID system variable	121
6.45.1	Cloud SSO Client ID	121
6.46	CLOUDSSOSCOPE system variable	121
6.46.1	Cloud SSO Scope	121
6.47	CLOUDTEMPFOLDER system variable	121
6.47.1	Cloud temporary folder	121
6.48	CLOUDUPLOADDEPENDENCIES system variable	122
6.48.1	Cloud upload dependencies	122
6.49	CLUSTER2DGEOMGLYPHS system variable	122
6.49.1	Cluster 2d constraint glyphs	122
6.50	CMATERIAL system variable	122
6.50.1	Current material	122
6.51	CMDACTIVE system variable	123
6.51.1	Active command (Read Only)	123
6.52	CMDDIA system variable	123
6.52.1	Command dialogs	123
6.53	CMDECHO system variable	123
6.53.1	Command echo	123
6.54	CMDLINEEDITBGCOLOR system variable	124
6.54.1	Command line edit background color	124
6.55	CMDLINEEDITFGCOLOR system variable	124
6.55.1	Command line edit foreground color	124
6.56	CMDLINEFADINGLOGBGCOLOR system variable	125
6.56.1	Command line fade log background color	125
6.57	CMDLINEFADINGLOGFADEDELAY system variable	125
6.57.1	Command line fading log fade delay	125
6.58	CMDLINEFADINGLOGFGCOLOR system variable	125
6.58.1	Command line fade log foreground color	125



Contents

6.59	CMDLINEFADINGLOGTRANSPARENCY system variable_____	126
6.59.1	Command line fade log transparency_____	126
6.60	CMDLINEFONTNAME system variable_____	126
6.60.1	Command line font name_____	126
6.61	CMDLINEFONTSIZE system variable_____	126
6.61.1	Command line font size_____	126
6.62	CMDLINEFRAMEACTIVETRANSPARENCY system variable_____	126
6.62.1	Command line frame transparency when active_____	126
6.63	CMDLINEFRAMEINACTIVETRANSPARENCY system variable_____	127
6.63.1	Command line frame transparency when inactive_____	127
6.64	CMDLINEFRAMEUSETEXTSCR system variable_____	127
6.64.1	Command line frame TEXTSCR_____	127
6.65	CMDLINELISTBGCOLOR system variable_____	128
6.65.1	Command line list background color_____	128
6.66	CMDLINELISTFGCOLOR system variable_____	128
6.66.1	Command line list foreground color_____	128
6.67	CMDLINEOPTIONBGCOLOR system variable_____	128
6.67.1	Command line option background color_____	128
6.68	CMDLINEOPTIONSHORTCUTCOLOR system variable_____	128
6.68.1	Command line option shortcut color_____	128
6.69	CMDLINEUSEMINIFRAME system variable_____	129
6.69.1	Command line mini floating frame_____	129
6.70	CMDLNTEXT system variable_____	129
6.70.1	Prompt prefix_____	129
6.71	CMDNAMES system variable_____	129
6.71.1	Active Command Name (Read Only)_____	129
6.72	CMLEADERSTYLE system variable_____	130
6.72.1	Multileader style_____	130
6.73	CMLJUST system variable_____	130
6.73.1	Multiline justification_____	130
6.74	CMLSCALE system variable_____	130
6.74.1	Multiline scale_____	130
6.75	CMLSTYLE system variable_____	131
6.75.1	Multiline style_____	131
6.76	CMPCLRMISS system variable_____	131
6.76.1	Color of missing entities - DWGCOMPARE_____	131
6.77	CMPCLRMOD1 system variable_____	131
6.77.1	Color of modified entities- DWGCOMPARE_____	131
6.78	CMPCLRMOD2 system variable_____	131
6.78.1	Color of modified entities in the second drawing- DWGCOMPARE_____	131
6.79	CMPCLRNEW system variable_____	132
6.79.1	Color of new entities in - DWGCOMPARE_____	132
6.80	CMPDIFFLIMIT system variable_____	132
6.80.1	Maximum number of entities - DWGCOMPARE_____	132
6.81	CMPFADECTL system variable_____	132
6.81.1	Fade - DWGCOMPARE_____	132
6.82	CMPLOG system variable_____	133
6.82.1	Log control - DWGCOMPARE_____	133



Contents

6.83	COLORBOOKPATH system variable	133
6.83.1	Color book file search path	133
6.84	COLORPICKBOX system variable	133
6.84.1	Pickbox color	133
6.85	COLORTHEME system variable	134
6.85.1	UI color theme	134
6.86	COLORX system variable	134
6.86.1	X axis color	134
6.87	COLORY system variable	134
6.87.1	Y axis color	134
6.88	COLORZ system variable	135
6.88.1	Z axis color	135
6.89	COMACADCOMPATIBILITY system variable	135
6.89.1	COM Acad compatibility	135
6.90	COMBINETEXTMODE system variable	136
6.90.1	Combined text mode	136
6.91	COMMANDASSIST system variable	136
6.91.1	AI Predict Command line	136
6.92	COMMANDPREVIEW system variable	136
6.92.1	Enables a preview of the outcome of commands such as TRIM, EXTEND.	136
6.93	COMMUNICATORBACKGROUNDMODE system variable	137
6.93.1	Perform import and export in background	137
6.94	COMMUNICATORPATH system variable	137
6.94.1	Communicator path (Mac & Linux)	137
6.95	COMPASS system variable	137
6.95.1	Compass	137
6.96	COMPONENTSCONFIG system variable	138
6.96.1	Library Panel Configuration	138
6.97	COMPONENTSPATH system variable	138
6.97.1	Library directory path	138
6.98	CONSTRAINTBARDISPLAY system variable	138
6.98.1	Constraint Display	138
6.99	CONTINUOUSMOTION system variable	139
6.99.1	Continuous motion	139
6.100	CONVERTODMAX system variable	139
6.100.1	Maximal multiplier for an outer diameter	139
6.101	CONVERTODMIN system variable	139
6.101.1	Minimal multiplier for an outer diameter	139
6.102	CONVERTTHMAX system variable	139
6.102.1	Maximal multiplier for a thickness	139
6.103	CONVERTTHMIN system variable	140
6.103.1	Minimal multiplier for a thickness	140
6.104	COORDS system variable	140
6.104.1	Coordinates	140
6.105	COPYGUIDED3DDISPLAYSOURCEFACES system variable	140
6.105.1	COPYGUIDED3D source faces	140
6.106	COPYMODE system variable	141
6.106.1	Copy mode	141



Contents

6.107	CLOTSTYLE system variable	141
6.107.1	Current plot style	141
6.108	CPROFILE system variable	141
6.108.1	Current profile (Read Only)	141
6.109	CRASHREPORTSENDING system variable	142
6.109.1	Crash report sending (Windows)	142
6.110	CREATESKETCHFEATURE system variable	142
6.110.1	Sketch based feature (experimental)	142
6.111	CREATETHUMBNAILONTHEFLY system variable	143
6.111.1	Create preview thumbnail on the fly	143
6.112	CREATEVIEWPORTS system variable	143
6.112.1	Automatic viewport creation	143
6.113	CROSSHAIRDRAWMODE system variable	144
6.113.1	Crosshair rendering mode	144
6.114	CROSSINGAREACOLOR system variable	144
6.114.1	Crossing area color	144
6.115	CTAB system variable	145
6.115.1	Current tab	145
6.116	CTABLESTYLE system variable	145
6.116.1	Current table style	145
6.117	CTRL3D MOUSE system variable	145
6.117.1	3D mouse mode	145
6.118	CTRLMBUTTON system variable	146
6.118.1	Middle Button Click	146
6.119	CTRLMOUSE system variable	146
6.119.1	Mouse shortcuts	146
6.120	CURSORMODE system variable	147
6.120.1	Crosshair displaying mode	147
6.121	CURSORSIZE system variable	147
6.121.1	Crosshair size	147
6.122	CVALLOWBREAKLINECROSSINGS system variable	147
6.122.1	Allow breakline crossings	147
6.123	CVANGLESAMPLINGINTERVAL system variable	148
6.123.1	Angle sampling interval	148
6.124	CVARCTESSELLATIONGRADING system variable	148
6.124.1	Arc approximation mid-ordinate distance	148
6.125	CVARCTESSELLATIONSURFACE system variable	148
6.125.1	Arc approximation mid-ordinate distance	148
6.126	CVARCTESSELLATIONTEMPLATEELEMENT system variable	149
6.126.1	Template Element arc approximation mid-ordinate distance	149
6.127	CVASSOCIATIVITY system variable	149
6.127.1	Associativity	149
6.128	CVDEFAULTCURVETYPEHA system variable	149
6.128.1	Default curve type for horizontal alignment	149
6.129	CVDEFAULTCURVETYPEVA system variable	150
6.129.1	Default curve type for vertical alignments	150
6.130	CVELEVATIONATBREAKLINECROSSINGS system variable	150
6.130.1	Elevation at breakline crossings	150



Contents

6.131	CVERSIONCONTROLPATH system variable	151
6.131.1	Current version control path	151
6.132	CVGRADEUNIT system variable	151
6.132.1	Format	151
6.133	CVGRADEUNITPREC system variable	151
6.133.1	Precision	151
6.134	CVLENGTHSAMPLINGINTERVAL system variable	152
6.134.1	Sampling interval for straight segments	152
6.135	CVPORT system variable	152
6.135.1	Current viewport	152
6.136	CVSLOPEUNIT system variable	153
6.136.1	Format	153
6.137	CVSLOPEUNITPREC system variable	153
6.137.1	Precision	153
6.138	CVSTATIONUNIT system variable	154
6.138.1	Station delimiter position	154
6.139	CVSTATIONUNITPREC system variable	154
6.139.1	Precision	154
7.	D	155
7.1	DATACOLLECTION system variable	155
7.1.1	Diagnostics and usage data collection	155
7.2	DATACOLLECTIONENABLED system variable	155
7.2.1	Current state of data collection (Read Only)	155
7.3	DATACOLLECTIONLOGINTYPE system variable	156
7.3.1	Latest type of login for data collection (Read Only)	156
7.4	DATACOLLECTIONOPTIONS system variable	156
7.4.1	Data Collection Options	156
7.5	DATALINKNOTIFY system variable	156
7.5.1	Data link Notifications	156
7.6	DATE system variable	157
7.6.1	Current date (Read Only)	157
7.7	DBCSTATE system variable	157
7.7.1	DbConnect state (Read Only)	157
7.8	DBLCLKEDIT system variable	157
7.8.1	Double click editing	157
7.9	DBMOD system variable	158
7.9.1	Modification status (Read Only)	158
7.10	DCTCUST system variable	158
7.10.1	Custom spelling dictionary	158
7.11	DCTMAIN system variable	158
7.11.1	Main spelling dictionary	158
7.12	DEFAULTBSYSLIBIMPERIAL system variable	159
7.12.1	Default Bsyslib imperial	159
7.13	DEFAULTBSYSLIBMETRIC system variable	159
7.13.1	Default Bsyslib metric	159
7.14	DEFAULTLIGHTING system variable	159
7.14.1	Default lighting	159
7.15	DEFAULTLIGHTSHADOWBLUR system variable	160



Contents

7.15.1	Default light shadow blur_____	160
7.16	DEFAULTNEWSHEETTEMPLATE system variable_____	160
7.16.1	Default new sheet template_____	160
7.17	DEFAULTPLOTSTYLETABLE system variable_____	160
7.17.1	Default plot style table_____	160
7.18	DEFAULTSPACEHEIGHT system variable_____	160
7.18.1	Default Space Height_____	160
7.19	DEFAULTSTORYNAMINGSCHEME system variable_____	161
7.19.1	Default Story Naming Scheme_____	161
7.20	DEFAULTSTYLEPIPECROSS system variable_____	161
7.20.1	Default style for pipe cross_____	161
7.21	DEFAULTSTYLEPIPEECCENTRICREDUCER system variable_____	161
7.21.1	Default style for pipe eccentric reducer_____	161
7.22	DEFAULTSTYLEPIPEELBOW45 system variable_____	162
7.22.1	Default style for pipe elbow (45 deg)_____	162
7.23	DEFAULTSTYLEPIPEELBOW90 system variable_____	162
7.23.1	Default style for pipe elbow (90 deg)_____	162
7.24	DEFAULTSTYLEPIPEREDUCER system variable_____	162
7.24.1	Default style for pipe reducer_____	162
7.25	DEFAULTSTYLEPIPESEGMENT system variable_____	162
7.25.1	Default style for pipe segment_____	162
7.26	DEFAULTSTYLEPIPETEE system variable_____	163
7.26.1	Default style for pipe tee_____	163
7.27	DEFLPLSTYLE system variable_____	163
7.27.1	Default layer plot style_____	163
7.28	DEFPLSTYLE system variable_____	163
7.28.1	Default entity plot style_____	163
7.29	DELETETOOL system variable_____	164
7.29.1	Delete tool_____	164
7.30	DELOBJ system variable_____	164
7.30.1	Delete source entity_____	164
7.31	DEMANDLOAD system variable_____	165
7.31.1	Demand load_____	165
7.32	DETAILSPATH system variable_____	165
7.32.1	Details directory path_____	165
7.33	DGNEXPXREFMODE system variable_____	166
7.33.1	Export Conversion of XRefs_____	166
7.34	DGNFRAME system variable_____	166
7.34.1	DGN frame_____	166
7.35	DGNIMP2DCLOSEDBSPLINECURVEIMPORTMODE system variable_____	166
7.35.1	2D closed B-spline curve import mode_____	166
7.36	DGNIMP2DELLIPSEIMPORTMODE system variable_____	167
7.36.1	2D ellipse import mode_____	167
7.37	DGNIMP2DSHAPEIMPORTMODE system variable_____	167
7.37.1	2D shape import mode_____	167
7.38	DGNIMP3DCLOSEDBSPLINECURVEIMPORTMODE system variable_____	168
7.38.1	3D closed B-spline curve import mode_____	168
7.39	DGNIMP3DELLIPSEIMPORTMODE system variable_____	168



Contents

7.39.1	3D ellipse import mode_____	168
7.40	DGNIMP3DOBJECTIMPORTMODE system variable_____	168
7.40.1	3D entity import mode_____	168
7.41	DGNIMP3DSHAPEIMPORTMODE system variable_____	169
7.41.1	3D shape import mode_____	169
7.42	DGNIMPBREAKDIMENSIONASSOCIATION system variable_____	169
7.42.1	Break dimension association_____	169
7.43	DGNIMPCONVERTDGNCOLORINDICESTOTRUECOLORS system variable_____	170
7.43.1	Convert DGN color indices to true colors_____	170
7.44	DGNIMPCONVERTEEMPTYDATAFIELDSTOSPACES system variable_____	170
7.44.1	Convert empty data fields to spaces_____	170
7.45	DGNIMPERASEUNUSEDRESOURCES system variable_____	171
7.45.1	Erase unused resources_____	171
7.46	DGNIMPEXPLODETEXTNODES system variable_____	171
7.46.1	Explode text nodes_____	171
7.47	DGNIMPIMPORTACTIVEMODELTOMODELSPACE system variable_____	171
7.47.1	Import active model to Model Space_____	171
7.48	DGNIMPIMPORTDGTXTSASDBMTEXTS system variable_____	172
7.48.1	Import Texts as MTexts_____	172
7.49	DGNIMPIMPORTINVISIBLEELEMENTS system variable_____	172
7.49.1	Import invisible elements_____	172
7.50	DGNIMPIMPORTPAPERSPACEMODELS system variable_____	172
7.50.1	Import Paper Space models_____	172
7.51	DGNIMPIMPORTVIEWINDEX system variable_____	173
7.51.1	Import view index_____	173
7.52	DGNIMPRECOMPUTEDIMENSIONSATERIMPORT system variable_____	173
7.52.1	Recompute dimensions after import_____	173
7.53	DGNIMPSYMBOLRESOURCEFILES system variable_____	174
7.53.1	Symbol resource files_____	174
7.54	DGNIMPXREFIMPORTMODE system variable_____	174
7.54.1	External references import mode_____	174
7.55	DGNOSNAP system variable_____	174
7.55.1	DGN entity snap_____	174
7.56	DIASAT system variable_____	175
7.56.1	Dialog state (Read Only)_____	175
7.57	DIMADEC system variable_____	175
7.57.1	Dim Angle Precision_____	175
7.58	DIMALT system variable_____	175
7.58.1	Alt units_____	175
7.59	DIMALTD system variable_____	176
7.59.1	Alt precision_____	176
7.60	DIMALTF system variable_____	176
7.60.1	Alt multiplier_____	176
7.61	DIMALTRND system variable_____	176
7.61.1	Alt roundoff_____	176
7.62	DIMALTTD system variable_____	177
7.62.1	Alt tolerance precision_____	177
7.63	DIMALTTZ system variable_____	177



Contents

7.63.1	Alt tolerance suppress zeros	177
7.64	DIMALTU system variable	178
7.64.1	Alt unit type	178
7.65	DIMALTZ system variable	178
7.65.1	Alt suppress zeros	178
7.66	DIMANNO system variable	179
7.66.1	Style is annotative (Read Only)	179
7.67	DIMAPOST system variable	179
7.67.1	Alt units prefix/suffix	179
7.68	DIMARCSYM system variable	179
7.68.1	Arc symbol	179
7.69	DIMASO system variable	180
7.69.1	Associativity (obsolete)	180
7.70	DIMASSOC system variable	180
7.70.1	Associativity	180
7.71	DIMASZ system variable	180
7.71.1	Arrow size	180
7.72	DIMATFIT system variable	181
7.72.1	Arrow and text fit	181
7.73	DIMAUNIT system variable	181
7.73.1	Dim angle units	181
7.74	DIMAZIN system variable	181
7.74.1	Suppress angle zeros	181
7.75	DIMBLK system variable	182
7.75.1	Arrow	182
7.76	DIMBLK1 system variable	182
7.76.1	Arrow 1	182
7.77	DIMBLK2 system variable	182
7.77.1	Arrow 2	182
7.78	DIMCEN system variable	183
7.78.1	Center mark	183
7.79	DIMCLRD system variable	183
7.79.1	Dim line color	183
7.80	DIMCLRE system variable	184
7.80.1	Ext line color	184
7.81	DIMCLRT system variable	184
7.81.1	Text color	184
7.82	DIMCONTINUEMODE system variable	184
7.82.1	Dim continue mode	184
7.83	DIMDEC system variable	185
7.83.1	Dim precision	185
7.84	DIMDLE system variable	185
7.84.1	Dim line ext	185
7.85	DIMDLI system variable	185
7.85.1	Dim baseline spacing	185
7.86	DIMDSEP system variable	186
7.86.1	Decimal separator	186
7.87	DIMEXE system variable	186



Contents

7.87.1	Ext line ext	186
7.88	DIMEXO system variable	186
7.88.1	Ext line offset	186
7.89	DIMFIT system variable	187
7.89.1	Dim fit (obsolete)	187
7.90	DIMFRAC system variable	187
7.90.1	Fractional type	187
7.91	DIMFXL system variable	187
7.91.1	Ext line fixed length	187
7.92	DIMFXLON system variable	188
7.92.1	Ext line fixed	188
7.93	DIMGAP system variable	188
7.93.1	Text offset	188
7.94	DIMJOGANG system variable	188
7.94.1	Jogged angle	188
7.95	DIMJUST system variable	189
7.95.1	Text Position Horizontal	189
7.96	DIMLAYER system variable	189
7.96.1	Default layer for new dimensions	189
7.97	DIMLDRBLK system variable	190
7.97.1	Leader arrow	190
7.98	DIMLFAC system variable	190
7.98.1	Dim Scale Linear	190
7.99	DIMLIM system variable	190
7.99.1	Tolerance method	190
7.100	DIMLTEx1 system variable	191
7.100.1	Ext line 1 linetype	191
7.101	DIMLTEx2 system variable	191
7.101.1	Ext line 2 linetype	191
7.102	DIMLTYPE system variable	191
7.102.1	Dim line linetype	191
7.103	DIMLUNIT system variable	191
7.103.1	Dim units	191
7.104	DIMLWD system variable	192
7.104.1	Dim line LW	192
7.105	DIMLWE system variable	192
7.105.1	Ext line LW	192
7.106	DIMMARKTYPE system variable	193
7.106.1	Dimension override marking	193
7.107	DIMPOST system variable	193
7.107.1	Dim prefix/suffix	193
7.108	DIMRND system variable	193
7.108.1	Dim round	193
7.109	DIMSAH system variable	194
7.109.1	Arrowheads	194
7.110	DIMSCALE system variable	194
7.110.1	Dim scale overall	194
7.111	DIMSD1 system variable	195



Contents

7.111.1	Dim line 1	195
7.112	DIMSD2 system variable	195
7.112.1	Dim line 2	195
7.113	DIMSE1 system variable	195
7.113.1	Ext line 1	195
7.114	DIMSE2 system variable	196
7.114.1	Ext line 2	196
7.115	DIMSHO system variable	196
7.115.1	Dimension show (Obsolete)	196
7.116	DIMSOXD system variable	196
7.116.1	Dim line inside	196
7.117	DIMSTYLE system variable	197
7.117.1	Dimension style (Read Only)	197
7.118	DIMTAD system variable	197
7.118.1	Text Position Vert	197
7.119	DIMTDEC system variable	197
7.119.1	Tolerance precision	197
7.120	DIMTFAC system variable	198
7.120.1	Tolerance text height	198
7.121	DIMTFILL system variable	198
7.121.1	Text fill	198
7.122	DIMTFILLCLR system variable	198
7.122.1	Text fill color	198
7.123	DIMTIH system variable	199
7.123.1	Text inside align	199
7.124	DIMTIX system variable	199
7.124.1	Text inside	199
7.125	DIMTM system variable	200
7.125.1	Tolerance limit lower	200
7.126	DIMTMOVE system variable	200
7.126.1	Text movement	200
7.127	DIMTOFL system variable	200
7.127.1	Dim line forced	200
7.128	DIMTOH system variable	201
7.128.1	Text outside align	201
7.129	DIMTOL system variable	201
7.129.1	Tolerance display	201
7.130	DIMTOLJ system variable	201
7.130.1	Tolerance pos vert	201
7.131	DIMTP system variable	202
7.131.1	Tolerance limit upper	202
7.132	DIMTSZ system variable	202
7.132.1	Dim tick size	202
7.133	DIMTVP system variable	203
7.133.1	Text offset vertical	203
7.134	DIMTXSTY system variable	203
7.134.1	Text style	203
7.135	DIMTXT system variable	203



Contents

7.135.1	Text height	203
7.136	DIMTXTDIRECTION system variable	203
7.136.1	Text direction	203
7.137	DIMTZIN system variable	204
7.137.1	Tolerance suppress zeros	204
7.138	DIMUNIT system variable	204
7.138.1	Dim unit type (obsolete)	204
7.139	DIMUPT system variable	205
7.139.1	Place text manually	205
7.140	DIMZIN system variable	205
7.140.1	Suppress dim zeros	205
7.141	DISPLAYAXES system variable	206
7.141.1	Display Axes	206
7.142	DISPLAYAXESFORMEP system variable	206
7.142.1	Display axes	206
7.143	DISPLAYSCALING system variable	206
7.143.1	Automatic display scaling (Read Only)	206
7.144	DISPLAYSIDESANDENDS system variable	207
7.144.1	Display Sides and Ends	207
7.145	DISPLAYSNAPMARKERINALLVIEWS system variable	207
7.145.1	Snap marker in all views	207
7.146	DISPLAYTOOLTIPS system variable	207
7.146.1	Snap tooltips	207
7.147	DISPLAYTRUEDIMENSION system variable	208
7.147.1	Default dimension type	208
7.148	DISPPAPERBKG system variable	208
7.148.1	Paper background	208
7.149	DISPPAPERMARGINS system variable	208
7.149.1	Printable area	208
7.150	DISPSILH system variable	209
7.150.1	Display silhouette curves	209
7.151	DISTANCE system variable	209
7.151.1	Distance (Read Only)	209
7.152	DMAUDITLEVEL system variable	210
7.152.1	DMAUDIT command, level of detail	210
7.153	DMAUTOUPDATE system variable	211
7.153.1	3D constraints recalculation mode	211
7.154	DMCONNECTIONCUTTYPE system variable	211
7.154.1	Connection type	211
7.155	DMPUSHPULLSUBTRACT system variable	212
7.155.1	DMPUSHPULL subtract	212
7.156	DMRECOGNIZE system variable	212
7.156.1	Automatic 3D geometry constraints recognition	212
7.157	DOCKPRIORITY system variable	213
7.157.1	Docking Priority	213
7.158	DOCTABPOSITION system variable	214
7.158.1	Tabs position	214
7.159	DONUTID system variable	214



Contents

7.159.1	Donut inside diameter	214
7.160	DONUTOD system variable	214
7.160.1	Donut outside diameter	214
7.161	DRAGMODE system variable	215
7.161.1	Entity drag mode	215
7.162	DRAGMODECONSTRAINTS system variable	215
7.162.1	Solve 3D constraints dynamically	215
7.163	DRAGMODEFACES system variable	215
7.163.1	MOVE face	215
7.164	DRAGMODEHIDE system variable	216
7.164.1	Hide during drag	216
7.165	DRAGMODEINTERRUPT system variable	216
7.165.1	Drag interruption mode	216
7.166	DRAGOPEN system variable	217
7.166.1	Drag open	217
7.167	DRAGP1 system variable	217
7.167.1	Regen-drag rate	217
7.168	DRAGP2 system variable	217
7.168.1	Fast-drag rate	217
7.169	DRAGSNAP system variable	218
7.169.1	Snap dragged entities	218
7.170	DRAWINGPATH system variable	218
7.170.1	Drawings path	218
7.171	DRAWINGVIEWASM system variable	218
7.171.1	Assemblies optimization	218
7.172	DRAWINGVIEWENTS system variable	219
7.172.1	Additional entities	219
7.173	DRAWINGVIEWFLAGS system variable	219
7.173.1	Drawing View Flags	219
7.174	DRAWINGVIEWPRESET system variable	220
7.174.1	Drawing view preset	220
7.175	DRAWINGVIEWPRESETHIDDEN system variable	220
7.175.1	Drawing view hidden lines preset	220
7.176	DRAWINGVIEWPRESETSCALE system variable	220
7.176.1	Scale for drawing view preset	220
7.177	DRAWINGVIEWPRESETTANGENT system variable	220
7.177.1	Drawing view tangent lines preset	220
7.178	DRAWINGVIEWPRESETTRAILING system variable	221
7.178.1	Drawing view trailing lines preset	221
7.179	DRAWINGVIEWQUALITY system variable	221
7.179.1	Quality of drawing views	221
7.180	DRAWORDERCTL system variable	222
7.180.1	Draworder control	222
7.181	DWFFORMAT system variable	222
7.181.1	Default DWF format	222
7.182	DWFFRAME system variable	222
7.182.1	DWF frame	222
7.183	DWFOSNAP system variable	223



Contents

7.183.1	DWF entity snap	223
7.184	DWFVERSION system variable	223
7.184.1	DWF version	223
7.185	DWGCHECK system variable	224
7.185.1	Drawing check	224
7.186	DWGCODEPAGE system variable	224
7.186.1	Drawing codepage (Read Only)	224
7.187	DWGGUIDCLOUDAI system variable	225
7.187.1	Drawing Guid	225
7.188	DWGNAME system variable	225
7.188.1	Drawing name (Read Only)	225
7.189	DWGPREFIX system variable	225
7.189.1	Drawing prefix (Read Only)	225
7.190	DWGTITLED system variable	225
7.190.1	Drawing titled (Read Only)	225
7.191	DXEVAL system variable	226
7.191.1	Data extraction update mode	226
7.192	DXFTEXTADJUSTALIGNMENT system variable	226
7.192.1	DXF text adjust alignment	226
7.193	DYNCONSTRAINTMODE system variable	226
7.193.1	Dynamic Constraint Mode	226
7.194	DYNDIGRIP system variable	227
7.194.1	Show dynamic dimensions	227
7.195	DYNDIMAPERTURE system variable	227
7.195.1	Dynamic dimension aperture	227
7.196	DYNDIMCOLORHOT system variable	228
7.196.1	Dynamic dimension hot color	228
7.197	DYNDIMCOLORHOVER system variable	228
7.197.1	Dynamic dimension hover color	228
7.198	DYNDIMDISTANCE system variable	228
7.198.1	Dynamic dimension distance	228
7.199	DYNDIMLINETYPE system variable	229
7.199.1	Dynamic dimension linetype	229
7.200	DYNDIVIS system variable	229
7.200.1	Dynamic dimension visibility	229
7.201	DYNINPUTTRANSPARENCY system variable	230
7.201.1	Transparency of dynamic input fields	230
7.202	DYNMODE system variable	230
7.202.1	Dynamic input mode	230
7.203	DYNPICOORDS system variable	231
7.203.1	Default mode for dynamic coordinates input	231
8.	E	232
8.1	EDGEMODE system variable	232
8.1.1	Edge mode	232
8.2	ELEVATION system variable	232
8.2.1	Elevation	232
8.3	ENABLEATTRACTION system variable	233
8.3.1	Grips attraction	233



Contents

8.4	ENABLEBIMBKUPDATE system variable	233
8.4.1	Enable section update in background	233
8.5	ENABLEHYPERLINKMENU system variable	233
8.5.1	Hyperlink menu	233
8.6	ENABLEHYPERLINKTOOLTIP system variable	234
8.6.1	Hyperlink tooltip	234
8.7	ERRNO system variable	234
8.7.1	Error number (Read Only)	234
8.8	EXPERIMENTALMODE system variable	234
8.8.1	Enable experimental features	234
8.9	EXPERIMENTALONSTARTPAGE system variable	235
8.9.1	Experimental features on start page	235
8.10	EXPERT system variable	235
8.10.1	Expert	235
8.11	EXPINSALIGN system variable	235
8.11.1	Explorer Insert Aligned	235
8.12	EXPINSANGLE system variable	236
8.12.1	Explorer Insert Angle	236
8.13	EXPINSFIXANGLE system variable	236
8.13.1	Explorer Insert Fix Angle	236
8.14	EXPINSFIXSCALE system variable	236
8.14.1	Explorer Insert Fix Scale	236
8.15	EXPINSSCALE system variable	237
8.15.1	Explorer Insert Scale	237
8.16	EXPLMODE system variable	237
8.16.1	Explode mode	237
8.17	EXPORT3DPDFWRITER system variable	237
8.17.1	3D PDF writer	237
8.18	EXPORTACISASSEMBLYWRITER system variable	238
8.18.1	ASAT/ASAB writer	238
8.19	EXPORTACISFORMATVERSION system variable	238
8.19.1	ACIS export format version	238
8.20	EXPORTCATIAV4FORMATVERSION system variable	239
8.20.1	CATIA V4 export format version	239
8.21	EXPORTCATIAV5FORMATVERSION system variable	240
8.21.1	CATIA V5 export format version	240
8.22	EXPORTGEOMETRYFLAGS system variable	240
8.22.1	Export Geometry Flags	240
8.23	EXPORTHIDDENPARTS system variable	241
8.23.1	Hidden parts	241
8.24	EXPORTMODELSPACE system variable	241
8.24.1	Export model space	241
8.25	EXPORTPAGESETUP system variable	242
8.25.1	Export page setup	242
8.26	EXPORTPAPERSPACE system variable	242
8.26.1	Export paper space	242
8.27	EXPORTPARASOLIDFORMATVERSION system variable	243
8.27.1	Parasolid export format version	243



Contents

8.28	EXPORTPRODUCTSTRUCTURE system variable	244
8.28.1	Product structure	244
8.29	EXPORTSTEPFORMATVERSION system variable	245
8.29.1	STEP export format version	245
8.30	EXPORTXCGMFORMATVERSION system variable	245
8.30.1	XCGM export format version	245
8.31	EXTMAX system variable	246
8.31.1	Extents maximum (Read Only)	246
8.32	EXTMIN system variable	246
8.32.1	Extents minimum (Read Only)	246
8.33	EXTNAMES system variable	247
8.33.1	Extend names	247
8.34	EXTRUDEINSIDE system variable	247
8.34.1	Extrude behavior inside	247
8.35	EXTRUDEOUTSIDE system variable	248
8.35.1	Extrude behavior outside	248
9.	F	249
9.1	FACETRATIO system variable	249
9.1.1	Faceting aspect ratio	249
9.2	FACETRES system variable	249
9.2.1	Facet resolution	249
9.3	FBXEXPORTCAMERAS system variable	249
9.3.1	FBX Export Cameras	249
9.4	FBXEXPORTENTITIES system variable	250
9.4.1	FBX Export Entities	250
9.5	FBXEXPORTENTITIESSELTYPE system variable	250
9.5.1	FBX entities to export	250
9.6	FBXEXPORTLIGHTS system variable	250
9.6.1	FBX Export Lights	250
9.7	FBXEXPORTMATERIALS system variable	251
9.7.1	FBX Export Materials	251
9.8	FBXEXPORTTEXTURES system variable	251
9.8.1	FBX Export Textures	251
9.9	FBXEXPORTTEXTURESPATH system variable	252
9.9.1	Fbx Export Textures path	252
9.10	FEATURECOLORS system variable	252
9.10.1	Feature colors	252
9.11	FIELDDISPLAY system variable	252
9.11.1	Field display	252
9.12	FIELDEVAL system variable	253
9.12.1	Field update mode	253
9.13	FILEDIA system variable	253
9.13.1	File dialog	253
9.14	FILLETRAD system variable	253
9.14.1	Fillet radius	253
9.15	FILLETWELDINGCOMBINEADJACENT system variable	254
9.15.1	Combine adjacent fillet welds	254
9.16	FILLETWELDINGMAXGAPRATIO system variable	254



Contents

9.16.1	Maximal ratio of a gap to a weld size	254
9.17	FILLETWELDINGZSIZE system variable	254
9.17.1	Default fillet weld Z size	254
9.18	FILLMODE system variable	255
9.18.1	Fill mode	255
9.19	FITLINEFITARCMODE system variable	255
9.19.1	FitLine FitArc mode	255
9.20	FITTINGRADIUSTYPE system variable	256
9.20.1	Fitting Radius Type	256
9.21	FITTINGRADIUSVALUE system variable	256
9.21.1	Fitting Radius Value	256
9.22	FLANGEASMDEFAULTGASKET system variable	256
9.22.1	Default gasket	256
9.23	FONTALT system variable	257
9.23.1	Alternate font	257
9.24	FONTALTMAP system variable	257
9.24.1	Font mapping optional file	257
9.25	FONTMAP system variable	258
9.25.1	Font mapping file	258
9.26	FRAME system variable	258
9.26.1	Frame	258
9.27	FRAMESELECTION system variable	259
9.27.1	Frame selection	259
9.28	FRONTZ system variable	259
9.28.1	Front clipping plane offset	259
9.29	FULLOPEN system variable	260
9.29.1	Full open (Read Only)	260
10.	G	261
10.1	GEARTEETHNUMBER system variable	261
10.1.1	Maximum number of sprocket teeth	261
10.2	GENERATEASSOCATTRS system variable	261
10.2.1	Generate associative attributes	261
10.3	GENERATEASSOCVIEWS system variable	261
10.3.1	Generate associative drawings	261
10.4	GEOCSMAPPRIORITY system variable	262
10.4.1	CSMAP priority	262
10.5	GEOLATLONGFORMAT system variable	262
10.5.1	Geographic latitude/longitude format	262
10.6	GEOMAPMODE system variable	263
10.6.1	Online map style	263
10.7	GEOMARKERVISIBILITY system variable	263
10.7.1	Geographic marker visibility	263
10.8	GEOMRELATIONS system variable	263
10.8.1	Geometric relationship indication	263
10.9	GETSTARTED system variable	264
10.9.1	Get Started	264
10.10	GFANG system variable	264
10.10.1	Gradient fill angle	264



Contents

10.11	GFCLR1 system variable	264
10.11.1	Gradient fill primary color	264
10.12	GFCLR2 system variable	265
10.12.1	Gradient fill secondary color	265
10.13	GFCLRLUM system variable	265
10.13.1	Gradient fill tint level	265
10.14	GFCLRSTATE system variable	265
10.14.1	Number of colors for a gradient fill	265
10.15	GFNAME system variable	266
10.15.1	Gradient fill name	266
10.16	GFSHIFT system variable	266
10.16.1	Gradient fill shift	266
10.17	GLSWAPMODE system variable	266
10.17.1	GL Swap Mode	266
10.18	GRADIENTCOLORBOTTOM system variable	267
10.18.1	Background gradient color bottom	267
10.19	GRADIENTCOLORMIDDLE system variable	267
10.19.1	Background gradient color middle	267
10.20	GRADIENTCOLORTOP system variable	267
10.20.1	Background gradient color top	267
10.21	GRADIENTMODE system variable	268
10.21.1	Background gradient mode	268
10.22	GRIDAXISCOLOR system variable	268
10.22.1	Grid axis color	268
10.23	GRIDDISPLAY system variable	268
10.23.1	Grid display	268
10.24	GRIDMAJOR system variable	269
10.24.1	Grid major	269
10.25	GRIDMAJORCOLOR system variable	269
10.25.1	Grid major color	269
10.26	GRIDMINORCOLOR system variable	270
10.26.1	Grid minor color	270
10.27	GRIDMODE system variable	270
10.27.1	Grid mode	270
10.28	GRIDSTYLE system variable	270
10.28.1	Grid style	270
10.29	GRIDUNIT system variable	271
10.29.1	Grid unit	271
10.30	GRIDXYZTINT system variable	271
10.30.1	Grid XYZ tint	271
10.31	GRIPBLOCK system variable	271
10.31.1	Grips in blocks	271
10.32	GRIPCOLOR system variable	272
10.32.1	Grip color	272
10.33	GRIPDYNCOLOR system variable	272
10.33.1	Dynamic grip color	272
10.34	GRIPHOT system variable	272
10.34.1	Selected grip color	272



Contents

10.35	GRIPHOVER system variable_____	273
10.35.1	Hover grip color_____	273
10.36	GRIPOBJLIMIT system variable_____	273
10.36.1	Grip entity limit_____	273
10.37	GRIPS system variable_____	274
10.37.1	Grips_____	274
10.38	GRIPSIZE system variable_____	274
10.38.1	Grip size_____	274
10.39	GRIPTIPS system variable_____	274
10.39.1	Grip tips_____	274
10.40	GSDEVICETYPE2D system variable_____	275
10.40.1	2D graphic system device_____	275
10.41	GSDEVICETYPE3D system variable_____	275
10.41.1	3D graphic system device_____	275
11.	H_____	276
11.1	HALOGAP system variable_____	276
11.1.1	Halo gap_____	276
11.2	HANDLES system variable_____	276
11.2.1	Publish Handles (Read Only)_____	276
11.3	HANDSEED system variable_____	276
11.3.1	Handle seed (Read Only)_____	276
11.4	HEALTHADVISOR system variable_____	277
11.4.1	Health Advisor_____	277
11.5	HIDEPRECISION system variable_____	277
11.5.1	Hide and shade precision_____	277
11.6	HIDESYSTEMPRINTERS system variable_____	277
11.6.1	Hide system printers_____	277
11.7	HIDETEXT system variable_____	278
11.7.1	Hide text on HIDE_____	278
11.8	HIDEXREFSCALES system variable_____	278
11.8.1	Hide xref scales_____	278
11.9	HIGHLIGHT system variable_____	278
11.9.1	Highlight_____	278
11.10	HIGHLIGHT_ALPHA system variable_____	279
11.10.1	Highlighted area transparency_____	279
11.11	HIGHLIGHTCOLOR system variable_____	279
11.11.1	Selection Highlight Color_____	279
11.12	HIGHLIGHTEFFECT system variable_____	279
11.12.1	Selection Highlight Style_____	279
11.13	HORIZONBKG_ENABLE system variable_____	280
11.13.1	Horizon background_____	280
11.14	HORIZONBKG_GROUNDHORIZON system variable_____	280
11.14.1	Ground horizon_____	280
11.15	HORIZONBKG_GROUNDORIGIN system variable_____	281
11.15.1	Ground origin_____	281
11.16	HORIZONBKG_SKYHIGH system variable_____	281
11.16.1	Sky high_____	281
11.17	HORIZONBKG_SKYHORIZON system variable_____	281



Contents

11.17.1	Sky horizon	281
11.18	HORIZONBKG_SKYLOW system variable	281
11.18.1	Sky low	281
11.19	HOTKEYASSISTANT system variable	282
11.19.1	Hotkey Assistant	282
11.20	HPANG system variable	282
11.20.1	Hatch pattern angle	282
11.21	HPANNOTATIVE system variable	282
11.21.1	Hatch pattern annotative	282
11.22	HPASSOC system variable	283
11.22.1	Hatch pattern associativity	283
11.23	HPBACKGROUNDCOLOR system variable	283
11.23.1	Hatch background default color	283
11.24	HPBOUND system variable	283
11.24.1	Hatch pattern boundary	283
11.25	HPBOUNDRETAIN system variable	284
11.25.1	Hatch pattern boundary retain	284
11.26	HPCOLOR system variable	284
11.26.1	Hatch default color	284
11.27	HPDOUBLE system variable	285
11.27.1	Hatch pattern doubling	285
11.28	HPDRAWORDER system variable	285
11.28.1	Hatch pattern draw order	285
11.29	HPGAPTOL system variable	286
11.29.1	Hatch pattern gap tolerance	286
11.30	HPISLANDDETECTION system variable	286
11.30.1	Hatch pattern island detection	286
11.31	HPLAYER system variable	286
11.31.1	Default layer for new hatches	286
11.32	HPLINETYPE system variable	287
11.32.1	Hatch pattern linetype	287
11.33	HPMAXAREAS system variable	287
11.33.1	Fill mode for sparse hatches	287
11.34	HPMAXCONTOURPOINTS system variable	288
11.34.1	Maximum number of points on a hatch contour	288
11.35	HPNAME system variable	288
11.35.1	Hatch pattern name	288
11.36	HPOBJWARNING system variable	288
11.36.1	Hatch pattern entity warning	288
11.37	HPORIGIN system variable	289
11.37.1	Hatch pattern origin	289
11.38	HPSCALE system variable	289
11.38.1	Hatch pattern scale	289
11.39	HPSEPARATE system variable	289
11.39.1	Hatch pattern separate	289
11.40	HPSPACE system variable	289
11.40.1	Hatch pattern spacing	289
11.41	HPTRANSPARENCY system variable	290



Contents

11.41.1	Default transparency for new hatches	290
11.42	HYPERLINKBASE system variable	290
11.42.1	Hyperlink base	290
12.	I	291
12.1	IFCCREATEUNIQUEGUID system variable	291
12.1.1	Export with unique guids	291
12.2	IFCEXPLODEEXTERNALREFERENCES system variable	291
12.2.1	Explode external references in IFC spatial structure	291
12.3	IFCEXPORTALLVISIBILITYSTATES system variable	291
12.3.1	Export Elements hidden by Visibility State	291
12.4	IFCEXPORTAUTHOR system variable	292
12.4.1	Export Author Name	292
12.5	IFCEXPORTAUTHORIZATION system variable	292
12.5.1	Export Authorization	292
12.6	IFCEXPORTBASEQUANTITIES system variable	292
12.6.1	Export base quantities	292
12.7	IFCEXPORTELEMENTSONOFFANDFROZENLAYER system variable	293
12.7.1	Export elements on Off and Frozen layers	293
12.8	IFCEXPORTIDSPROPERTIESONLY system variable	293
12.8.1	Export IDS Properties Only	293
12.9	IFCEXPORTMAPPINGPATH system variable	293
12.9.1	Export mapping file path	293
12.10	IFCEXPORTMULTIPLYELEMENTSASAGGREGATED system variable	293
12.10.1	Export multi-ply elements as aggregated elements	293
12.11	IFCEXPORTORGANIZATION system variable	294
12.11.1	Export Organization Name	294
12.12	IFCEXPORTPROFILECENTEROFGRAVITY system variable	294
12.12.1	Export profile center of gravity	294
12.13	IFCEXPORTSUBTRACTOPENINGS system variable	294
12.13.1	Subtracts the openings from the host geometry before export	294
12.14	IFCEXPORTSWEPTSOLIDSASBREP system variable	295
12.14.1	Always export swept solids as BRep	295
12.15	IFCEXPORTTESSELLATION system variable	295
12.15.1	Level of tessellation	295
12.16	IFCEXPORTVALIDATEMODEL system variable	296
12.16.1	Apply IFC model validation	296
12.17	IFCIMPORTSETTINGSCONFIG system variable	296
12.17.1	IFC import settings configuration	296
12.18	IFCTESSELLATEBSPLINECURVESANDSURFACES system variable	296
12.18.1	Tessellate complex curves and surfaces	296
12.19	IMAGECACHEFOLDER system variable	296
12.19.1	Image disk cache folder	296
12.20	IMAGECACHEMAXMEMORY system variable	297
12.20.1	Maximum used memory	297
12.21	IMAGEDISKCACHE system variable	297
12.21.1	Image disk cache	297
12.22	IMAGEFRAME system variable	297
12.22.1	Image frame	297



Contents

12.23	IMAGEHLT system variable	298
12.23.1	Image highlight	298
12.24	IMAGENOTIFY system variable	298
12.24.1	Image notify	298
12.25	IMPORTCATIAV5EDGEATTRIBUTES system variable	299
12.25.1	Import edge attributes mode	299
12.26	IMPORTCATIAV5REPRESENTATION system variable	299
12.26.1	Import representation	299
12.27	IMPORTCATIAV5SEARCHPATHSPREFERENCE system variable	299
12.27.1	Search path preference	299
12.28	IMPORTCOLORS system variable	300
12.28.1	Translate colors	300
12.29	IMPORTCREOALTERNATESEARCHPATHS system variable	300
12.29.1	Alternate search paths	300
12.30	IMPORTCREOCONFIGURATION system variable	301
12.30.1	Import configuration	301
12.31	IMPORTCUIFILEEXISTS system variable	301
12.31.1	Import cui file exists	301
12.32	IMPORTHIDDENPARTS system variable	301
12.32.1	Hidden parts	301
12.33	IMPORTIGESSIMPLIFY system variable	302
12.33.1	Perform simplification	302
12.34	IMPORTIGESSTITCH system variable	302
12.34.1	Perform stitching	302
12.35	IMPORTINVENTORALTERNATESEARCHPATHS system variable	303
12.35.1	Alternate search paths	303
12.36	IMPORTINVENTORSEARCHPATHSPREFERENCE system variable	303
12.36.1	Search paths preference	303
12.37	IMPORTJTREPRESENTATION system variable	303
12.37.1	Import representation	303
12.38	IMPORTNXALTERNATESEARCHPATHS system variable	304
12.38.1	Alternate search paths	304
12.39	IMPORTNXCONFIGURATION system variable	304
12.39.1	Import configuration	304
12.40	IMPORTNXSEARCHPATHSPREFERENCE system variable	304
12.40.1	Search paths preference	304
12.41	IMPORTPMI system variable	305
12.41.1	Product and manufacturing information	305
12.42	IMPORTPRODUCTSTRUCTURE system variable	305
12.42.1	Product structure	305
12.43	IMPORTREPAIR system variable	306
12.43.1	Repair model on import	306
12.44	IMPORTSIMPLIFY system variable	306
12.44.1	Perform simplification	306
12.45	IMPORTSOLIDEDGEALTERNATESEARCHPATHS system variable	307
12.45.1	Alternate search paths	307
12.46	IMPORTSOLIDEDGESEARCHPATHSPREFERENCE system variable	307
12.46.1	Search paths preference	307



Contents

12.47	IMPORTSOLIDWORKSALTERNATESEARCHPATHS system variable	307
12.47.1	Alternate search paths	307
12.48	IMPORTSOLIDWORKSCONFIGURATION system variable	308
12.48.1	Import configuration	308
12.49	IMPORTSOLIDWORKSREPRESENTATION system variable	308
12.49.1	Import representation	308
12.50	IMPORTSOLIDWORKSROTATEYZ system variable	309
12.50.1	Map SolidWorks Y to current Z axis	309
12.51	IMPORTSOLIDWORKSSEARCHPATHSPREFERENCE system variable	309
12.51.1	Search paths preference	309
12.52	IMPORTSTEPROTATEYZ system variable	309
12.52.1	Map Y to current Z axis	309
12.53	IMPORTSTITCH system variable	310
12.53.1	Perform stitching	310
12.54	INCLUDEPLOTSTAMP system variable	310
12.54.1	Include Plot Stamp	310
12.55	INDEXCTL system variable	311
12.55.1	Index control	311
12.56	INETLOCATION system variable	311
12.56.1	Internet location	311
12.57	INSBASE system variable	311
12.57.1	Insertion base point	311
12.58	INSNAME system variable	312
12.58.1	Insertion name	312
12.59	INSUNITS system variable	312
12.59.1	Insertion units	312
12.60	INSUNITSDEFSOURCE system variable	313
12.60.1	Insertion units default source	313
12.61	INSUNITSDEFTARGET system variable	314
12.61.1	Insertion units default target	314
12.62	INSUNITSSCALING system variable	315
12.62.1	Insertion units scaling	315
12.63	INTERFERECOLOR system variable	316
12.63.1	Interference color	316
12.64	INTERFERELAYER system variable	316
12.64.1	Interference layer	316
12.65	INTERFERENCELEVEL system variable	316
12.65.1	Interference Check Level	316
12.66	INTERFEREOBJVS system variable	317
12.66.1	Interference entity visual style	317
12.67	INTERFEREVPVS system variable	317
12.67.1	Interference viewport visual style	317
12.68	INTERIORELEVATIONMINLENGTH system variable	317
12.68.1	Interior Elevation Minimum Length	317
12.69	INTERIORELEVATIONOFFSET system variable	318
12.69.1	Interior Elevation Offset Distance	318
12.70	INTERSECTEDENTITIES system variable	318
12.70.1	Resolve intersection	318



Contents

12.71	INTERSECTIONCOLOR system variable	318
12.71.1	Intersection color	318
12.72	INTERSECTIONDISPLAY system variable	319
12.72.1	Intersection display	319
12.73	ISAVEBAK system variable	319
12.73.1	Incremental save backup	319
12.74	ISAVEPERCENT system variable	320
12.74.1	Save percent	320
12.75	ISOLINES system variable	320
12.75.1	Isolines	320
13.	K	321
13.1	KEEPCONNECTIONS system variable	321
13.1.1	Solve interferences and gaps	321
14.	L	322
14.1	LASTANGLE system variable	322
14.1.1	Last angle (Read Only)	322
14.2	LASTPOINT system variable	322
14.2.1	Last point	322
14.3	LASTPROMPT system variable	322
14.3.1	Last prompt (Read Only)	322
14.4	LATITUDE system variable	322
14.4.1	Latitude	322
14.5	LAYERFILTEREXCESS system variable	323
14.5.1	Layer Filter Excess	323
14.6	LAYERPMODE system variable	323
14.6.1	Layer previous mode	323
14.7	LAYLOCKFADECTL system variable	324
14.7.1	Locked layer fade control	324
14.8	LAYOUTREGENCTL system variable	324
14.8.1	Layout regeneration control	324
14.9	LAYOUTTAB system variable	324
14.9.1	Layout and model tabs	324
14.10	LEGACYCODESEARCH system variable	325
14.10.1	Legacy code search mode (Read Only)	325
14.11	LENGTHUNITS system variable	325
14.11.1	Length units	325
14.12	LENSLENGTH system variable	325
14.12.1	Lens length (Read Only)	325
14.13	LEVELOFDETAIL system variable	326
14.13.1	Composition Level of detail	326
14.14	LICFLAGS system variable	326
14.14.1	Licensed components (Read Only)	326
14.15	LIGHTGLYPHCOLOR system variable	327
14.15.1	Color for light glyph	327
14.16	LIGHTGLYPHDISPLAY system variable	327
14.16.1	Light display	327
14.17	LIGHTINGUNITS system variable	327
14.17.1	Lighting units	327



Contents

14.18	LIGHTWEBGLYPHCOLOR system variable	328
14.18.1	Color for web light glyph	328
14.19	LIMCHECK system variable	328
14.19.1	Limits check	328
14.20	LIMMAX system variable	328
14.20.1	Limits maximum	328
14.21	LIMMIN system variable	329
14.21.1	Limits minimum	329
14.22	LINEARARROWHEADLENGTH system variable	329
14.22.1	Default head length	329
14.23	LINEARARROWHEADWIDTH system variable	329
14.23.1	Default head width	329
14.24	LINEARARROWTHICKNESS system variable	330
14.24.1	Default thickness	330
14.25	LINEARBRIGHTNESS system variable	330
14.25.1	Linear brightness	330
14.26	LINEARCONTRAST system variable	330
14.26.1	Linear contrast	330
14.27	LINETYPE3DPLINE system variable	331
14.27.1	3D Polyline linetype	331
14.28	LISPINIT system variable	331
14.28.1	LISP init	331
14.29	LOADMECHANICAL2D system variable	332
14.29.1	Mechanical 2D Editor	332
14.30	LOCALE system variable	332
14.30.1	Locale (Read Only)	332
14.31	LOCALROOTPREFIX system variable	332
14.31.1	Local root prefix (Read Only)	332
14.32	LOCKUI system variable	333
14.32.1	Lock user interface elements	333
14.33	LOFTANG1 system variable	333
14.33.1	Loft angle 1	333
14.34	LOFTANG2 system variable	334
14.34.1	Loft angle 2	334
14.35	LOFTMAG1 system variable	335
14.35.1	Loft magnitude 1	335
14.36	LOFTMAG2 system variable	335
14.36.1	Loft magnitude 2	335
14.37	LOFTNORMALS system variable	336
14.37.1	Loft normals	336
14.38	LOFTPARAM system variable	336
14.38.1	Loft param	336
14.39	LOGFILEMODE system variable	337
14.39.1	Log file mode	337
14.40	LOGFILENAME system variable	337
14.40.1	Log file name (Read Only)	337
14.41	LOGFILEPATH system variable	337
14.41.1	Log file path	337



Contents

14.42	LOGGEDINSTATUS system variable	338
14.42.1	Logged in (Read Only)	338
14.43	LOGINNAME system variable	338
14.43.1	Login name (Read Only)	338
14.44	LONGITUDE system variable	338
14.44.1	Longitude	338
14.45	LOOKFROMDIRECTIONMODE system variable	338
14.45.1	LookFrom direction mode	338
14.46	LOOKFROMFEEDBACK system variable	339
14.46.1	LookFrom feedback	339
14.47	LOOKFROMZOOMEXTENTS system variable	340
14.47.1	LookFrom zoom extents	340
14.48	LTGAPSELECTION system variable	340
14.48.1	Linetype gap selection	340
14.49	LTSCALE system variable	340
14.49.1	Linetype scale	340
14.50	LUNITS system variable	341
14.50.1	Linear unit type	341
14.51	LUPREC system variable	341
14.51.1	Linear unit precision	341
14.52	LWDEFAULT system variable	342
14.52.1	Default lineweight	342
14.53	LWDISPLAY system variable	342
14.53.1	Lineweight display	342
14.54	LWDISPSCALE system variable	343
14.54.1	Lineweight display scale	343
14.55	LWUNITS system variable	343
14.55.1	Lineweight units	343
15.	M	344
15.1	MACROREC system variable	344
15.1.1	Macro recording	344
15.2	MANIPULATOR system variable	344
15.2.1	Manipulator	344
15.3	MANIPULATORCOLORTHEME system variable	344
15.3.1	Color theme of Manipulator	344
15.4	MANIPULATORDURATION system variable	345
15.4.1	Manipulator duration	345
15.5	MANIPULATORHANDLE system variable	346
15.5.1	Manipulator handle	346
15.6	MANIPULATORSIZE system variable	346
15.6.1	Size of Manipulator	346
15.7	MASSPREC system variable	346
15.7.1	Mass precision	346
15.8	MASSPROPACCURACY system variable	347
15.8.1	Mass properties calculation relative accuracy	347
15.9	MASSUNITS system variable	348
15.9.1	Mass units	348
15.10	MAXACTVP system variable	348



Contents

15.10.1	Maximum active viewports	348
15.11	MAXHATCH system variable	349
15.11.1	Maximum hatch dashes	349
15.12	MAXSORT system variable	349
15.12.1	Maximum sort	349
15.13	MAXTHREADS system variable	349
15.13.1	Maximum number of threads	349
15.14	MBSTATE system variable	350
15.14.1	Mechanical browser state (Read Only)	350
15.15	MBUTTONPAN system variable	350
15.15.1	Middle button pan	350
15.16	MEASUREINIT system variable	350
15.16.1	Measurement initial	350
15.17	MEASUREMENT system variable	351
15.17.1	Measurement	351
15.18	MECH2DSAVEFORMAT system variable	351
15.18.1	Mechanical 2D save format	351
15.19	MECHANICALBLOCKSOPTIONS system variable	352
15.19.1	Mechanical blocks options	352
15.20	MECHANICALBROWSERSETTINGS system variable	352
15.20.1	Mechanical browser options	352
15.21	MENUBAR (EXCEPT OS X) system variable	353
15.21.1	Menu bar	353
15.22	MENUCTL system variable	353
15.22.1	Menu control	353
15.23	MENUECHO system variable	354
15.23.1	Menu echo	354
15.24	MENUNAME system variable	354
15.24.1	Menu name (Read Only)	354
15.25	MESHTYPE system variable	354
15.25.1	Mesh type	354
15.26	MIDDLECLICKCLOSE system variable	355
15.26.1	Middle click close (Mac & Linux)	355
15.27	MILLISECS system variable	355
15.27.1	Milliseconds (Read Only)	355
15.28	MIRR Hatch system variable	355
15.28.1	Mirror hatch patterns	355
15.29	MIRRTEXT system variable	356
15.29.1	Mirror text	356
15.30	MLEADERSCALE system variable	356
15.30.1	Multileader scale	356
15.31	MODEMACRO system variable	356
15.31.1	Mode macro	356
15.32	MSLTSCALE system variable	357
15.32.1	Model space linetype scale	357
15.33	MSOLESCALE system variable	357
15.33.1	Model space OLE scale	357
15.34	MTEXTAUTOSTACK system variable	358



Contents

15.34.1	Multiline text autostack	358
15.35	MTEXTCOLUMN system variable	358
15.35.1	Multiline text column setting	358
15.36	MTEXTDETECTSPACE system variable	358
15.36.1	Space detection for creating lists in mtext editor	358
15.37	MTEXTED system variable	359
15.37.1	Multiline text editor	359
15.38	MTEXTFIXED system variable	359
15.38.1	Multiline text fixed	359
15.39	MTEXTTOOLBAR system variable	359
15.39.1	MText Formatting toolbar	359
15.40	MTFLAGS system variable	360
15.40.1	Multi-Threading Flags	360
15.41	MULTISELECTANGULARTOLERANCE system variable	360
15.41.1	BimMultiSelect angular tolerance	360
15.42	MYDOCUMENTSPREFIX system variable	361
15.42.1	MyDocuments root prefix (Read Only)	361
16.	N	362
16.1	NAVVCUBEDISPLAY system variable	362
16.1.1	LookFrom display	362
16.2	NAVVCUBELOCATION system variable	362
16.2.1	LookFrom location	362
16.3	NAVVCUBEOPACITY system variable	363
16.3.1	LookFrom opacity	363
16.4	NAVVCUBEORIENT system variable	363
16.4.1	LookFrom orientation	363
16.5	NEARESTDISTANCE system variable	363
16.5.1	Nearest Distance	363
16.6	NOMUTT system variable	364
16.6.1	No muttering	364
16.7	NORTHDIRECTION system variable	365
16.7.1	North direction	365
17.	O	366
17.1	OBJECTISOLATIONMODE system variable	366
17.1.1	Object Isolation Mode	366
17.2	OBSCUREDColor system variable	366
17.2.1	Obscured color	366
17.3	OBSCUREDLTtype system variable	367
17.3.1	Obscured linetype	367
17.4	OFFSETDIST system variable	367
17.4.1	Offset distance	367
17.5	OFFSETERASE system variable	368
17.5.1	Offset erase	368
17.6	OFFSETGAPtype system variable	368
17.6.1	Offset gap type	368
17.7	OLEFRAME system variable	368
17.7.1	OLE frame	368
17.8	OLEHIDE system variable	369



Contents

17.8.1	OLE hide	369
17.9	OLEQUALITY system variable	369
17.9.1	OLE quality	369
17.10	OLESTARTUP system variable	370
17.10.1	OLE startup	370
17.11	OPMSTATE system variable	370
17.11.1	Properties panel state (Read Only)	370
17.12	ORBITAUTOTARGET system variable	370
17.12.1	Orbit Auto Target	370
17.13	ORTHOMODE system variable	371
17.13.1	Orthogonal mode	371
17.14	OSMODE system variable	371
17.14.1	Entity snap mode	371
17.15	OSNAPCOORD system variable	372
17.15.1	Entity snap coordinates	372
17.16	OSNAPZ system variable	372
17.16.1	Ignore entity snap elevation	372
17.17	OSOPTIONS system variable	373
17.17.1	Entity snap options	373
17.18	OVERKILLLAYER system variable	373
17.18.1	Duplicate Entities Layer	373
18.	P	374
18.1	PANBUFFER system variable	374
18.1.1	Pan buffer	374
18.2	PANELBUTTONSIZE system variable	374
18.2.1	Panel control button size	374
18.3	PAPERUPDATE system variable	374
18.3.1	Paper update	374
18.4	PARAMETERCOPYMODE system variable	375
18.4.1	Parameter copy mode	375
18.5	PARAMETERMATCHMODE system variable	375
18.5.1	Match Parametric Blocks by parameters	375
18.6	PARAMETRICBLOCKS2DPATH system variable	376
18.6.1	Parametric blocks 2D directory path	376
18.7	PARAMETRIZECONNECTIONS system variable	376
18.7.1	Parametrize Connections	376
18.8	PBLOCKREFERENCEOPERATIONSVISUALIZATION system variable	376
18.8.1	Visualize parametric operations on block references	376
18.9	PDFANIMATIONFPS system variable	377
18.9.1	Frames per second	377
18.10	PDFCACHE system variable	377
18.10.1	PDF cache	377
18.11	PDFCREATEBOOKMARKS system variable	378
18.11.1	Create bookmarks	378
18.12	PDFEMBEDDEDTF system variable	378
18.12.1	Pdf embedded fonts	378
18.13	PDFEXPORTHYPERLINKS system variable	378
18.13.1	Export hyperlinks	378



Contents

18.14	PDFFRAME system variable_____	379
18.14.1	PDF frame_____	379
18.15	PDFIMAGEANTIALIAS system variable_____	379
18.15.1	Image anti-aliasing_____	379
18.16	PDFIMAGECOMPRESSION system variable_____	379
18.16.1	Image compression_____	379
18.17	PDFIMAGEDPI system variable_____	380
18.17.1	Image DPI_____	380
18.18	PDFIMPORTAPPLYLINEWEIGHT system variable_____	380
18.18.1	Apply lineweight properties_____	380
18.19	PDFIMPORTASBLOCK system variable_____	381
18.19.1	Import as block_____	381
18.20	PDFIMPORTCHARSPACEFACTOR system variable_____	381
18.20.1	Inter-character space factor_____	381
18.21	PDFIMPORTCOMBINETEXTOBJECTS system variable_____	381
18.21.1	Combine text entities_____	381
18.22	PDFIMPORTCONVERTSOLIDSTOHATCHES system variable_____	382
18.22.1	Convert solid fills to hatches_____	382
18.23	PDFIMPORTIMAGEPATH system variable_____	382
18.23.1	Raster Images Folder_____	382
18.24	PDFIMPORTJOINLINEANDARCSEGMENTS system variable_____	382
18.24.1	Join line and arc segments_____	382
18.25	PDFIMPORTLAYERSUSETYPE system variable_____	383
18.25.1	Layers_____	383
18.26	PDFIMPORTRASTERIMAGES system variable_____	383
18.26.1	Raster Images_____	383
18.27	PDFIMPORTSOLIDFILLS system variable_____	384
18.27.1	Solid fills_____	384
18.28	PDFIMPORTSPACEFACTOR system variable_____	384
18.28.1	Inter-word space factor_____	384
18.29	PDFIMPORTTRUETYPETEXT system variable_____	384
18.29.1	TrueType text_____	384
18.30	PDFIMPORTTRUETYPETEXTASGEOMETRY system variable_____	385
18.30.1	Import True Type text as geometry_____	385
18.31	PDFIMPORTUSECLIPPING system variable_____	385
18.31.1	Apply clipping_____	385
18.32	PDFIMPORTUSEGEOMETRYOPTIMIZATION system variable_____	385
18.32.1	Import geometry with optimization_____	385
18.33	PDFIMPORTUSEIMAGECLIPPING system variable_____	386
18.33.1	Clip images_____	386
18.34	PDFIMPORTUSEPAGEBORDERCLIPPING system variable_____	386
18.34.1	Apply clipping at page border_____	386
18.35	PDFIMPORTVECTORGEOMETRY system variable_____	387
18.35.1	Vector geometry_____	387
18.36	PDFLAYERSSETTING system variable_____	387
18.36.1	PDF layer support_____	387
18.37	PDFLAYOUTSTOEXPORT system variable_____	387
18.37.1	PDF layouts to export_____	387



Contents

18.38	PDFMERGECONTROL system variable	388
18.38.1	PDF Merge Control	388
18.39	PDFNOTIFY system variable	388
18.39.1	PDF notify	388
18.40	PDFOPENINVIEWER system variable	388
18.40.1	Open in viewer	388
18.41	PDFOSNAP system variable	389
18.41.1	PDF entity snap	389
18.42	PDFPAPERHEIGHT system variable	389
18.42.1	PDF override - paper height	389
18.43	PDFPAPERSIZEOVERRIDE system variable	389
18.43.1	PDF papersize override	389
18.44	PDFPAPERWIDTH system variable	390
18.44.1	PDF override - paper width	390
18.45	PDFPDFA system variable	390
18.45.1	PDF/A format support	390
18.46	PDFPRCCOMPRESSION system variable	390
18.46.1	PRC Compression	390
18.47	PDFPRCEXPORT system variable	391
18.47.1	PRC Export Mode	391
18.48	PDFPRCPROJECTION system variable	391
18.48.1	PRC Projection	391
18.49	PDFPRCVIEWMODE system variable	392
18.49.1	PRC View mode	392
18.50	PDFSHXTEXTASGEOMETRY system variable	392
18.50.1	PDF SHX text as geometry	392
18.51	PDFSIMPLEGEOOPTIMIZATION system variable	392
18.51.1	Pdf simple geometry optimization	392
18.52	PDFTTFTEXTASGEOMETRY system variable	393
18.52.1	PDF TTF text as geometry	393
18.53	PDFUSEPLOTSTYLES system variable	393
18.53.1	Use PDF plotstyles	393
18.54	PDFVECTORRESOLUTIONDPI system variable	394
18.54.1	Vector Resolution DPI	394
18.55	PDFZOOMTOEXTENTSMODE system variable	394
18.55.1	PDF zoom to extents mode	394
18.56	PDMODE system variable	394
18.56.1	Point display mode	394
18.57	PDSIZE system variable	395
18.57.1	Point display size	395
18.58	PEDITACCEPT system variable	396
18.58.1	Polyline edit accept	396
18.59	PELLIPSE system variable	396
18.59.1	Polyline ellipse	396
18.60	PERIMETER system variable	396
18.60.1	Last perimeter (Read Only)	396
18.61	PERSPECTIVE system variable	397
18.61.1	Perspective	397



Contents

18.62	PFACEVMAX system variable	397
18.62.1	Polyface mesh maximum vertices (Read Only)	397
18.63	PICKADD system variable	397
18.63.1	Pick add	397
18.64	PICKAUTO system variable	398
18.64.1	Selection window behavior	398
18.65	PICKBOX system variable	398
18.65.1	Pick box	398
18.66	PICKDRAG system variable	399
18.66.1	Pick drag	399
18.67	PICKFIRST system variable	399
18.67.1	Pick first	399
18.68	PICKSTYLE (EXCEPT OS X) system variable	399
18.68.1	Pick style	399
18.69	PICTUREEXPORTSCALE system variable	400
18.69.1	Picture format export scale factor	400
18.70	PLACESBARFOLDER1 system variable	400
18.70.1	First folder	400
18.71	PLACESBARFOLDER2 system variable	401
18.71.1	Second folder	401
18.72	PLACESBARFOLDER3 system variable	401
18.72.1	Third folder	401
18.73	PLACESBARFOLDER4 system variable	402
18.73.1	Fourth folder (Windows)	402
18.74	PLATFORM system variable	403
18.74.1	Platform (Read Only)	403
18.75	PLINECACHE system variable	403
18.75.1	Polyline cache	403
18.76	PLINECONVERTMODE system variable	403
18.76.1	Polyline convert mode	403
18.77	PLINEGEN system variable	404
18.77.1	Polyline generation	404
18.78	PLINEREVERSEWIDTHS system variable	404
18.78.1	Reverse widths	404
18.79	PLINETYPE system variable	405
18.79.1	Polyline type	405
18.80	PLINEWID system variable	405
18.80.1	Polyline width	405
18.81	PLOTFCGPATH system variable	405
18.81.1	Plotter configuration path	405
18.82	PLOTID system variable	406
18.82.1	Plot id (Obsolete)	406
18.83	PLOTOUTPUTPATH system variable	406
18.83.1	Plot output path	406
18.84	PLOTSTYLEPATH system variable	406
18.84.1	Plot styles path	406
18.85	PLOTTER system variable	406
18.85.1	Plotter (Obsolete)	406



Contents

18.86	PLOTTRANSPARENCYOVERRIDE system variable	407
18.86.1	Plot transparency override	407
18.87	PLQUIET system variable	407
18.87.1	Plot quiet	407
18.88	POINTCLOUD2DVSDISPLAY system variable	407
18.88.1	Toggle show/hide bounding box in 2d wireframe mode	407
18.89	POINTCLOUDADAPTIVEDISPLAY system variable	408
18.89.1	Toggle adaptive vs. fixed point sizes	408
18.90	POINTCLOUDBOUNDARY system variable	408
18.90.1	Show/hide point cloud extent boundary	408
18.91	POINTCLOUDCACHEFOLDER system variable	409
18.91.1	Disk cache folder	409
18.92	POINTCLOUDEYEDOMELIGHTING system variable	409
18.92.1	Eye dome lighting strength	409
18.93	POINTCLOUDGAPFILLING system variable	409
18.93.1	Gap filling size	409
18.94	POINTCLOUDHSPC system variable	410
18.94.1	Point Cloud format (hspc/bcad)	410
18.95	POINTCLOUDIGNOREGEOTAGS system variable	410
18.95.1	Ignore geo tags in source data (deprecated!)	410
18.96	POINTCLOUDNORMALS system variable	411
18.96.1	Normal calculation	411
18.97	POINTCLOUDPOINTMAX system variable	411
18.97.1	Maximum number of points displayed on screen (in millions)	411
18.98	POINTCLOUDPOINTSIZ system variable	411
18.98.1	Point size	411
18.99	POLARADDANG system variable	412
18.99.1	Polar add angles	412
18.100	POLARANG system variable	412
18.100.1	Polar angle	412
18.101	POLARDIST system variable	413
18.101.1	Polar distance	413
18.102	POLARMODE system variable	413
18.102.1	Polar mode	413
18.103	POLYSIDES system variable	413
18.103.1	Polygon sides	413
18.104	POPERATIONSCOLOR system variable	414
18.104.1	Parametric operations color	414
18.105	POPUPS system variable	414
18.105.1	Popups (Read Only)	414
18.106	PREVIEWDELAY system variable	414
18.106.1	Delay to preview selection	414
18.107	PREVIEWEFFECT system variable	415
18.107.1	Selection preview effect	415
18.108	PREVIEWFILTER system variable	415
18.108.1	Selection filter	415
18.109	PREVIEWTYPE system variable	416
18.109.1	Preview type	416



Contents

18.110	PREVIEWWNDINOPENDLG system variable	416
18.110.1	Preview window in open dialog	416
18.111	PRINTFILE system variable	416
18.111.1	Print file	416
18.112	PRINTPDFPREVIEW system variable	417
18.112.1	Print As PDF Preview	417
18.113	PRODUCT system variable	417
18.113.1	Product (Read Only)	417
18.114	PROFILEOFFSETBEHAVIOR system variable	417
18.114.1	Profile offset behavior	417
18.115	PROGBAR system variable	418
18.115.1	Progress bar	418
18.116	PROGRAM system variable	418
18.116.1	Program (Read Only)	418
18.117	PROJECTIONTYPE system variable	418
18.117.1	Drawing view projection type	418
18.118	PROJECTLOCATIONVISIBILITY system variable	419
18.118.1	Project location marker visibility	419
18.119	PROJECTNAME system variable	420
18.119.1	Project name	420
18.120	PROJECTSEARCHPATHS system variable	420
18.120.1	Project search paths	420
18.121	PROJMODE system variable	420
18.121.1	Projection mode	420
18.122	PROMPTMENU system variable	421
18.122.1	Prompt menu	421
18.123	PROMPTMENUFLAGS system variable	421
18.123.1	Prompt menu flags	421
18.124	PROMPTOPTIONFORMAT system variable	422
18.124.1	Prompt option format	422
18.125	PROMPTOPTIONTRANSLATEKEYWORDS system variable	423
18.125.1	Prompt option translate keywords	423
18.126	PROPAGATESEARCHSPACE system variable	423
18.126.1	Search space	423
18.127	PROPAGATETOLERANCE system variable	424
18.127.1	Position tolerance	424
18.128	PROPERTYPREVIEW system variable	424
18.128.1	Property Preview	424
18.129	PROPERTYPREVIEWDELAY system variable	424
18.129.1	Property Preview Delay	424
18.130	PROPERTYPREVIEWOBJLIMIT system variable	425
18.130.1	Property Preview Object Limit	425
18.131	PROPOBJLIMIT system variable	425
18.131.1	Properties objects limit	425
18.132	PROPPREVTIMEOUT system variable	425
18.132.1	Property Preview Timeout	425
18.133	PROPUNITS system variable	426
18.133.1	Property units	426



Contents

18.134	PROXYGRAPHICS system variable	426
18.134.1	Proxy graphics	426
18.135	PROXYNOTICE system variable	426
18.135.1	Proxy notice	426
18.136	PROXYSERVERENABLED system variable	427
18.136.1	Proxy server	427
18.137	PROXYSERVERHTTP system variable	427
18.137.1	HTTP server	427
18.138	PROXYSERVERHTTPPORT system variable	427
18.138.1	HTTP server port	427
18.139	PROXYSERVERHTTPS system variable	428
18.139.1	HTTPS server	428
18.140	PROXYSERVERHTTPSPORT system variable	428
18.140.1	HTTPS server port	428
18.141	PROXYSERVERPASSWORD system variable	428
18.141.1	User password	428
18.142	PROXYSERVERUSER system variable	428
18.142.1	User name	428
18.143	PROXYSHOW system variable	428
18.143.1	Proxy show	428
18.144	PROXYWEBSEARCH system variable	429
18.144.1	Proxy web search	429
18.145	PSLTSCALE system variable	429
18.145.1	Paper space linetype scale	429
18.146	PSOLHEIGHT system variable	430
18.146.1	Polysolid height	430
18.147	PSOLWIDTH system variable	430
18.147.1	Polysolid width	430
18.148	PSTYLEMODE system variable	430
18.148.1	Plot style mode (Read Only)	430
18.149	PSTYLEPOLICY system variable	431
18.149.1	Plot style policy	431
18.150	PSVPSCALE system variable	431
18.150.1	Paper space viewport scale	431
18.151	PUBLISHALLSHEETS system variable	431
18.151.1	Publish all sheets	431
18.152	PUBLISHCOLLATE system variable	432
18.152.1	Collate published sheets	432
18.153	PUCSBASE system variable	432
18.153.1	Paper space UCS base (Read Only)	432
19.	Q	433
19.1	QAFLAGS system variable	433
19.1.1	Quality Assurance flags	433
19.2	QSELECTAUTOCLOSE system variable	433
19.2.1	Quick Select auto close	433
19.3	QSELECTINIT system variable	434
19.3.1	Quick Select initial	434
19.4	QSELECTLIST system variable	434



Contents

19.4.1	Quick Select List	434
19.5	QTEXTMODE system variable	435
19.5.1	Quick text mode	435
19.6	QUADCOMMANDLAUNCH system variable	436
19.6.1	Quad default command launch	436
19.7	QUADDISPLAY system variable	436
19.7.1	Quad display	436
19.8	QUADEXPANDDELAY system variable	437
19.8.1	Quad expand delay	437
19.9	QUADEXPANDTABDELAY system variable	437
19.9.1	Quad expand tab delay	437
19.10	QUADGOTRSPARENT system variable	437
19.10.1	Quad go transparent	437
19.11	QUADHIDEDELAY system variable	438
19.11.1	Quad hide delay	438
19.12	QUADHIDEMARGIN system variable	438
19.12.1	Quad hide margin	438
19.13	QUADICONSIZE system variable	438
19.13.1	Quad icon size	438
19.14	QUADICONSPACE system variable	439
19.14.1	Quad icon space	439
19.15	QUADMOSTRECENTITEMS system variable	440
19.15.1	Quad most recent items	440
19.16	QUADPOPUPCORNER system variable	440
19.16.1	Quad popup corner	440
19.17	QUADSHOWDELAY system variable	441
19.17.1	Quad show delay	441
19.18	QUADWIDTH system variable	441
19.18.1	Quad width	441
20.	R	442
20.1	R12SAVEACCURACY system variable	442
20.1.1	R12 Save accuracy	442
20.2	R12SAVEDEVIATION system variable	442
20.2.1	R12 Save deviation	442
20.3	RASTERPREVIEW system variable	442
20.3.1	Raster preview	442
20.4	RE_INIT system variable	443
20.4.1	Reinitialize Aliases (Read Only)	443
20.5	REALTIMESPEEDUP system variable	443
20.5.1	Realtime speedup	443
20.6	REALWORLDSCALE system variable	443
20.6.1	Real world scale	443
20.7	RECENTFILES system variable	444
20.7.1	Recent file list max count	444
20.8	RECENTPATH system variable	444
20.8.1	Recent path	444
20.9	REDHILITE_DUCSLOCKED_FACE_ALPHA system variable	444
20.9.1	Face opacity	444



Contents

20.10	REDHILITE_DUCSLOCKED_FACE_COLOR system variable_____	445
20.10.1	Face color_____	445
20.11	REDHILITE_HIDDENEDGE_ALPHA system variable_____	445
20.11.1	Edge opacity_____	445
20.12	REDHILITE_HIDDENEDGE_COLOR system variable_____	445
20.12.1	Hidden edge color_____	445
20.13	REDHILITEFULL_EDGE_ALPHA system variable_____	446
20.13.1	Edge opacity_____	446
20.14	REDHILITEFULL_EDGE_COLOR system variable_____	446
20.14.1	Edge color_____	446
20.15	REDHILITEFULL_EDGE_SHOWHIDDEN system variable_____	446
20.15.1	Hidden edges_____	446
20.16	REDHILITEFULL_EDGE_SMOOTHING system variable_____	447
20.16.1	Edge smoothing_____	447
20.17	REDHILITEFULL_EDGE_THICKNESS system variable_____	447
20.17.1	Edge thickness_____	447
20.18	REDHILITEFULL_FACE_ALPHA system variable_____	447
20.18.1	Face transparency_____	447
20.19	REDHILITEFULL_FACE_COLOR system variable_____	448
20.19.1	Face color_____	448
20.20	REDHILITEPARTIAL_SELECTEDEDGE_ALPHA system variable_____	448
20.20.1	Edge opacity_____	448
20.21	REDHILITEPARTIAL_SELECTEDEDGE_COLOR system variable_____	449
20.21.1	Edge color_____	449
20.22	REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable_____	449
20.22.1	Glow_____	449
20.23	REDHILITEPARTIAL_SELECTEDEDGE_SMOOTHING system variable_____	449
20.23.1	Edge smoothing_____	449
20.24	REDHILITEPARTIAL_SELECTEDEDGE_THICKNESS system variable_____	450
20.24.1	Edge thickness_____	450
20.25	REDHILITEPARTIAL_SELECTEDEDGE_GLOW_ALPHA system variable_____	450
20.25.1	Glow transparency_____	450
20.26	REDHILITEPARTIAL_SELECTEDEDGE_GLOW_COLOR system variable_____	450
20.26.1	Glow color_____	450
20.27	REDHILITEPARTIAL_SELECTEDEDGE_GLOW_SMOOTHING system variable_____	451
20.27.1	Glow smoothing_____	451
20.28	REDHILITEPARTIAL_SELECTEDEDGE_GLOW_THICKNESS system variable_____	452
20.28.1	Glow thickness_____	452
20.29	REDHILITEPARTIAL_SELECTEDFACE_ALPHA system variable_____	453
20.29.1	Face opacity_____	453
20.30	REDHILITEPARTIAL_SELECTEDFACE_COLOR system variable_____	453
20.30.1	Face color_____	453
20.31	REDHILITEPARTIAL_UNSELECTEDEGE_SHOWHIDDEN system variable_____	453
20.31.1	Hidden edges_____	453
20.32	REDSDKLINESMOOTHING system variable_____	454
20.32.1	Line smoothing_____	454
20.33	REDUCELENGTHTYPE system variable_____	454
20.33.1	Reduce Length Type_____	454



Contents

20.34	REDUCELENGTHVALUE system variable	454
20.34.1	Reduce Length Value	454
20.35	REFEDITLOCKNOTINWORKSET system variable	455
20.35.1	Refedit lock	455
20.36	REFEDITNAME system variable	455
20.36.1	Refedit name (Read Only)	455
20.37	REFPATHTYPE system variable	455
20.37.1	Default path type of reference files	455
20.38	REGENMODE system variable	456
20.38.1	Regeneration mode	456
20.39	REGEXPAND system variable	456
20.39.1	Registry paths expanding type	456
20.40	REMEMBERFOLDERS system variable	456
20.40.1	Remember folders	456
20.41	RENDERCOMPOSITIONMATERIAL system variable	457
20.41.1	Render Composition Material	457
20.42	RENDERMATERIALDOWNLOAD system variable	457
20.42.1	Download missing resources for render materials	457
20.43	RENDERMATERIALSPATH system variable	458
20.43.1	Render materials directory path	458
20.44	RENDERUSINGHARDWARE system variable	458
20.44.1	Render using hardware	458
20.45	REPORTPANELMODE system variable	458
20.45.1	Report panel mode	458
20.46	RESTORECONNECTIONS system variable	459
20.46.1	Restore Connections	459
20.47	RESTORELOSTFOCUS system variable	459
20.47.1	Restore lost focus (Linux)	459
20.48	RETAINEDGRAPHICS system variable	459
20.48.1	Retained Graphics	459
20.49	REVCLLOUDARCSTYLE system variable	460
20.49.1	Revision cloud default arc style	460
20.50	REVCLLOUDCREATEMODE system variable	460
20.50.1	Revision cloud creation mode	460
20.51	REVCLLOUDGRIPS system variable	461
20.51.1	Revision cloud grips	461
20.52	REVCLLOUDMAXARCLENGTH system variable	461
20.52.1	Revision cloud default maximum arc length	461
20.53	REVCLLOUDMINARCLENGTH system variable	462
20.53.1	Revision cloud default minimum arc length	462
20.54	RHINOVERSION system variable	462
20.54.1	Rhino Export version	462
20.55	RIBBONDOCKEDHEIGHT system variable	462
20.55.1	Ribbon docked height	462
20.56	RIBBONPANELMARGIN system variable	463
20.56.1	Panel margin	463
20.57	RIBBONSETTINGSENABLED system variable	463
20.57.1	Ribbon interface settings control on/off	463



Contents

20.58	RIBBONSTATE system variable	464
20.58.1	Ribbon state (Read Only)	464
20.59	ROAMABLEROOTPREFIX system variable	464
20.59.1	Roamable root prefix (Read Only)	464
20.60	ROLLOVEROPACITY system variable	464
20.60.1	Rollover opacity	464
20.61	ROLLOVERPARAMS system variable	465
20.61.1	Rollover parameters	465
20.62	ROLLOVERSELECTIONSET system variable	465
20.62.1	Rollover selection set	465
20.63	ROLLOVERTIPS system variable	465
20.63.1	Rollover tips	465
20.64	RTDISPLAY system variable	466
20.64.1	Realtime display	466
20.65	RTISOLATESELECTION system variable	466
20.65.1	Realtime selection isolation	466
20.66	RTROTATIONSPEEDFACTOR system variable	467
20.66.1	Realtime Rotation Speed Factor	467
20.67	RUBBERBANDCOLOR system variable	467
20.67.1	Rubber band color	467
20.68	RUBBERBANDSTYLE system variable	467
20.68.1	Rubber band dashed style	467
20.69	RUBBERSHEET (for OS X) system variable	468
20.69.1	Rubbersheet Touchpad	468
20.70	RUBBERSHEETSENSIBILITY (FOR OS X) system variable	468
20.70.1	Rubbersheet gesture activation sensibility	468
20.71	RULERDISPLAY system variable	468
20.71.1	Ruler display	468
20.72	RULERTEXTCOLOR system variable	469
20.72.1	Ruler Text Color	469
20.73	RUNASLEVEL system variable	469
20.73.1	Run as license level	469
20.74	RVTRFALEVELOFDETAIL system variable	470
20.74.1	Level of detail	470
20.75	RVTVALIDATEBREP system variable	470
20.75.1	Validate BREP geometry	470
21.	S	471
21.1	SAFEMODE system variable	471
21.1.1	Safe mode (Read Only)	471
21.2	SAVECHANGETOLAYOUT system variable	471
21.2.1	Save changes to layout	471
21.3	SAVEFIDELITY system variable	471
21.3.1	Save fidelity	471
21.4	SAVEFILE system variable	472
21.4.1	Save file name (Read Only)	472
21.5	SAVEFILEPATH system variable	472
21.5.1	Save file path	472
21.6	SAVEFORMAT system variable	472



Contents

21.6.1	Save format	472
21.7	SAVELAYERSNAPSHOT system variable	473
21.7.1	Save Layer Snapshot with view	473
21.8	SAVENAME system variable	474
21.8.1	Saved drawing name (Read Only)	474
21.9	SAVEONDOCSWITCH system variable	474
21.9.1	Save on document switch	474
21.10	SAVEROUNDTRIP system variable	474
21.10.1	Save roundtrip	474
21.11	SAVETIME system variable	474
21.11.1	Save time interval	474
21.12	SCREENBOXES system variable	475
21.12.1	Screen menu boxes (Read Only)	475
21.13	SCREENMODE system variable	475
21.13.1	Screen mode (Read Only)	475
21.14	SCREENSIZE system variable	475
21.14.1	Screen size (Read Only)	475
21.15	SCRLHIST system variable	476
21.15.1	Scroll history	476
21.16	SDI system variable	476
21.16.1	Single-document interface (Windows)	476
21.17	SECTIONOFFSETSTEP system variable	477
21.17.1	Section plane offset step	477
21.18	SECTIONPLANEVISIBILITY system variable	477
21.18.1	Section plane visibility	477
21.19	SECTIONRESULTINTERVAL system variable	478
21.19.1	Section result interval	478
21.20	SECTIONSCALE system variable	478
21.20.1	Section scale	478
21.21	SECTIONSETTINGSSEARCHPATH system variable	478
21.21.1	Section settings search path	478
21.22	SECTIONSHEETSETTEMPLATEIMPERIAL system variable	479
21.22.1	Section sheet set template imperial	479
21.23	SECTIONSHEETSETTEMPLATEMETRIC system variable	479
21.23.1	Section sheet set template metric	479
21.24	SECURELOAD system variable	479
21.24.1	Executable file security policy (Read Only)	479
21.25	SELECTIONANNODISPLAY system variable	480
21.25.1	Show all annotation scales on selection	480
21.26	SELECTIONAREA system variable	480
21.26.1	Selection area	480
21.27	SELECTIONAREAOPACITY system variable	480
21.27.1	Selection area opacity	480
21.28	SELECTIONCYCLING system variable	481
21.28.1	Selection cycling	481
21.29	SELECTIONMODES system variable	482
21.29.1	Selection modes	482
21.30	SELECTIONPREVIEW system variable	482



Contents

21.30.1	Selection preview display	482
21.31	SELECTSIMILARMODE system variable	483
21.31.1	Match options for SELECTSIMILAR	483
21.32	SETBYLAYERMODE system variable	483
21.32.1	Set by layer mode	483
21.33	SHADEDGE system variable	484
21.33.1	Shading edges	484
21.34	SHADEDIF system variable	484
21.34.1	Shading diffusion	484
21.35	SHEETNUMBERLEADINGZEROES system variable	485
21.35.1	Sheet number leading zeroes	485
21.36	SHEETSETAUTOBACKUP system variable	485
21.36.1	Sheet set automatic backup	485
21.37	SHEETSETTEMPLATEPATH system variable	485
21.37.1	Sheet Set template path	485
21.38	SHORTCUTMENU system variable	486
21.38.1	Shortcut menus	486
21.39	SHORTCUTMENUDURATION system variable	486
21.39.1	Shortcut menu duration	486
21.40	SHOWBMINSERTWARNINGDIALOG system variable	487
21.40.1	BMINSERT warning	487
21.41	SHOWDOCTABS system variable	487
21.41.1	Tabs visibility	487
21.42	SHOWFULLPATHINTITLE system variable	487
21.42.1	Display full path in title	487
21.43	SHOWIDSPROPERTIESONLY system variable	488
21.43.1	Show IDS Properties Only	488
21.44	SHOWLAYERUSAGE system variable	488
21.44.1	Layer Usage	488
21.45	SHOWSCROLLBUTTONS system variable	489
21.45.1	Scroll buttons (Mac & Linux)	489
21.46	SHOWTABCLOSEBUTTON system variable	489
21.46.1	Close button on tabs (Mac & Linux)	489
21.47	SHOWTABCLOSEBUTTONACTIVE system variable	489
21.47.1	Close button on active tab (Mac & Linux)	489
21.48	SHOWTABCLOSEBUTTONALL system variable	490
21.48.1	Close button on all tabs (Mac & Linux)	490
21.49	SHOWWINDOWLISTBUTTON system variable	490
21.49.1	Window list button (Mac & Linux)	490
21.50	SHPNAME system variable	490
21.50.1	Shape name	490
21.51	SIGWARN system variable	491
21.51.1	Signature warning	491
21.52	SINGLETONMODE system variable	491
21.52.1	Singleton mode	491
21.53	SITELOCATIONVISIBILITY system variable	491
21.53.1	Site location marker visibility	491
21.54	SKETCHFEATURECOPYMODE system variable	492



Contents

21.54.1	Sketch feature copy mode	492
21.55	SKETCHINC system variable	492
21.55.1	Sketch increment	492
21.56	SKPOLY system variable	492
21.56.1	Sketch poly	492
21.57	SKYSTATUS system variable	493
21.57.1	Sky status	493
21.58	SLICETHICKNESSSTEP system variable	493
21.58.1	Section plane slice thickness step	493
21.59	SMASSEMBLYEXPORTMODE system variable	494
21.59.1	SmAssemblyExport mode	494
21.60	SMASSEMBLYEXPORTREPORTPATHTYPE system variable	494
21.60.1	Report file path type	494
21.61	SMASSEMBLYEXPORTSOLIDTYPESINREPORTS system variable	495
21.61.1	Solid types in reports	495
21.62	SMATTRIBUTESLAYERCOLOR system variable	495
21.62.1	Color of the attributes layer	495
21.63	SMATTRIBUTESLAYERTEXTHEIGHT system variable	495
21.63.1	Height of the text	495
21.64	SMATTRIBUTESLAYERTEXTHEIGHTTYPE system variable	496
21.64.1	Type of the text height	496
21.65	SMBENDANNOTATIONSLAYERCOLOR system variable	496
21.65.1	Color of the bend annotations text layer	496
21.66	SMBENDANNOTATIONSLAYERTEXTHEIGHT system variable	496
21.66.1	Height of the text	496
21.67	SMBENDANNOTATIONSLAYERTEXTHEIGHTTYPE system variable	497
21.67.1	Type of the text height	497
21.68	SMBENDLINESDOWNLAYERCOLOR system variable	497
21.68.1	Color of the bend down lines layer	497
21.69	SMBENDLINESDOWNLAYERLINETYPE system variable	497
21.69.1	Linetype of the bend down lines layer	497
21.70	SMBENDLINESDOWNLAYERLINEWEIGHT system variable	498
21.70.1	Lineweight of the bend down layer	498
21.71	SMBENDLINESUPLAYERCOLOR system variable	498
21.71.1	Color of the bend up lines layer	498
21.72	SMBENDLINESUPLAYERLINETYPE system variable	498
21.72.1	Linetype of the bend up lines layer	498
21.73	SMBENDLINESUPLAYERLINEWEIGHT system variable	499
21.73.1	Lineweight of the bend up layer	499
21.74	SMBEVELFEATURECOLOR system variable	499
21.74.1	Color of the bevel features layer	499
21.75	SMCOLORBEND system variable	499
21.75.1	Bend feature color	499
21.76	SMCOLORBENDRELIEF system variable	500
21.76.1	Bend relief feature color	500
21.77	SMCOLORBEVEL system variable	500
21.77.1	Bevel feature color	500
21.78	SMCOLORCORNERRELIEF system variable	500



Contents

21.78.1	Corner relief feature color_____	500
21.79	SMCOLORFLANGE system variable_____	501
21.79.1	Flange feature color_____	501
21.80	SMCOLORFLANGEREFERENCESIDE system variable_____	501
21.80.1	Flange feature reference side color_____	501
21.81	SMCOLORFORM system variable_____	501
21.81.1	Form feature color_____	501
21.82	SMCOLORHEM system variable_____	501
21.82.1	Hem feature color_____	501
21.83	SMCOLORJOG system variable_____	502
21.83.1	Jog feature color_____	502
21.84	SMCOLORJUNCTION system variable_____	502
21.84.1	Junction feature color_____	502
21.85	SMCOLORLOFTEDBEND system variable_____	502
21.85.1	Lofted bend feature color_____	502
21.86	SMCOLORMITER system variable_____	503
21.86.1	Miter feature color_____	503
21.87	SMCOLORROLLEDEGE system variable_____	503
21.87.1	Rolled edge feature color_____	503
21.88	SMCOLORTAB system variable_____	503
21.88.1	Tab feature color_____	503
21.89	SMCOLORWRONGBEND system variable_____	503
21.89.1	Wrong bend feature color_____	503
21.90	SMCOLORWRONGFLANGE system variable_____	504
21.90.1	Wrong flange feature color_____	504
21.91	SMCONTOURSLAYERCOLOR system variable_____	504
21.91.1	Color of the contour layer_____	504
21.92	SMCONTOURSLAYERLINETYPE system variable_____	504
21.92.1	Linetype of the contour layer_____	504
21.93	SMCONTOURSLAYERLINEWEIGHT system variable_____	505
21.93.1	Lineweight of the contour layer_____	505
21.94	SMCONVERTMAXIMALBEVELANGLE system variable_____	505
21.94.1	Maximal angle of bevel_____	505
21.95	SMCONVERTMAXIMALEXTRUSIONDEPTHNEARBORDER system variable_____	505
21.95.1	Maximal depth of extrusions at a flanges border, unit is 1 flange thickness._____	505
21.96	SMCONVERTMINIMALBEVELANGLE system variable_____	506
21.96.1	Minimal angle of bevel_____	506
21.97	SMCONVERTPREFERFORMFEATURES system variable_____	506
21.97.1	Prefer form features to flanges and bends_____	506
21.98	SMCONVERTPREFERHEMFEATURES system variable_____	506
21.98.1	Prefer hem features to flanges and bends_____	506
21.99	SMCONVERTPREFERJOGFEATURES system variable_____	507
21.99.1	Prefer jog features to flanges and bends_____	507
21.100	SMCONVERTPREFERZEROBENDFEATURES system variable_____	507
21.100.1	Prefer zero bend features to wrong bends_____	507
21.101	SMCONVERTRECOGNIZEBEVELS system variable_____	507
21.101.1	Recognize bevel features_____	507
21.102	SMCONVERTRECOGNIZEHOLES system variable_____	508



Contents

21.102.1	Recognize holes_____	508
21.103	SMCONVERTRECOGNIZERIBCONTROLCURVES system variable_____	508
21.103.1	Recognize bead control curves_____	508
21.104	SMCONVERTWRONGFEATURETHICKNESSDEVIATIONTYPE system variable_____	508
21.104.1	Type of deviation of wrong feature thickness_____	508
21.105	SMCONVERTWRONGFEATURETHICKNESSDEVIATIONVALUE system variable_____	509
21.105.1	Deviation value of wrong feature thickness_____	509
21.106	SMDEFAULTBENDLINEEXTENTTYPE system variable_____	509
21.106.1	Bend line extent type_____	509
21.107	SMDEFAULTBENDLINEEXTENTVALUE system variable_____	510
21.107.1	Bend line extent value_____	510
21.108	SMDEFAULTBENDRADIUSTYPE system variable_____	510
21.108.1	Bend radius type_____	510
21.109	SMDEFAULTBENDRADIUSVALUE system variable_____	510
21.109.1	Bend radius value_____	510
21.110	SMDEFAULTBENDRELIEFWIDTHTYPE system variable_____	511
21.110.1	Bend relief type_____	511
21.111	SMDEFAULTBENDRELIEFWIDTHVALUE system variable_____	511
21.111.1	Bend relief width value_____	511
21.112	SMDEFAULTBEVELFEATUREUNFOLDMODE system variable_____	511
21.112.1	Bevel unfolding mode_____	511
21.113	SMDEFAULTCORNERRELIEFDIAMETERVALUE system variable_____	512
21.113.1	Corner relief diameter value_____	512
21.114	SMDEFAULTFLANGESPLITEXTENSIONTYPE system variable_____	512
21.114.1	Miter extension type_____	512
21.115	SMDEFAULTFLANGESPLITEXTENSIONVALUE system variable_____	513
21.115.1	Miter extension value_____	513
21.116	SMDEFAULTFLANGESPLITGAPTYPE system variable_____	513
21.116.1	Miter gap type_____	513
21.117	SMDEFAULTFLANGESPLITGAPVALUE system variable_____	513
21.117.1	Miter gap value_____	513
21.118	SMDEFAULTFORMFEATUREUNFOLDMODE system variable_____	514
21.118.1	Form feature unfolding mode_____	514
21.119	SMDEFAULTGUSSETDEPTHTYPE system variable_____	514
21.119.1	Gusset depth type_____	514
21.120	SMDEFAULTGUSSETDEPTHVALUE system variable_____	514
21.120.1	Gusset height value_____	514
21.121	SMDEFAULTGUSSETFILLETRADIUSTYPE system variable_____	515
21.121.1	Gusset fillet radius type_____	515
21.122	SMDEFAULTGUSSETFILLETRADIUSVALUE system variable_____	515
21.122.1	Gusset fillet radius value_____	515
21.123	SMDEFAULTGUSSETTYPE system variable_____	515
21.123.1	Gusset type_____	515
21.124	SMDEFAULTGUSSETWIDTHTYPE system variable_____	516
21.124.1	Gusset width type_____	516
21.125	SMDEFAULTGUSSETWIDTHVALUE system variable_____	516
21.125.1	Gusset width value_____	516
21.126	SMDEFAULTHEMGAPTYPE system variable_____	517



Contents

21.126.1	Open Hem gap type	517
21.127	SMDEFAULTHEMGAPVALUE system variable	517
21.127.1	Open Hem gap value (in addition to the thickness)	517
21.128	SMDEFAULTHEMRELATIVEBENDDEDUCTION system variable	517
21.128.1	Hem relative bend deduction value	517
21.129	SMDEFAULTJOGANGLEVALUE system variable	518
21.129.1	Jog angle value	518
21.130	SMDEFAULTJOGHEIGHTTYPE system variable	518
21.130.1	Jog height type	518
21.131	SMDEFAULTJOGHEIGHTVALUE system variable	518
21.131.1	Jog height value	518
21.132	SMDEFAULTJOGRADIUSTYPE system variable	519
21.132.1	Jog radius type	519
21.133	SMDEFAULTJOGRADIUSVALUE system variable	519
21.133.1	Jog radius value	519
21.134	SMDEFAULTJUNCTIONALIGNMENTTORELIEF system variable	520
21.134.1	Junction alignment to relief	520
21.135	SMDEFAULTJUNCTIONGAPTYPE system variable	520
21.135.1	Junction gap type	520
21.136	SMDEFAULTJUNCTIONGAPVALUE system variable	520
21.136.1	Junction gap value	520
21.137	SMDEFAULTKFACTOR system variable	521
21.137.1	K-Factor value	521
21.138	SMDEFAULTLOFTEDBENDNUMBERSAMPLES system variable	521
21.138.1	Lofted bend subdivisions	521
21.139	SMDEFAULTRELIEFEXTENSIONTYPE system variable	521
21.139.1	Relief extension type	521
21.140	SMDEFAULTRELIEFEXTENSIONVALUE system variable	522
21.140.1	Relief extension value	522
21.141	SMDEFAULTRIBFILLETTRADIUSTYPE system variable	522
21.141.1	Bead fillet radius type	522
21.142	SMDEFAULTRIBFILLETTRADIUSVALUE system variable	522
21.142.1	Bead fillet radius value	522
21.143	SMDEFAULTRIBPROFILERADIUSTYPE system variable	523
21.143.1	Bead profile radius type	523
21.144	SMDEFAULTRIBPROFILERADIUSVALUE system variable	523
21.144.1	Bead profile radius value	523
21.145	SMDEFAULTRIBROUNDRADIUSTYPE system variable	523
21.145.1	Bead round radius type	523
21.146	SMDEFAULTRIBROUNDRADIUSVALUE system variable	524
21.146.1	Bead round radius value	524
21.147	SMDEFAULTSHARPBENDRADIUSLIMITRATIO system variable	524
21.147.1	Sharp bend radius limit ratio	524
21.148	SMDEFAULTTABCHAMFERDISTANCETYPE system variable	524
21.148.1	Tab chamfer distance type	524
21.149	SMDEFAULTTABCHAMFERDISTANCEVALUE system variable	525
21.149.1	Tab chamfer distance value	525
21.150	SMDEFAULTTABCLEARANCETYPE system variable	525



Contents

21.150.1	Tab clearance type	525
21.151	SMDEFAULTTABCLEARANCEVALUE system variable	525
21.151.1	Tab clearance value	525
21.152	SMDEFAULTTABDISTANCETYPE system variable	526
21.152.1	Tab distance type	526
21.153	SMDEFAULTTABDISTANCEVALUE system variable	526
21.153.1	Tab distance value	526
21.154	SMDEFAULTTABEDGETYPE system variable	526
21.154.1	Tab edge type	526
21.155	SMDEFAULTTABFILLET RADIUS TYPE system variable	527
21.155.1	Tab fillet radius type	527
21.156	SMDEFAULTTABFILLET RADIUS VALUE system variable	527
21.156.1	Tab fillet radius value	527
21.157	SMDEFAULTTABHEIGHTTYPE system variable	528
21.157.1	Tab height type	528
21.158	SMDEFAULTTABHEIGHTVALUE system variable	528
21.158.1	Tab height value	528
21.159	SMDEFAULTTABLENGTHTYPE system variable	528
21.159.1	Tab length type	528
21.160	SMDEFAULTTABLENGTHVALUE system variable	529
21.160.1	Tab length value	529
21.161	SMDEFAULTTABSLOTNUMBER system variable	529
21.161.1	Tab slot number	529
21.162	SMDEFAULTTHICKNESS system variable	529
21.162.1	Thickness value	529
21.163	SMEXPORTOSMAPPROXIMATIONACCURACY system variable	530
21.163.1	Accuracy of the approximation	530
21.164	SMEXPORTOSMMINIMALEDGELENGTH system variable	530
21.164.1	Minimal edge length	530
21.165	SMFORMFEATURESDOWNCOLOR system variable	530
21.165.1	Color of the form features down layer	530
21.166	SMFORMFEATURESDOWNLAYERLINETYPE system variable	531
21.166.1	Linetype of the form features down layer	531
21.167	SMFORMFEATURESDOWNLAYERLINEWEIGHT system variable	531
21.167.1	Lineweight of the form features down layer	531
21.168	SMFORMFEATURESUPCOLOR system variable	531
21.168.1	Color of the form features up layer	531
21.169	SMFORMFEATURESUPLAYERLINETYPE system variable	532
21.169.1	Linetype of the form features up layer	532
21.170	SMFORMFEATURESUPLAYERLINEWEIGHT system variable	532
21.170.1	Lineweight of the form features up layer	532
21.171	SMHEMCREATECLOSEDHEMGAP system variable	532
21.171.1	Closed Hem, Teardrop, and Round gap value	532
21.172	SMJUNCTIONCREATEHEALCOINCIDENT system variable	533
21.172.1	Heal coincident junction faces	533
21.173	SMOOTHMESHCONVERT system variable	533
21.173.1	Mesh conversion mode	533
21.174	SMOVERALLANNOTATIONSLAYERCOLOR system variable	534



Contents

21.174.1	Color of the overall dimensions annotations layer	534
21.175	SMOVERALLANNOTATIONSLAYERLINETYPE system variable	534
21.175.1	Linetype of the overall annotation layer	534
21.176	SMOVERALLANNOTATIONSLAYERLINEWEIGHT system variable	534
21.176.1	Lineweight of the overall annotation layer	534
21.177	SMPARAMETRIZEHOLESPARAMETRIZATION system variable	535
21.177.1	Hole parametrization	535
21.178	SMREPAIRLOFTEDBENDMERGE system variable	535
21.178.1	Merge lofted bends	535
21.179	SMROLLEDEGEANNOTATIONSLAYERCOLOR system variable	535
21.179.1	Color of the rolled edge annotations text layer	535
21.180	SMROLLEDEGEANNOTATIONSLAYERTEXTHEIGHT system variable	536
21.180.1	Height of the text	536
21.181	SMROLLEDEGEANNOTATIONSLAYERTEXTHEIGHTTYPE system variable	536
21.181.1	Type of the text height	536
21.182	SMROLLEDEDELINESDOWNLAYERCOLOR system variable	537
21.182.1	Color of the rolled edge down lines layer	537
21.183	SMROLLEDEDELINESDOWNLAYERLINETYPE system variable	537
21.183.1	Linetype of the rolled edge down lines layer	537
21.184	SMROLLEDEDELINESDOWNLAYERLINEWEIGHT system variable	537
21.184.1	Lineweight of the rolled edge down layer	537
21.185	SMROLLEDEDELINESUPLAYERCOLOR system variable	538
21.185.1	Color of the rolled edge up lines layer	538
21.186	SMROLLEDEDELINESUPLAYERLINETYPE system variable	538
21.186.1	Linetype of the rolled edge up lines layer	538
21.187	SMROLLEDEDELINESUPLAYERLINEWEIGHT system variable	538
21.187.1	Lineweight of the rolled edge up layer	538
21.188	SMSMARTFEATURES system variable	539
21.188.1	Automatic update features after sheet metal commands	539
21.189	SMSPLITAMBIGUOUSINPUT system variable	539
21.189.1	Ambiguous input behavior	539
21.190	SMSPLITCONVERTBENDTOJUNCTION system variable	539
21.190.1	Convert bend to junction	539
21.191	SMSPLITHEALCOINCIDENT system variable	540
21.191.1	Heal coincident miter faces	540
21.192	SMSPLITORTHOGONALBENDSPLIT system variable	540
21.192.1	Orthogonal bend split	540
21.193	SMTARGETCAM system variable	540
21.193.1	Target CAM	540
21.194	SMUNFOLDAPPEARANCE system variable	541
21.194.1	Unfold appearance	541
21.195	SNAPANG system variable	541
21.195.1	Snap angle	541
21.196	SNAPBASE system variable	541
21.196.1	Snap base	541
21.197	SNAPISOPAIR system variable	541
21.197.1	Snap isometric pair	541
21.198	SNAPMARKERCOLOR system variable	542



Contents

21.198.1	Snap marker color	542
21.199	SNAPMARKERSIZE system variable	543
21.199.1	Snap marker size	543
21.200	SNAPMARKERTHICKNESS system variable	543
21.200.1	Snap marker thickness	543
21.201	SNAPMODE system variable	543
21.201.1	Snap mode	543
21.202	SNAPSTYL system variable	543
21.202.1	Snap style	543
21.203	SNAPTYPE system variable	544
21.203.1	Snap type	544
21.204	SNAPUNIT system variable	544
21.204.1	Snap unit	544
21.205	SOLIDCHECK system variable	545
21.205.1	Solid check	545
21.206	SORTENTS system variable	545
21.206.1	Sort entities	545
21.207	SPAADJUSTMODE system variable	546
21.207.1	Adjust mode	546
21.208	SPACHECKLEVEL system variable	546
21.208.1	Check level	546
21.209	SPAGRIDASPECTRATIO system variable	547
21.209.1	Grid aspect ratio	547
21.210	SPAGRIDMODE system variable	547
21.210.1	Grid mode	547
21.211	SPAMAXFACETEDGELENGTH system variable	548
21.211.1	Maximum facet edge length	548
21.212	SPAMAXNUMGRIDLINES system variable	548
21.212.1	Maximum number of grid lines	548
21.213	SPAMINUGRIDLINES system variable	549
21.213.1	Minimum number of U grid lines	549
21.214	SPAMINVGRIDLINES system variable	549
21.214.1	Minimum number of V grid lines	549
21.215	SPANORMALTOL system variable	549
21.215.1	Normal tolerance	549
21.216	SPASURFACETOL system variable	550
21.216.1	Surface tolerance	550
21.217	SPATRIANGMODE system variable	550
21.217.1	Triangulation mode	550
21.218	SPAUSEFACETRES system variable	550
21.218.1	Use FACETRES system variable	550
21.219	SPLFRAME system variable	551
21.219.1	Spline frame	551
21.220	SPLINESEGS system variable	551
21.220.1	Spline segments	551
21.221	SPLINETYPE system variable	552
21.221.1	Spline type	552
21.222	SRCHPATH system variable	552



Contents

21.222.1	Support file search path	552
21.223	SSFOUND system variable	552
21.223.1	Sheet Set found (Read Only)	552
21.224	SSLOCATE system variable	553
21.224.1	Sheet Set locate	553
21.225	SSMAUTOOPEN system variable	553
21.225.1	Sheet Set manager auto open	553
21.226	SSMPOLLTIME system variable	553
21.226.1	Sheet Set manager poll time	553
21.227	SSMSHEETSTATUS system variable	554
21.227.1	Sheet Set manager status	554
21.228	SSMSTATE system variable	554
21.228.1	Sheet Set manager state (Read Only)	554
21.229	STACKPANELTYPE system variable	555
21.229.1	Stack panel type	555
21.230	STAMPFONTSIZE system variable	555
21.230.1	Font Size	555
21.231	STAMPFONTSTYLE system variable	555
21.231.1	Font Style	555
21.232	STAMPFOOTER system variable	556
21.232.1	Footer	556
21.233	STAMPFOOTEROFFSETX system variable	556
21.233.1	Stamp footer X offset	556
21.234	STAMPFOOTEROFFSETY system variable	556
21.234.1	Stamp footer Y offset	556
21.235	STAMPHEADER system variable	556
21.235.1	Header	556
21.236	STAMPHEADEROFFSETX system variable	557
21.236.1	Stamp header X offset	557
21.237	STAMPHEADEROFFSETY system variable	557
21.237.1	Stamp header Y offset	557
21.238	STAMPUNITS system variable	557
21.238.1	Units	557
21.239	STANDARDISOPTIONS system variable	558
21.239.1	Standards validation options	558
21.240	STANDARDSVIOLATION system variable	558
21.240.1	Standards Violation Notification	558
21.241	STARTUP system variable	558
21.241.1	Startup	558
21.242	STATUSBAR system variable	559
21.242.1	Window Status bar	559
21.243	STEPSIZE system variable	559
21.243.1	Step size	559
21.244	STEPSPERSEC system variable	560
21.244.1	Steps per second	560
21.245	STLPOSITIVEQUADRANT system variable	560
21.245.1	STL export coordinates adjustment	560
21.246	STORYBAR system variable	560



Contents

21.246.1	Display Story Bar	560
21.247	STRUCTURETREECONFIG system variable	561
21.247.1	Structure Tree Configuration	561
21.248	SURFTAB1 system variable	561
21.248.1	Surface tabulation 1	561
21.249	SURFTAB2 system variable	561
21.249.1	Surface tabulation 2	561
21.250	SURFTYPE system variable	562
21.250.1	Surface-fitting type	562
21.251	SURFU system variable	562
21.251.1	Surface U	562
21.252	SURFV system variable	562
21.252.1	Surface V	562
21.253	SVGBLENDEDGRADIENTS system variable	563
21.253.1	SVG Blended Gradients	563
21.254	SVGCOLORPOLICY system variable	563
21.254.1	SVG Color Policy	563
21.255	SVGDEFAULTIMAGEEXTENSION system variable	563
21.255.1	SVG Default Image Extension	563
21.256	SVGGENERICFONTFAMILY system variable	564
21.256.1	SVG Generic Font Family	564
21.257	SVGIMAGEBASE system variable	564
21.257.1	SVG Image base path	564
21.258	SVGIMAGEURL system variable	565
21.258.1	SVG Image Url	565
21.259	SVGLINEWEIGHTSCALE system variable	565
21.259.1	SVG Line Weight Scale	565
21.260	SVGOUTPUTHEIGHT system variable	565
21.260.1	SVG Output Height	565
21.261	SVGOUTPUTWIDTH system variable	565
21.261.1	SVG Output Width	565
21.262	SVGPRECISION system variable	566
21.262.1	SVG Floating Point Precision	566
21.263	SVGSCALEFACTOR system variable	566
21.263.1	SVG Scale Factor	566
21.264	SYSCODEPAGE system variable	566
21.264.1	System code page (Read Only)	566
22.	T	568
22.1	TABCONTROLHEIGHT system variable	568
22.1.1	Tab control height in pixels (Mac & Linux)	568
22.2	TABMODE system variable	568
22.2.1	Tablet mode	568
22.3	TABSFIXEDWIDTH system variable	568
22.3.1	Tabs fixed width (Mac & Linux)	568
22.4	TANGENTLENGTHTYPE system variable	569
22.4.1	Tangent Length Type	569
22.5	TANGENTLENGTHVALUE system variable	569
22.5.1	Tangent Length Value	569



Contents

22.6	TARGET system variable	569
22.6.1	Target (Read Only)	569
22.7	TDCREATE system variable	570
22.7.1	Time/Date create (Read only)	570
22.8	TDINDWG system variable	570
22.8.1	Time/Date in drawing (Read Only)	570
22.9	TDUCREATE system variable	570
22.9.1	Time/Date universal create (Read Only)	570
22.10	TDUPDATE system variable	570
22.10.1	Time/Date update (Read Only)	570
22.11	TDUSRTIMER system variable	571
22.11.1	Time/Date user timer (Read Only)	571
22.12	TDUUPDATE system variable	571
22.12.1	Time/Date universal update (Read Only)	571
22.13	TEETANGENTLENGTHTYPE system variable	571
22.13.1	Tee Length Type	571
22.14	TEETANGENTLENGTHVALUE system variable	571
22.14.1	Tee Length Value	571
22.15	TEMPLATEPATH system variable	572
22.15.1	Template path	572
22.16	TEMPPPREFIX system variable	572
22.16.1	Temporary prefix	572
22.17	TEXTANGLE system variable	572
22.17.1	Text angle	572
22.18	TEXTED system variable	572
22.18.1	Text editor for single line text entities	572
22.19	TEXTEDITMODE system variable	573
22.19.1	Text edit mode	573
22.20	TEXT EVAL system variable	573
22.20.1	Text evaluation	573
22.21	TEXTFILL system variable	574
22.21.1	Text fill	574
22.22	TEXTQLTY system variable	574
22.22.1	Text quality (Mac & Linux)	574
22.23	TEXTSIZE system variable	575
22.23.1	Text size	575
22.24	TEXTSTYLE system variable	575
22.24.1	Text style	575
22.25	TEXTUREMAPPATH system variable	575
22.25.1	Texture map path	575
22.26	THICKNESS system variable	576
22.26.1	Thickness	576
22.27	THREADDISPLAY system variable	576
22.27.1	Thread representation	576
22.28	THUMBSIZE system variable	576
22.28.1	Thumbnail preview image size	576
22.29	TILEMODE system variable	577
22.29.1	Tile mode	577



Contents

22.30	TILEMODELIGHTSYNCH system variable	577
22.30.1	Tile mode light synch	577
22.31	TIMEZONE system variable	578
22.31.1	Timezone	578
22.32	TOOLBARMARGIN system variable	580
22.32.1	Toolbar margin	580
22.33	TOOLBUTTONSIZE system variable	580
22.33.1	Tool button size	580
22.34	TOOLICONPADDING system variable	581
22.34.1	Tool icon padding	581
22.35	TOOLPALETTEPATH system variable	581
22.35.1	Tool palettes path	581
22.36	TOOLTIPDELAY system variable	581
22.36.1	Tooltip delay	581
22.37	TOOLTIPS system variable	582
22.37.1	Tooltips	582
22.38	TPSTATE system variable	582
22.38.1	Tool Palettes Panel state (Read Only)	582
22.39	TRACEWID system variable	582
22.39.1	Trace width	582
22.40	TRACKPATH system variable	583
22.40.1	Track path	583
22.41	TRANSPARENCYDISPLAY system variable	583
22.41.1	Transparency display	583
22.42	TRAYICONS system variable	583
22.42.1	Tray icons	583
22.43	TRAYNOTIFY system variable	584
22.43.1	Tray notify	584
22.44	TRAYTIMEOUT system variable	584
22.44.1	Tray timeout	584
22.45	TREEDEPTH system variable	584
22.45.1	Tree depth	584
22.46	TREEMAX system variable	585
22.46.1	Tree maximum	585
22.47	TRIMEDGES system variable	585
22.47.1	TRIM and EXTEND to hatches	585
22.48	TRIMEXTENDMODE system variable	586
22.48.1	TRIM and EXTEND mode	586
22.49	TRIMMODE system variable	586
22.49.1	Trim mode	586
22.50	TRUSTEDPATHS system variable	587
22.50.1	Trusted executable file locations (Read Only)	587
22.51	TSPACEFAC system variable	587
22.51.1	Text space factor	587
22.52	TSPACETYPE system variable	587
22.52.1	Text space type	587
22.53	TSTACKALIGN system variable	588
22.53.1	Text stack align	588



Contents

22.54	TSTACKSIZE system variable	588
22.54.1	Text stack size	588
22.55	TTFASTEXT system variable	588
22.55.1	TrueType Text displaying mode	588
22.56	TUTORIALSONSTARTPAGE system variable	589
22.56.1	Tutorials on start page	589
23.	U	590
23.1	UCSAXISANG system variable	590
23.1.1	UCS axis angle	590
23.2	UCSBASE system variable	590
23.2.1	UCS base	590
23.3	UCSDETECT system variable	590
23.3.1	UCS detect	590
23.4	UCSFOLLOW system variable	591
23.4.1	UCS follow	591
23.5	UCSICON system variable	591
23.5.1	UCS icon	591
23.6	UCSICONPOS system variable	591
23.6.1	UCS icon position	591
23.7	UCSNAME system variable	592
23.7.1	UCS name (Read Only)	592
23.8	UCSORG system variable	592
23.8.1	UCS origin (Read Only)	592
23.9	UCSORTHO system variable	592
23.9.1	UCS orthographic	592
23.10	UCSVIEW system variable	593
23.10.1	UCS view	593
23.11	UCSVP system variable	593
23.11.1	UCS viewports	593
23.12	UCSXDIR system variable	594
23.12.1	UCS X direction (Read Only)	594
23.13	UCSYDIR system variable	594
23.13.1	UCS Y direction (Read Only)	594
23.14	UNDOCTL system variable	594
23.14.1	Undo control (Read Only)	594
23.15	UNDOMARKS system variable	595
23.15.1	Undo marks (Read Only)	595
23.16	UNITESURFACES system variable	595
23.16.1	Unite adjacent surfaces	595
23.17	UNITMODE system variable	595
23.17.1	Unit mode	595
23.18	USECOMMUNICATOR system variable	596
23.18.1	Use Communicator	596
23.19	USENEWLOOKFROM system variable	596
23.19.1	Use the new LookFrom	596
23.20	USENEWNOTIFICATIONS system variable	596
23.20.1	QML Notifications	596
23.21	USENEWSTATUSBAR system variable	597



Contents

23.21.1	Status Bar Preview	597
23.22	USERI1 system variable	597
23.22.1	User integer 1	597
23.23	USERI2 system variable	597
23.23.1	User integer 2	597
23.24	USERI3 system variable	598
23.24.1	User integer 3	598
23.25	USERI4 system variable	598
23.25.1	User integer 4	598
23.26	USERI5 system variable	598
23.26.1	User integer 5	598
23.27	USERR1 system variable	599
23.27.1	User real 1	599
23.28	USERR2 system variable	599
23.28.1	User real 2	599
23.29	USERR3 system variable	599
23.29.1	User real 3	599
23.30	USERR4 system variable	599
23.30.1	User real 4	599
23.31	USERR5 system variable	600
23.31.1	User real 5	600
23.32	USERS1 system variable	600
23.32.1	User string 1	600
23.33	USERS2 system variable	600
23.33.1	User string 2	600
23.34	USERS3 system variable	600
23.34.1	User string 3	600
23.35	USERS4 system variable	601
23.35.1	User string 4	601
23.36	USERS5 system variable	601
23.36.1	User string 5	601
23.37	UESTANDARDOPENFILEDIALOG system variable	601
23.37.1	Use standard open file dialog (Windows)	601
24.	V	602
24.1	VBAMACROS system variable	602
24.1.1	Enable macros	602
24.2	VENDORNAME system variable	602
24.2.1	Vendor name (obsolete)	602
24.3	VERBOSEBIMSECTIONUPDATE system variable	602
24.3.1	Additional diagnostics while section update	602
24.4	VERSIONCONTROLCONFIGPATH system variable	603
24.4.1	Version Control config path	603
24.5	VERSIONCONTROLDOWNLOADPATH system variable	603
24.5.1	Version Control download path	603
24.6	VERSIONCUSTOMIZABLEFILES system variable	603
24.6.1	Version customizable files (Read Only)	603
24.7	VIEWCTR system variable	603
24.7.1	View center (Read Only)	603



Contents

24.8	VIEWDIR system variable	603
24.8.1	View direction (Read Only)	603
24.9	VIEWMODE system variable	604
24.9.1	View mode (Read Only)	604
24.10	VIEWSIZE system variable	604
24.10.1	View size (Read Only)	604
24.11	VIEWTWIST system variable	604
24.11.1	View twist (Read Only)	604
24.12	VIEWUPDATEAUTO system variable	605
24.12.1	Automatically update drawing views	605
24.13	VISRETAIN system variable	605
24.13.1	Visibility retain	605
24.14	VOLUMEPREC system variable	606
24.14.1	Volume precision	606
24.15	VOLUMEUNITS system variable	606
24.15.1	Volume units	606
24.16	VPMAXIMIZEDSTATE system variable	607
24.16.1	Viewport maximized (Read Only)	607
24.17	VPROTATEASSOC system variable	607
24.17.1	Rotate view	607
24.18	VSMAX system variable	607
24.18.1	Virtual screen maximum (Read Only)	607
24.19	VSMIN system variable	608
24.19.1	Virtual screen minimum (Read Only)	608
24.20	VTDURATION system variable	608
24.20.1	View transition duration	608
24.21	VTENABLE system variable	608
24.21.1	Enable view transitions	608
24.22	VTFPS system variable	609
24.22.1	View transition minimum FPS	609
25.	W	610
25.1	WARNINGMESSAGES system variable	610
25.1.1	Warning messages	610
25.2	WHIPARC system variable	610
25.2.1	Whip arcs	610
25.3	WHIPTHREAD system variable	611
25.3.1	Whip thread	611
25.4	WINDOWAREACOLOR system variable	611
25.4.1	Window area color	611
25.5	WIPEOUTFRAME system variable	612
25.5.1	Wipeout frame	612
25.6	WMFBKGND system variable	612
25.6.1	Windows Meta File background	612
25.7	WMFFOREGND system variable	612
25.7.1	Windows Meta File foreground	612
25.8	WMFTTFASTEXT system variable	613
25.8.1	TrueType Text mode for Windows Meta File	613
25.9	WNDLMAIN system variable	613



Contents

25.9.1	Main window state	613
25.10	WNDLSCRL system variable	614
25.10.1	Window scrollbars (Windows)	614
25.11	WNDLTEXT system variable	614
25.11.1	Text window state	614
25.12	WNDPMAIN system variable	614
25.12.1	Main window top-left	614
25.13	WNDPTEXT system variable	614
25.13.1	Text window top left	614
25.14	WNDMAIN system variable	615
25.14.1	Main window size	615
25.15	WNDSTEXT system variable	615
25.15.1	Text window size	615
25.16	WORLDUCS system variable	615
25.16.1	World UCS (Read Only)	615
25.17	WORLDVIEW system variable	615
25.17.1	World view	615
25.18	WRITESTAT system variable	616
25.18.1	Write status (Read Only)	616
25.19	WSAUTOSAVE system variable	616
25.19.1	Workspace autosave	616
25.20	WSCURRENT system variable	617
25.20.1	Current workspace	617
26.	X	618
26.1	XCLIPFRAME system variable	618
26.1.1	Xref clipping frame	618
26.2	XDWGFADECTL system variable	618
26.2.1	XRef database fade control	618
26.3	XEDIT system variable	618
26.3.1	XRef editable	618
26.4	XFADECTL system variable	619
26.4.1	Reference editing fade control	619
26.5	XLOADCTL system variable	619
26.5.1	XRef load control	619
26.6	XLOADPATH system variable	620
26.6.1	XRef load path	620
26.7	XNOTIFYTIME system variable	620
26.7.1	Xnotify time	620
26.8	XREFCTL system variable	620
26.8.1	XRef control	620
26.9	XREFNOTIFY system variable	621
26.9.1	XRef notify	621
26.10	XREFOVERRIDE system variable	621
26.10.1	XRef override	621
26.11	XREFTYPE system variable	622
26.11.1	XRef type	622
27.	Z	623
27.1	ZOOMFACTOR system variable	623



Contents

27.1.1	Zoom factor	623
27.2	ZOOMWHEEL system variable	623
27.2.1	Mouse wheel zoom direction	623



1. _

1.1 _QUADTABFLAGS system variable

1.1.1 Quad tab flags

Temporary setting used while new Quad tab layout is implemented.

The value is stored as a bitcode using the sum of the values of all selected options.

	0 to 31
	12
	1: Fixed width tabs 2: Center tab labels 4: Tab borders 8: Double tab height 16: Show 3D Solid mass properties

1.2 _VERNUM system variable

1.2.1 Version number (Read Only)

Shows the program version number.



2. 2

2.1 2DCONSTRAINTFLAGS system variable

2.1.1 2D Constraint Flags

Controls behavior during solving 2D constraints.

	PARAMETERCOPYMODE
	0
	0: Keeps directions of segments and arcs. 1: Disables segments.



3. 3

3.1 3DCOMPAREMODE system variable

3.1.1 Compare mode

Controls the visualization for the 3DCOMPARE command.

	3
	0: First model on the left, second model on the right. 1: First model with differences on the left, second model on the right. 2: First model on the left, second model with differences on the right. 3: First model with differences on the left, second model with differences on the right. 4: Both models with all differences in one viewport. 5: Both models with all differences in one viewport. 6: Both models with all differences in one viewport. 7: Both models with all differences in one viewport.

3.2 3DOSMODE system variable

3.2.1 3D entity snap mode

Controls the 3D entity snap types.

	0 to 33023
	11



	1: Turn off all 3D snaps 2: 3D Entity Vertices and Control Vertices of Splines 4: Midpoint of edge 8: Center of face 16: Spline Knot 32: Perpendicular to face 64: Nearest to face 128: Pointcloud nearest Point 32768: Intersection with face
--	--

3.3 3DSNAPMARKERCOLOR system variable

3.3.1 3d snap marker color

Controls the color of 3D snap markers. Values between 1 and 255 are accepted.

	5



4. A

4.1 ACADLSPASDOC system variable

4.1.1 on_start.lsp for each doc

Loads the on_start_default.lsp, on_start.lsp, on_doc_load.lsp and on_doc_load_default.lsp files, for every new drawing.

If off, only loads these files for the first drawing.

	Off (0): Do not load on_start.lsp with every drawing On (1): Load on_start.lsp with every drawing

4.2 ACADPREFIX system variable

4.2.1 Program folder path (Read only)

List of support paths, with path separators if necessary.

4.3 ACADVER system variable

4.3.1 AutoCAD version (Read Only)

Shows the compatible program version number.

4.4 ACISHLRRESOLUTION system variable

4.4.1 Hidden line removal resolution

Controls the smallest distance used for Hidden Line Removal calculation.



Negative value is Auto-calibration based on the size of the model (recommended). For very small entities the value can be set to 0.001 or smaller.

	-1.0

4.5 ACISSAVEASMODE system variable

4.5.1 Acis save as mode

Controls the explode mode of ACIS entities (3DSolids, Bodies, Regions) when saved to R12.

	0
	0: Save meshes 1: Save edges only

4.6 ACISOUTVER system variable

4.6.1 Acisout version

Controls the ACIS version of the SAT files for the ACISOUT command.

	70

4.7 ADAPTIVEGRIDSTEPSIZE system variable

4.7.1 Adaptive grid step size

Controls the snap spacing for 'Adaptive Grid Snap' mode of SNAPTYPE system variable, in pixels. Also Controls the step size of the Manipulator ruler.



	4.0

4.8 AFLAGS system variable

4.8.1 Attribute options

Sets the default options for attribute creation.

	0
	0: No mode selected 1: Invisible 2: Constant 4: Verify 8: Preset 16: Lock position 32: Multiline

4.9 ALIGNDIMENSIONONISOMETRIC system variable

4.9.1 Dimension alignment

Enables isometric dimensions. Dimensions are aligned to the geometry.

	1
	Off (0): Disable isometric dimensions On (1): Enable isometric dimensions



4.10 ALLOWEDBENDANGLES system variable

4.10.1 Allowed bend angles

Sets allowed bend angles for MEP elements.

	1
	1: Any 2: 90 4: 60 8: 45 16: 30

4.11 ALLOWTABEXTERNALMOVE system variable

4.11.1 Move tabs externally (Mac & Linux)

Allows a tab to be moved to another tab control, in the documents tab.

	Off (0): Don't allow a tab to be moved externally On (1): Allow a tab to be moved externally

4.12 ALLOWTABMOVE system variable

4.12.1 Move tabs (Mac & Linux)

Allows a tab to be dragged horizontally, in the documents tab.



	Off (0): Don't allow tabs to be moved On (1): Allow tabs to be moved
--	---

4.13 ALLOWTABSPLIT system variable

4.13.1 Split tabs (Mac & Linux)

Allows drag to split the tab control, in the documents tab.

	Off (0): Don't allow tabs to be split On (1): Allow tabs to be split

4.14 AMPOWERDIMDISPLAY system variable

4.14.1 Mechanical 2D Editor

Controls the opening the **Edit Dimensioning** dialog box after placing a power dimension.

	1
	0: On demand only 1: For the first dimension only 2: Always

4.15 AMSYMSCALE system variable

4.15.1 Mechanical2D annotation scaling

Controls the display of Mechanical2D symbols and text in Model Space.



	1.0
--	-----

Note: The minimum value is 1.0E-100.

4.16 ANGBASE system variable

4.16.1 Angle base

Controls the start location of angle 0.

	0.0

4.17 ANGDIR system variable

4.17.1 Angle direction

Toggles the angle direction clockwise/Counterclockwise.

	Off (0): Counter-clockwise On (1): Clockwise

4.18 ANNOALLVISIBLE system variable

4.18.1 Annotation visibility

Hides or displays annotative entities that do not support the current annotation scale. The setting is saved individually for model space and each layout.

	1



	0: Only annotative entities that support the current scale representation are displayed 1: All annotative entities are displayed
--	---

4.19 ANNOAUTOSCALE system variable

4.19.1 Annotation scaling

Synchronizes new annotative entities with the current annotation scale.

	-4
	0: Do not add to annotative entities. 1: Add to annotative entities that support it, except entities on locked, turned off, frozen or viewport-frozen layers. 2: Add to annotative entities that support it, except entities on turned off, frozen or viewport-frozen layers. 3: Add to annotative entities that support it, except entities on locked layers. 4: Add all annotative entities supporting it. -1: Do not add to annotative entities (toggled value 1). -2: Do not add to annotative entities (toggled value 2). -3: Do not add to annotative entities (toggled value 3). -4: Do not add to annotative entities (toggled value 4).

4.20 ANNOMONITOR system variable

4.20.1 Annotation monitor

Turns the annotation monitor on or off. When ON, a warning sign is displayed near the disassociated dimension.

	-2



	-2: Annotation monitor is Off, any Model Documentation edit and update events automatically changes the value to 2. The status bar control toggles between 2 and -2. -1: Annotation monitor is Off. The status bar control toggles between 1 and -1. 0: Annotation monitor is Off. 1: Annotation monitor is On. The status bar control toggles between 1 and -1. 2: Annotation monitor is On. The status bar control toggles between 2 and -2.
--	---

4.21 ANNOTATIVEDWG system variable

4.21.1 Annotative drawing

Creates an annotative block when this drawing is inserted into another drawing.

Note: The ANNOTATIVEDWG system variable becomes read-only if the drawing contains annotative entities

	Off (0): Not annotative On (1): Annotative

4.22 ANTIALIASRENDER system variable

4.22.1 Anti-alias amount for render

Controls the smoothness of the output of the RENDER command.

For values higher than 1, an anti-aliased output is calculated, at a cost, this increases with bigger values.

	1 to 5
	2



	1: 1x1 (no anti-aliasing) 2: 2x2 3: 3x3 4: 4x4 5: 5x5 (maximum anti-aliasing)
--	---

4.23 ANTIALIASSCREEN system variable

4.23.1 Anti-alias amount for screen

Controls the smoothness of on-screen curve display.

CAUTION: When the visual style is set to 2DWireframe and the value is higher than 1, calculation of an anti-aliased display comes at a high performance cost. For the other display modes the calculation time is increased, but with lesser impact.

	1 to 5
	1
	1: 1x1 (no anti-aliasing) 2: 2x2 3: 3x3 4: 4x4 5: 5x5 (maximum anti-aliasing)

4.24 APBOX system variable

4.24.1 Entity snap aperture box

Displays the Entity Snap aperture box, at the cursor, during a pick action. Entity snaps are activated when the aperture box passes over an entity. See also the APERTURE system variable.



	Off (0): Does not display the aperture box. On (1): Displays the aperture box.
--	---

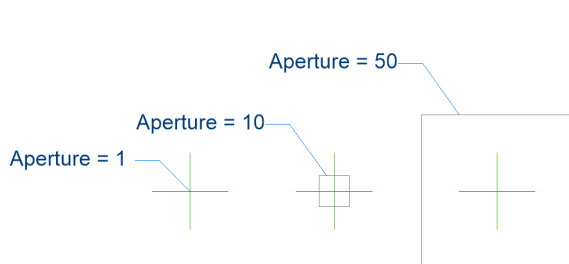
4.25 APERTURE system variable

4.25.1 Entity snap sensitivity

Controls the Aperture Box size, in pixels. Entity snaps are activated when the aperture box passes over an entity. To display the aperture box switch on the APBOX system variable.

Values between 1 and 50 are accepted.

	1 to 50
	10



4.26 AREA system variable

4.26.1 Area (Read Only)

The last calculated area by the AREA, LIST or DBLIST commands.

4.27 AREAPREC system variable

4.27.1 Area precision

Controls the number of decimal places displayed for areas, if area properties are formatted with the PROPUNITS system variable.



	-1
	-1: Use the LUPREC system variable 0: 0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000 8: 0.00000000

4.28 AREAUNITS system variable

4.28.1 Area units

Controls a list of units used to display areas, if area properties are formatted with the PROPUNITS system variable. If empty, all areas match the drawing.

Note: The string contains a space-separated list of unit abbreviations.

	in ft mi μ m mm cm m km

4.29 ARRAYASSOCIATIVITY system variable

4.29.1 Associative arrays

Creates new arrays as associative arrays.



	Off (0): Not associative On (1): Associative
--	---

4.30 ARRAYEDITSTATE system variable

4.30.1 Array edit state (Read Only)

Displays if an associative array's source entity is currently being edited.

4.31 ARRAYTYPE system variable

4.31.1 Array type

Controls the default associative array type. See also the ARRAYASSOCIATIVITY system variable.

	0
	0: Rectangular array 1: Path array 2: Polar array

4.32 ATTDIA system variable

4.32.1 Attribute dialog

Shows a dialog box for attribute values for the INSERT command.



	Off (0): Don't use dialog box On (1): Use dialog box
--	---

4.33 ATTFULLUPDATE system variable

4.33.1 Reset attributes after editing the block record

Defines the behavior when modifying the attributes of parametric blocks.

If on, the attributes in the associated block references are synchronized.

That is, their parameters, such as rotation angle, position, height of the font, etc. (except the text values), are set according with those of the attribute definitions. Additionally, the missing attributes are restored, and those that have no definitions are removed.

If off, nothing is done. Later, you can manually synchronize the attributes by running the ATTSYNC command.

	Off (0): Nothing is done. On (1): The attributes of all the block references associated with the modified block record are synchronized.

4.34 ATTMODE system variable

4.34.1 Attribute display mode

Controls the display of attributes.

Note: If the ATTMODE variable is set to 2, all attributes display, including Hidden attributes.

	1
	0: Don't show 1: As defined in block 2: Show all



4.35 ATTRACTIONDISTANCE system variable

4.35.1 Grips attraction distance

Sets the grip attraction distance. See also the ENABLEATTRACTION system variable.

	4

4.36 ATTREQ system variable

4.36.1 Insertion default settings

Controls attribute settings for a block inserted with the INSERT command.

If off, uses default values. If on, uses a prompt.

	1
	Off (0): Use default values On (1): Prompt user

4.37 AUDITCTL system variable

4.37.1 Audit control

Creates an audit report (ADT) file when the AUDIT command is used.

When you turn on the AUDITCTL settings variable, AUDIT creates an ASCII file describing problems and the action taken. This report, with the file extension ADT, is placed in the same directory as the current drawing.



	Off (0): Don't write ADT files On (1): Write ADT files
--	---

4.38 AUDITERORCOUNT system variable

4.38.1 Audit Error Count (Read Only)

The number of errors found in the last audit (AUDIT command).

4.39 AUNITS system variable

4.39.1 Angular unit type

Controls the unit type for angles.

	0
	0: Decimal degrees 1: Degrees/minutes/seconds 2: Gradians 3: Radians 4: Surveyor's units

4.40 AUPREC system variable

4.40.1 Angular unit precision

Controls the number of decimal places for angular units.

	0



	0: 0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000 8: 0.00000000
--	--

4.41 AUTOCOMPLETEDELAY system variable

4.41.1 Auto complete delay

Controls the delay before features display at the Command line. See also the AUTOCOMPLETEMODE system variable.

Values between 0.0 and 10.0 are accepted.

	0.3

4.42 AUTOCOMPLETEMODE system variable

4.42.1 Auto complete mode

Controls the types features shown at the Command line.

	0 to 63
	47



	1: Enable 2: Auto-Append 4: Suggestion List 8: Display Icons (unsupported) 16: Exclude the display of System Variables 32: Display preference variables
--	--

4.43 AUTOMATICCONNECTION system variable

4.43.1 Automatic connection

Controls automatic creation of connections for the BIMLINEARSOLID and BIMAPPLYPROFILE commands.

	1
	Off (0): Disable On (1): Enable

4.44 AUTOMATICSTAIRSECTIONBEHAVIOR system variable

4.44.1 Automatic stair section behavior

Controls the generation of 2D representations of BIM stair entities during a section generation.

Affects only the automatic stair sectioning behavior. See the BIMGENERATE2DSTAIR command.

	0
	0: Symbolic 1: Geometric

If set to **Symbolic**, a symbolic representation of entities classified as **Stairs** will be generated during section generation. This will affect only the automatic stair sectioning behavior. To customize, launch the BIMGENERATE2DSTAIR command before sectioning.



4.45 AUTOMATICTEES system variable

4.45.1 Automatic tees

Controls the automatic creation of T type connections during the BIMFLOWCONNECT command.

	0
	Off (0): Disable On (1): Enable

4.46 AUTORESETSCALES system variable

4.46.1 Purge unused scales

Controls how unused annotation scales are managed, when a drawing containing a large number of scales is loaded. A large number of annotation scales decreases performance.

	0
	0: Show a dialog box before purging unused annotation scales 1: Automatically purge unneeded scales 2: Don't purge scales and don't show dialog box when drawing contains a large number of scales

4.47 AUTOSAVECHECKSONLYFIRSTBITDBMOD system variable

4.47.1 Ignore all but first bit of DBMOD for autosave

Does not create autosave files for drawings, when they have been viewed but not edited (includes zoom and pan actions).



	Off (0): Autosave file for files that are viewed only On (1): No autosave file for files that are viewed only

4.48 AUTOSNAP system variable

4.48.1 AutoSnap

Toggles polar and entity snap tracking and controls the display of a snap marker, tooltips and magnet.

	0 to 127
	127
	0: All off 1: AutoSnap marker 2: AutoSnap tooltips 4: AutoSnap magnet 8: Polar tracking 16: Entity snap tracking 32: Tooltips for polar tracking and entity snap tracking 64: Tracking line from LASTPOINT

4.49 AUTOTRACKINGVECCOLOR system variable

4.49.1 Auto tracking vector color

Controls the color of polar/snap tracking markers.

	1 to 255
	171



4.50 AUTOVPFITTING system variable

4.50.1 Automatically resize viewports

Controls if viewport borders automatically adjust to fit, when a viewport is updated.

	Off (0): Don't fit viewport borders automatically On (1): Fit viewport borders automatically



5. B

5.1 BACKGROUNDPLOT system variable

5.1.1 Background plotting

Controls if background plotting is enabled for plot and/or publish actions.

	0 to 3
	2
	0: None 1: When plotting (Not yet supported) 2: When publishing

5.2 BACKZ system variable

5.2.1 Back clipping plane offset

The value of the **CLipping** option of the DVIEW command.

	0.0

5.3 BACTIONBARMODE system variable

5.3.1 Display Action Bars

Indicates whether the action bars or the legacy action objects are displayed in the **Block Editor**.



	Off (0): Action bars are not displayed in the block editor. On (1): Action bars are displayed in the block editor.
--	---

5.4 BACTIONCOLOR system variable

5.4.1 Action Text Color

Controls the text color of actions in the **Block Editor**.

	White

5.5 BASEFILE system variable

5.5.1 Template

The file path and default template file name for new drawings. If empty, uses built-in defaults.

5.6 BCFSOURCEURL system variable

5.6.1 BCF source url

The address (URL) of the BCF source.

5.7 BEDITASSOCMODE system variable

5.7.1 Associative identifiers in BEDIT

Controls if additional service data is generated during the BEDIT command.

This enables the automatic re-association of constraints and dimensions attached to the references of the block, including references in other documents.



	1
	0: Do not initialize identifiers in BEDIT 1: Initialize identifiers in BEDIT

5.8 BEDITMODE system variable

5.8.1 Block editor mode (Read Only)

The **Block Editor** can be opened to edit standard static and dynamic blocks or blocks with parametric data (specific to).

Important: Editing of dynamic blocks is possible in **Experimental mode** except on United States territory. In the event that you purchase in the U.S. or for use in the U.S., this feature is neither available nor licensed to you. Please see EULA for more information.

	0: BEDIT not open 1: General (parametric data is not allowed) 2: Allow parametric data 3: No restrictions

5.9 BGRIPOBJCOLOR system variable

5.9.1 Grip Color

Controls the color of grips in the **Block Editor**.

	141



5.10 BGRIPOBJSIZE system variable

5.10.1 Grip Size

Controls the display size of custom grips in the **Block Editor** relative to the screen display.

	8

5.11 BILLOFMATERIALSSETTINGS system variable

5.11.1 Bill of materials defaults

Sets the default options for BOMs (Bill Of Materials).

	10
	1: Add thumbnails to new bill of materials 2: Automatically update thumbnails 4: Display warning messages 8: Allow multiple inserts of the same table

5.12 BIMDEFAULTPROPERTIESPATH system variable

5.12.1 Default properties path

The file paths for properties, loaded when a new document is opened.

	bimproj_user.xml;bimproj_IFC.xml;bimproj_quantity.xml



5.13 BIMMATCHPROP system variable

5.13.1 Match BIM Properties

Matches BIM properties during the MATCHPROP command.

	0 to 1
	1
	0: Match standard properties 1: Match standard and BIM properties

5.14 BIMOSMODE system variable

5.14.1 BIM snap mode

Overrules the OSMODE and 3DOSMODE system variables for BIM entities.

	0 to 3
	3
	0: Entity snap modes are not overruled for BIM entities 1: Axis of linear solid 2: Axis of BIM grid

5.15 BIMPROFILESTANDARDS system variable

5.15.1 Profile's standards

Controls the profiles standards used in the **Profiles** dialog box and panel.

Separate entries with semicolons (;).

--	--



--	--

5.16 BINDTYPE system variable

5.16.1 Xref bind type

Controls how XRefs names are handled when XRefs are bound or edited in place.

If on, uses insert-like behavior. If off, uses traditional bind behavior.

	0
	Off (0): Traditional binding behavior On (1): Insert-like behavior

- If the BINDTYPE system variable = 1 (Insert-like behavior): Xrefs will be converted into blocks.
- If BINDTYPE system variable = 0 (Traditional binding behavior): it binds the xref and makes the xref part of the drawing (the objects/layers from the external drawing will be added to the current drawing with the prefix equal to the file name).

5.17 BKGCOLOR system variable

5.17.1 Background color

Controls the background color of the drawing window in model space.

	RGB:24,25,28

5.18 BKGCOLORDBEDIT system variable

5.18.1 Background color in the Dynamic Block Editor

Controls the background color of the drawing window in the **Dynamic Block Editor**.

--	--



	RGB:200,200,200

5.19 BKGCOLORPBEDIT system variable

5.19.1 Background color in the Parametric Block Editor

Controls the background color of the drawing window in the **Parametric Block Editor**.

	RGB:200,200,200

5.20 BKGCOLORPS system variable

5.20.1 Paper space background color

Controls the background color of the drawing window in paper space.

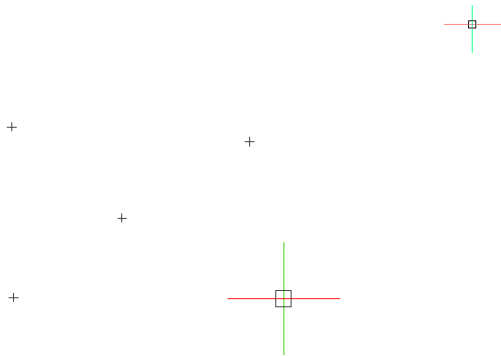
	RGB:250,250,250

5.21 BLIPMODE system variable

5.21.1 Blip mode

Determines whether or not marker blips are displayed.

	Off (0): Don't display marker blips On (1): Display marker blips



5.22 BLOCKEDITLOCK system variable

5.22.1 Block editor lock

Disables the **Block Editor** (BEdit mode). Blocks cannot be edited.

5.23 BLOCKEDITOR system variable

5.23.1 Block editor (Read Only)

Shows if the **Block Editor** (BEdit mode) is open or not.

5.24 BLOCKIFYMODE system variable

5.24.1 Blockify settings

Controls the behavior of the BLOCKIFY command.

	0 to 871



	71
	1: Use entire drawing as search space 2: Use default block insertion point 4: Use default block name 32: Compare geometry only 64: Convert unique solids 256: Use parameters and constraints 512: Prevent loss of parametrics

5.25 BLOCKIFYSCANNER system variable

5.25.1 Blockify scanner

Enables or disables the display of blockify suggestions in the block dialog. When enabled, the dialog will show suggestions for similar blocks.

	Off (0): Don't run background blockify On (1): Run background blockify

5.26 BLOCKIFYTOLERANCE system variable

5.26.1 Blockify tolerance

Controls the relative tolerance used in the BLOCKIFY command to determine if two entities are equal. A negative value means the program will determine the optimal tolerance (recommended).

	-1.0

5.27 BLOCKLEVELOFDETAIL system variable

5.27.1 Block Level of detail

Controls the block level of detail (LOD).



	1
	0: Low 1: High

Note: The low level of detail representation is a bounding box.

5.28 BLOCKSPATH system variable

5.28.1 Blocks path

Specifies the file path used for the fifth folder on the left side of the **Select Drawing File** dialog box, opened with the INSERT command when the **Browse** option is selected.

5.29 BLOCKTESTWINDOW system variable

5.29.1 Block test window (Read Only)

This system variable is set to 1 if the test block window is current.

	0 to 1
	0
	0: The test block window is not current 1: The test block window is current

5.30 BMAUTOUPDATE system variable

5.30.1 Update external components

Controls when external assembly components are reloaded to reflect the changes in their definition files.



	1
	0: Only when BMUPDATE command is issued 1: Automatically when the file is opened

5.31 BMEXTERNALIZEILLEGALSYMBOLS system variable

5.31.1 Illegal symbols treatment

Defines treatment of symbols that are not allowed in file names.

	3
	1: Remove 2: Replace with underscore (_) 3: Replace with escape sequences

5.32 BMFORMTEMPLATEPATH system variable

5.32.1 BMFORM template path

The file path and name of the default BMFORM command Template file.

5.33 BMTOOLPATH system variable

5.33.1 Assembly Inspect tool search paths

The file paths used for searching tool files in Assembly Inspect.

Separate file paths with semicolons (;). If left empty, it defaults to the installed Design library Tools folder.

--	--



	C:\Program Files\Bricsys\BricsCAD en_US\UserDataCache\Support \en_US\DesignLibrary\Tools\

5.34 BMUPDATEMODE system variable

5.34.1 Assembly components update mode

Controls if external assembly components are reloaded if they are modified, or unconditionally.

	0
	0: Update only modified components (faster) 1: Update all components (slower, but repairs assembly structure)

5.35 BOLTINGASMDEFAULTLENGTHINCREMENT system variable

5.35.1 Default length increment

Controls the default length increment for the default stud, see the BOLTINGASMDEFAULTSTUD system variable.

	25.4

Note:

- If INSUNITS=inches (1), the default value of BOLTINGASMDEFAULTLENGTHINCREMENT is 1.0.
- If INSUNITS=millimeters (4), the default value of BOLTINGASMDEFAULTLENGTHINCREMENT is 25.4.

5.36 BOLTINGASMDEFAULTNUT system variable

5.36.1 Default nut

Controls the default nut used to generate bolt assemblies.



	ASME B18.2.2 Heavy Hex Nut

5.37 BOLTINGASMDEFAULTNUTSNUMBER system variable

5.37.1 Default nuts number

Controls the default nuts number used to generate bolt assemblies.

	2 to 4
	4
	2: 2 3: 3 4: 4

5.38 BOLTINGASMDEFAULTSTUD system variable

5.38.1 Default stud

Controls the default stud used to generate bolt assemblies.

	ASME B18.31.2 Continuous Thread Flange Bolting Stud

5.39 BOMFILTERSETTINGS system variable

5.39.1 Default BOM filter settings

Sets the default filter settings, defines which objects to include.

--	--



	0 to 127
	1
	1: Include mechanical components, blocks and solids 2: Include non-mechanical local blocks and solids 4: Include non-mechanical external references 8: Include solid plies 16: Ignore BOM status 32: Treat external references as transparent 64: Treat leaf parts as transparent

Note: If the file does not contain any mechanical components and the mode does not require to include any non-mechanical entities, then it will be extended to include all non-mechanical entities.

5.40 BOMPROPERTYSET system variable

5.40.1 Default BOM property set

Sets the default set of properties for BOM tables.

	0 to 3
	1
	1: Mechanical-only properties 2: All properties except coordinates 3: All properties

Note: If the BOM filter mode requires to include non-mechanical objects (BOMFILTERSETTINGS = 2 / 4 / 6)), then the property set will be automatically extended to include all properties except coordinates (BOMPROPERTYSET=2).

5.41 BOMTEMPLATE system variable

5.41.1 Default template

Controls the file path for the default BOM template.



	" "

5.42 BOMTHUMBNAILHEIGHT system variable

5.42.1 Default thumbnail height, px

Sets the default thumbnail height for BOM (Bill Of Material) tables, in pixels.

	200

5.43 BOMTHUMBNAILWIDTH system variable

5.43.1 Default thumbnail width, px

Sets the default thumbnail width for BOM tables, in pixels.

	200

5.44 BOUNDARYCOLOR system variable

5.44.1 Detected Boundary Color

Controls the color used to detect boundaries.

	1 to 255
	95



5.45 BPARAMETERCOLOR system variable

5.45.1 Parameter Color

Controls the color of parameters in the **Block Editor**.

	170

5.46 BPARAMETERFONT system variable

5.46.1 Font Name

Sets the font used for parameters and actions in the **Block Editor**.

	simplex.shx

5.47 BPARAMETERSIZE system variable

5.47.1 Parameter Size

Controls the size of parameter text and features in the **Block Editor** relative to the screen display.

	12

5.48 BPTEXTHORIZONTAL system variable

5.48.1 Parameter Text Alignment

Forces the text displayed for action parameters and constraint parameters in the **Block Editor** to be horizontal.

--	--



	Off (0): Does not force the text for action parameters and constraint parameters in the Block Editor to display horizontally. On (1): Displays the text for action parameters and constraint parameters in the Block Editor horizontally.

5.49 BSYSLIBCOPYOVERWRITE system variable

5.49.1 Bsyslib copy overwrite

Controls how materials or compositions with a name that already exists in the target drawing are copied.

	0 to 3
	0
	0: Prompt 1: Skip 2: Overwrite 3: Rename

5.50 BTMARKDISPLAY system variable

5.50.1 Display Tickmarks for Parameters With Value Sets

Controls whether or not value set markers are displayed for dynamic block references.

	Off (0): Value set markers are not displayed. On (1): Value set markers are displayed.



5.51 BVMODE system variable

5.51.1 Block Visibility Mode

Controls how hidden entities are displayed in **Block Editor**.

	0 to 1
	0
	0: Hidden entities are invisible 1: Hidden entities are visible but dimmed



6. C

6.1 CACHELAYOUT system variable

6.1.1 Cache layout

Caches layouts - reduces the time needed to switch between layouts.

	Off (0): Don't cache layout On (1): Cache layout

6.2 CAMERADISPLAY system variable

6.2.1 Camera display

Displays a visual representation of a camera for all camera locations.

	Off (0): Don't display camera glyphs On (1): Display camera glyphs

6.3 CAMERAHEIGHT system variable

6.3.1 Camera height

Controls the default height, in drawing units, for new cameras.

	0.0



6.4 CANNOSCALE system variable

6.4.1 Annotation scale name

Controls the name of the current annotation scale for the current space.

	1:1

6.5 CANNOSCALEVALUE system variable

6.5.1 Annotation scale value (Read Only)

Displays the value of the current annotation scale.

	1.0

6.6 CDATE system variable

6.6.1 Calendar date (Read Only)

Shows the current date and time, in decimal format.

6.7 CECOLOR system variable

6.7.1 Entity color

Sets the color for new entities.



6.8 CELTSCALE system variable

6.8.1 Entity linetype scale

Sets the current entity linetype scale multiplier.

	Greater than 0
	1.0

6.9 CELTYPE system variable

6.9.1 Entity linetype

Sets the linetype for new entities.

6.10 CELWEIGHT system variable

6.10.1 Entity lineweight

Sets the lineweight of new entities.

	-3 to 211
	-1
	-3: Lineweight Default (defined by LWDEFAULT) -2: Lineweight ByBlock -1: Lineweight ByLayer 0 - 211: Lineweight value in hundredths of millimeters

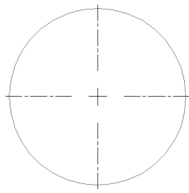


6.11 CENTERCROSSGAP system variable

6.11.1 Center mark cross gap

Controls the gap between the center mark and its centerlines.

	0.05x

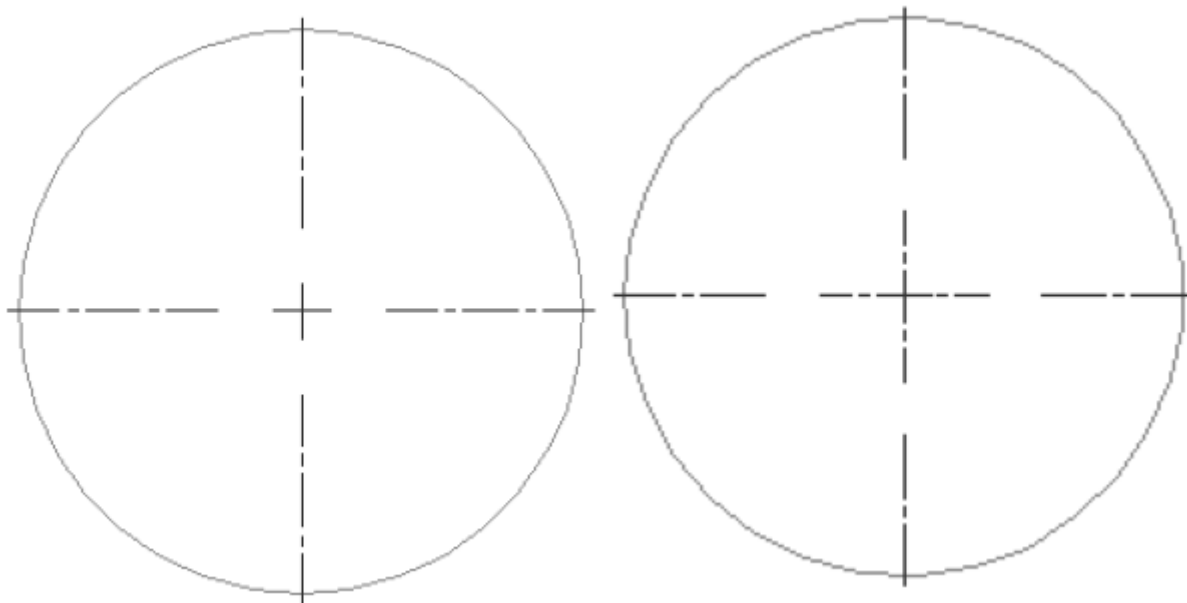


6.12 CENTERCROSSSIZE system variable

6.12.1 Center mark cross size

Controls the size of an associative center mark.

	0.1x



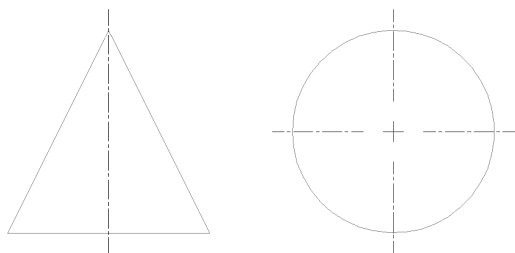
6.13 CENTEREXE system variable

6.13.1 Centerline extension length

Controls the extension length of a centerline.

	0.12: If MEASUREMENT=0 and INSUNITS=inches 3.5: If MEASUREMENT=1 and INSUNITS=millimeters

Note: The value is expressed in drawing units.



6.14 CENTERLAYER system variable

6.14.1 Default layer for center mark or centerline

Controls a default layer for new centermarks or centerlines.



	.

6.15 CENTERLTSCALE system variable

6.15.1 Linetype scale for center mark or centerline

Controls the linetype scale used to create center marks and centerlines.

	1.0

6.16 CENTERLTYPE system variable

6.16.1 Center mark/centerline linetype

Controls the linetype used by center marks and centerlines.

	CENTER2

6.17 CENTERLTYPEFILE system variable

6.17.1 Linetype file for center mark or centerline

Controls the linetype file used to create center marks and centerlines.

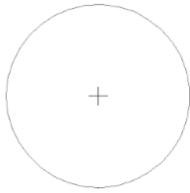
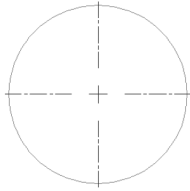
	• Default in imperial unit drawings: default.lin. • Default in metric unit drawings: iso.lin.



6.18 CENTERMARKEXE system variable

6.18.1 Automatic extension for center mark or centerline

Automatically extends centerlines for new center marks and centerlines.



	Off (0): No automatic extension On (1): Automatic extension

6.19 CETRANSARENCY system variable

6.19.1 Transparency

Sets the transparency for new entities.

	ByLayer: Apply the layer's transparency ByBlock: Apply the block's transparency 0: Apply no transparency (fully opaque) 1-90: Apply transparency percentage from least (1) to most (90) transparent



6.20 CHAMFERA system variable

6.20.1 Chamfer first distance

Controls the first chamfer distance when the CHAMMODE system variable is Distance-Distance.

	0.0

6.21 CHAMFERB system variable

6.21.1 Chamfer second distance

Controls the second chamfer distance when the CHAMMODE system variable is Distance-Distance.

	0.0

6.22 CHAMFERC system variable

6.22.1 Chamfer length

Controls the chamfer length when the CHAMMODE system variable is Length-Angle.

	0.0

6.23 CHAMFERD system variable

6.23.1 Chamfer angle

Controls the chamfer angle when the CHAMMODE system variable is Length-Angle.

--	--



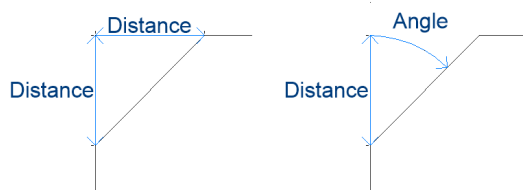
	0.0

6.24 CHAMMODE system variable

6.24.1 Chamfer mode

Controls the default chamfer creation method.

	0 to 1
	0
	0: Distance-Distance 1: Length-Angle



6.25 CHECKDWLPRESENCE system variable

6.25.1 Check DWL file existence before open

Warn if there is a DWL lock file when a drawing is opened, indicates that another user has the drawing open.

The content of the lock files allows to inform other users trying to open that drawing, that it is in use, since when, and by whom. This is typically useful for drawings on a shared folder that can be accessed by multiple users from different operating systems.



	Off (Windows) On (Mac & Linux)
	Off (0): Don't check DWL file existence before opening a drawing On (1): Check DWL file existence before opening a drawing

6.26 CIRCLERAD system variable

6.26.1 Circle radius

Controls the default circle radius.

A value of zero means no default.

	0.0

6.27 CIRCULARARROWHEADLENGTH system variable

6.27.1 Default head length

Sets the default head length of circular arrows.

	1 - if INSUNITS=1 (inches) 25 - if INSUNITS=4 (millimeters) 2.5 - if INSUNITS=5 (centimeters) 0.025 - if INSUNITS=6 (meters)

6.28 CIRCULARARROWHEADWIDTH system variable

6.28.1 Default head width

Sets the default head width of circular arrows.



	1.5 - if INSUNITS=1 (inches) 37.5 - if INSUNITS=4 (millimeters) 3.75 - if INSUNITS=5 (centimeters) 0.0375 - if INSUNITS=6 (meters)
--	---

6.29 CIRCULARARROWLEADERRADIUS system variable

6.29.1 Default leader radius

Sets the default leader radius of circular arrows.

	2 - if INSUNITS=1 (inches) 50 - if INSUNITS=4 (millimeters) 5 - if INSUNITS=5 (centimeters) 0.05 - if INSUNITS=6 (meters)

6.30 CIRCULARARROWLEADERROTATION system variable

6.30.1 Default leader rotation

Sets the default leader rotation of circular arrows.

Values between 20.0 and 320.0 are accepted.

	90

6.31 CIRCULARARROWTHICKNESS system variable

6.31.1 Default thickness

Sets the default thickness of circular arrows.



	0.5 - if INSUNITS=1 (inches) 12.5 - if INSUNITS=4 (millimeters) 1.25 - if INSUNITS=5 (centimeters) 0.0125 - if INSUNITS=6 (meters)
--	---

6.32 CLAYER system variable

6.32.1 Current layer

Sets the layer for new entities.

	0

6.33 CLEANSCREENOPTIONS system variable

6.33.1 Clean screen options

Controls which UI elements are hidden by the CLEANSCREENON command.

	0 to 127
	15
	1: Hide document tabs 2: Hide dockable panels 4: Hide toolbars 8: Hide Ribbon 16: Hide Command line 32: Hide Status bar 64: Hide menu bar

6.34 CLEANSCREENSTATE system variable

6.34.1 Clean screen state (Read Only)

Indicates if clean screen state is active. Use the CLEANSCREENON and CLEANSCREENOFF commands.



Activating the clean screen state makes the drawing area larger by hiding elements of the user interface.

6.35 CLIPBOARDFORMAT system variable

6.35.1 Clipboard DWG format

Controls the drawing format version used to copy to the clipboard.

	4
	1: DWG 2018 4: DWG 2013 7: DWG 2010 10: DWG 2007 13: DWG 2004 16: DWG 2000 19: DWG R14 22: DWG R13 25: DWG R11/R12

6.36 CLIPBOARDFORMATS system variable

6.36.1 Clipboard Formats

Controls the types of data that can be copied to the clipboard.

Reduce the number of data types to improve performance.

	0 to 127



	127
	1: Bitmap 2: Metafile Picture Format 4: Enhanced Metafile 8: AutoCAD 16: Native 32: OLE Embed Source and Object Descriptor 64: CVS and XMLSS table data

6.37 CLIPROMPTLINES system variable

6.37.1 Prompt Lines

Controls the maximum number of floating lines of text momentarily displayed above the Command line. Applies only if the Command line is hidden, or floating with the CMDLINEUSEMINIFRAME system variable set to on (1).

Values between 0 and 64 are accepted.

	0 to 64
	4

6.38 CLISTATE system variable

6.38.1 Command line state (Read Only)

Command line status.

	1
	Off (0): Command line is invisible On (1): Command line is visible



6.39 CLOSECHECKONLYFIRSTBITDBMOD system variable

6.39.1 Ignore all but first bit of DBMOD for close

If on, does not ask to save drawings, when they have been viewed but not edited (includes zoom and pan actions).

	Off (0): Don't close drawing without getting a request to save the file. On (1): Close drawing without getting a request to save the file.

6.40 CLOUDDOWNLOADPATH system variable

6.40.1 Cloud download path

The folder path for files downloaded through the **Bricsys 24/7** Panel.

	{User}Documents/Bricsys247

6.41 CLOUDLOG system variable

6.41.1 Cloud log

Controls if data exchanged with Bricsys 24/7 is logged or not. If set to "Log file" a log file will be written in the folder set in the LOGFILEPATH system variable.

	0 to 2
	0



	0: No log 1: Log messages 2: Log file
--	---

6.42 CLOUDLOGVERBOSE system variable

6.42.1 Cloud log verbose

Creates a verbose log for Bricsys 24/7.

If switched on, more information is logged and Bricsys 24/7 actions will be slower.

	Off (0): Verbose log off On (1): Verbose log on

6.43 CLOUDONMODIFIED system variable

6.43.1 Cloud on modified

Specifies what to do when a file opened from Bricsys 24/7 is modified and saved locally.

	0 to 3
	1
	0: Do nothing 1: Prompt 2: Always upload to new revision 3: Always save locally under new name

6.44 CLOUDSERVER system variable

6.44.1 Cloud server

The address of the Bricsys 24/7 server.



	https://my.bricsys247.com/

6.45 CLOUDSSOCLIENTID system variable

6.45.1 Cloud SSO Client ID

The client_id used to connect to the SSO service.

	bricscad

6.46 CLOUDSSOSCOPE system variable

6.46.1 Cloud SSO Scope

Controls scopes or permissions used to connect to the SSO service.

	openid profile email

6.47 CLOUDTEMPFOLDER system variable

6.47.1 Cloud temporary folder

The file path for temporary Bricsys 24/7 files.

#

	{User}\AppData\Local\Temp\Bricsys_24_7



6.48 CLOUDUPLOADDEPENDENCIES system variable

6.48.1 Cloud upload dependencies

Controls what to do with dependencies, such as XRefs, when a drawing is uploaded to Bricsys 24/7.

	0 to 2
	1
	0: Upload drawing only (ignore dependencies) 1: Use eTransmit dialog if the drawing contains external references 2: Always use eTransmit dialog

6.49 CLUSTER2DGEOMGLYPHS system variable

6.49.1 Cluster 2d constraint glyphs

Controls the clustering of 2d constraint glyphs.

	0 to 3
	0
	0: No clustering or merging occurs 1: Enable clustering 2: Enable merging

6.50 CMATERIAL system variable

6.50.1 Current material

Controls the default render material for new entities.

--	--



6.51 CMDACTIVE system variable

6.51.1 Active command (Read Only)

Indicates the type of the current command.

	1
	1: Ordinary command is active 2: Ordinary command and a transparent command are active 4: Script is active 8: Dialog box is active 16: DDE is active 32: lisp is active (only visible to an ObjectARX-defined command) 64: ObjectARX command is active

6.52 CMDDIA system variable

6.52.1 Command dialogs

Controls if dialog boxes are shown for commands.

	Off (0): Don't use dialog box for commands On (1): Use dialog box for commands

6.53 CMDECHO system variable

6.53.1 Command echo

Displays prompts and input during a LISP 'command' function.



	Off (0): Echoing off On (1): Echoing on

6.54 CMDLINEEDITBGCOLOR system variable

6.54.1 Command line edit background color

The Command line edit field background color.

Color may be represented as a name (for standard colors) or as RGB values. At the Command line, color may be entered as a name (for standard colors), RGB values, or HTML color.

	RGB: 50 54 56 (Settings dialog) #323638 (Command line)

6.55 CMDLINEEDITFGCOLOR system variable

6.55.1 Command line edit foreground color

The Command line edit field foreground color.

Color may be represented as a name (for standard colors) or as RGB values. At the Command line, color may be entered as a name (for standard colors), RGB values, or HTML color.

	White (Settings dialog) #FFFFFF (Command line)



6.56 CMDLINEFADINGLOGBGCOLOR system variable

6.56.1 Command line fade log background color

The Command line fade log background color.

Color may be represented as a name (for standard colors) or as RGB values. At the Command line, color may be entered as a name (for standard colors), RGB values, or HTML color.

	RGB: 50 54 56 (Settings dialog) #323638 (Command line)

6.57 CMDLINEFADINGLOGFADEDELAY system variable

6.57.1 Command line fading log fade delay

The delay before Command line's log starts to fade.

	0.0 to 10.0
	2.0

6.58 CMDLINEFADINGLOGFGCOLOR system variable

6.58.1 Command line fade log foreground color

The Command line fade log foreground color.



6.59 CMDLINEFADINGLOGTRANSPARENCY system variable

6.59.1 Command line fade log transparency

Controls the Command line fade log transparency.

Values between 0 and 100 are accepted. A value of zero means fully opaque, 100 is fully transparent.

	0 to 100
	30

6.60 CMDLINEFONTNAME system variable

6.60.1 Command line font name

The Command line font.

	Consolas

6.61 CMDLINEFONTSIZE system variable

6.61.1 Command line font size

The height of the Command line font in pixels.

	10

6.62 CMDLINEFRAMEACTIVETRANSPARENCY system variable

6.62.1 Command line frame transparency when active

Controls Command line frame transparency when active. Values between 0 and 100 are accepted.

A value of zero means fully opaque, 100 if fully transparent.



	0 to 100
	10

6.63 CMDLINEFRAMEINACTIVETRANSARENCY system variable

6.63.1 Command line frame transparency when inactive

Controls the Command line frame transparency when inactive.

Values between 0 and 100 are accepted. A value of zero means fully opaque, 100 is fully transparent.

	0 to 100
	30

6.64 CMDLINEFRAMEUSETEXTSCR system variable

6.64.1 Command line frame TEXTSCR

When the Command line is floating, controls the effect of TEXTSCR command, also impacts log prompt delay. If on, displays a separate window, the same as in the docked state. If off, displays as a mini-frame.

	Off (0): Don't display (TEXTSCR) history window in a separate floating frame On (1): Display (TEXTSCR) history window in a separate floating frame



6.65 CMDLINELISTBGCOLOR system variable

6.65.1 Command line list background color

The Command line history list background color.

	RGB:130,130,130

6.66 CMDLINELISTFGCOLOR system variable

6.66.1 Command line list foreground color

The Command line history list foreground color.

6.67 CMDLINEOPTIONBGCOLOR system variable

6.67.1 Command line option background color

The Command line options background color.

	RGB:121,132,142

6.68 CMDLINEOPTIONSHORTCUTCOLOR system variable

6.68.1 Command line option shortcut color

The Command line option shortcut color.

--	--



	RGB:255,187,0

6.69 CMDLINEUSEMINIFRAME system variable

6.69.1 Command line mini floating frame

Controls if the mini-frame is used when the Command line floats.

	Off (0): Don't use new mini-frame On (1): Use new mini-frame

Note: The CMDLINEUSEMINIFRAME system variable replaces the CMDLINEUSENEWFRAME system variable.

6.70 CMDLNTEXT system variable

6.70.1 Prompt prefix

Controls the prefix text shown in the Command line when no command is active.

	:

6.71 CMDNAMES system variable

6.71.1 Active Command Name (Read Only)

The names of any active or transparent commands.



6.72 CMLEADERSTYLE system variable

6.72.1 Multileader style

Controls the multileader style for entities created with the MLEADER command.

6.73 CMLJUST system variable

6.73.1 Multiline justification

Controls the justification of multilines relative to the cursor, for the MLINE command.

	0 to 2
	0
	0: Top (second line created below the cursor) 1: Zero (lines created either side of the cursor) 2: Bottom (second line created above the cursor)

6.74 CMLSCALE system variable

6.74.1 Multiline scale

Controls the overall distance between lines created with the MLINE command.

A negative value mirrors the offset lines.

	1.0: If MEASUREMENT=0 and INSUNITS=inches 20.0: If MEASUREMENT=1 and INSUNITS=millimeters



6.75 CMLSTYLE system variable

6.75.1 Multiline style

Controls the multiline style for entities created with the MLINE command.

6.76 CMPCLRMISS system variable

6.76.1 Color of missing entities - DWGCOMPARE

Controls the color of missing entities during the DWGCOMPARE command.

	1 to 255
	1

6.77 CMPCLRMOD1 system variable

6.77.1 Color of modified entities- DWGCOMPARE

Controls the color of modified entities during the DWGCOMPARE command.

	1 to 255
	253

6.78 CMPCLRMOD2 system variable

6.78.1 Color of modified entities in the second drawing- DWGCOMPARE

Controls the color of modified entities in the second drawing during the DWGCOMPARE command.



	1 to 255
	2

6.79 CMPCLRNEW system variable

6.79.1 Color of new entities in - DWGCOMPARE

Controls the color of new entities during the DWGCOMPARE command.

Controls the color of new entities during the DWGCOMPARE command.

	1 to 255
	3

6.80 CMPDIFFLIMIT system variable

6.80.1 Maximum number of entities - DWGCOMPARE

Controls the limit for entities to compare during the DWGCOMPARE command.

Values between 1 and 10,000,000 are accepted.

	1 to 10000000
	10000000

6.81 CMPFADECTL system variable

6.81.1 Fade - DWGCOMPARE

Controls the fade level for unmodified entities during the DWGCOMPARE command.



Values between 0 and 90 are accepted. A value of zero means Maximum opacity, 90 means maximum transparency.

	0 to 90
	80

6.82 CMPLOG system variable

6.82.1 Log control - DWGCOMPARE

Toggles the creation of a log report (cmplog) for the DWGCOMPARE command.

	Off (0): Don't write cmplog files On (1): Write cmplog files

6.83 COLORBOOKPATH system variable

6.83.1 Color book file search path

The file path(s) for color books.

Separate file paths with semicolons (;).

6.84 COLORPICKBOX system variable

6.84.1 Pickbox color

Sets the color for the pickbox. Values between 0 and 255 are accepted.



	0 to 255
	7

6.85 COLORTHEME system variable

6.85.1 UI color theme

Applies a dark or light color theme to the user interface.

	0 to 1
	0
	0: Dark color theme 1: Light color theme

6.86 COLORX system variable

6.86.1 X axis color

Controls the color of the X-axis.

	1 to 255
	11

6.87 COLORY system variable

6.87.1 Y axis color

Controls the color of the Y-axis.



	1 to 255
	112

6.88 COLORZ system variable

6.88.1 Z axis color

Controls the color of the Z-axis.

	1 to 255
	150

6.89 COMACADCOMPATIBILITY system variable

6.89.1 COM Acad compatibility

Use registry settings to improve support for existing VB applications.

	Off (0): Don't use registry settings On (1): Use registry settings

Note: When the COMACADCOMPATIBILITY system variable is set to **On**, drawing files that are embedded as OLE objects in other applications will open in .



6.90 COMBINETEXTMODE system variable

6.90.1 Combined text mode

Controls the order of the text selection word-wrap method and linespacing style, for the TXT2MTXT command.

	0 to 15
	11
	1: Combine into a single mtext 2: Sort top-down 4: Word-wrap text 8: Uniform linespacing

6.91 COMMANDASSIST system variable

6.91.1 AI Predict Command line

Controls the use of personalized, AI command suggestions.

Only possible if **Application Data** collection is enabled in the DATACOLLECTIONOPTIONS system variable.

	Off (0): Do not enable AI Predict Command line On (1): Enable AI Predict Command line

6.92 COMMANDPREVIEW system variable

6.92.1 Enables a preview of the outcome of commands such as TRIM, EXTEND.

If CommandPreview is enabled then some commands will display a preview of their expected results.

--	--



	Off (0): Do not enable preview in commands On (1): Enable preview in commands

6.93 COMMUNICATORBACKGROUNDMODE system variable

6.93.1 Perform import and export in background

Enables user interaction while import or export is performed.

	Off (0): Disables user interaction while import or export is performed. On (1): Enables user interaction while import or export is performed.

6.94 COMMUNICATORPATH system variable

6.94.1 Communicator path (Mac & Linux)

The file path used to install the .

6.95 COMPASS system variable

6.95.1 Compass

Toggles the display of the 3D compass on/off in the current viewport.



	Off (0): 3D Compass off On (1): 3D Compass on
--	--

6.96 COMPONENTSCONFIG system variable

6.96.1 Library Panel Configuration

The name of the active **Library** panel configuration file. Controls what is shown in the **Library** panel.

Use the SRCHPATH command to find the file.

6.97 COMPONENTSPATH system variable

6.97.1 Library directory path

The file path(s) for user created components.

Separate file paths with semicolons (;).

6.98 CONSTRAINTBARDISPLAY system variable

6.98.1 Constraint Display

Controls when constraints are shown.

	0 to 3
	3
	1: Show constraint markers when geometrical constraints are added 2: Show hidden constraint markers when constrained entities are selected



6.99 CONTINUOUSMOTION system variable

6.99.1 Continuous motion

Controls if rotation continues after the mouse is released during the ROTATE commands

	Off (0): Disable continuous inertial motion in realtime On (1): Enable continuous inertial motion in realtime

6.100 CONVERTODMAX system variable

6.100.1 Maximal multiplier for an outer diameter

	1.1

6.101 CONVERTODMIN system variable

6.101.1 Minimal multiplier for an outer diameter

	0.95

6.102 CONVERTTHMAX system variable

6.102.1 Maximal multiplier for a thickness



	2
--	---

6.103 CONVERTTHMIN system variable

6.103.1 Minimal multiplier for a thickness

	0.5

6.104 COORDS system variable

6.104.1 Coordinates

Controls the format and update frequency of the coordinate field in the Status bar.

	0 to 3
	1
	0: Update coordinates only when points are selected 1: Coordinates show pointer location 2: Coordinates in polar form for point, distance and angle selection 3: Coordinates in geographic form as latitude and longitude

6.105 COPYGUIDED3DDISPLAYSOURCEFACES system variable

6.105.1 COPYGUIDED3D source faces

Displays source faces during the COPYGUIDED3D command. Source faces are used to position the copied entity/entities.



	Off (0): Disable display of source faces On (1): Enable display of source faces

6.106 COPYMODE system variable

6.106.1 Copy mode

Controls if the COPY command creates a single copy or multiple copies, by default.

	0 to 1
	0
	0: Repeat automatically 1: Create single copy

6.107 CPLOTSTYLE system variable

6.107.1 Current plot style

Controls the plot style for new entities. In color-dependent mode drawings this is "BYCOLOR" and is read-only. In named-plot-style mode drawings, the options: "BYLAYER" (default), "BYBLOCK", "NORMAL" and "USER DEFINED", this can be changed. See also the PSTYLEMODE system variable. Use the CONVERTPSTYLES command to convert the current drawing to use named or color-dependent plot styles.

Note: To convert the current drawing to use named or color-dependent plot styles, use CONVERTPSTYLES.

6.108 CPROFILE system variable

6.108.1 Current profile (Read Only)

The name of the current user profile.



	Default

6.109 CRASHREPORTSENDING system variable

6.109.1 Crash report sending (Windows)

Controls the preferences of sharing the crash report and showing the **Crash report** dialog box.

Sending a crash report helps identify and fix any issues and improve BricsCAD® for all users.

	0 to 2
	0
	0: Ask before sending 1: Send always and don't ask 2: Don't send and don't ask

6.110 CREATESKETCHFEATURE system variable

6.110.1 Sketch based feature (experimental)

Links 3D entities created with the EXTRUDE, LOFT, SWEEP, and REVOLVE commands and their options

Subtract and **Unite** to the 2D entities used to create them and converts the 2D entities into a sketch. Any modifications to the sketch are reflected in the 3D entity.

	0 to 1
	0



	0: Do not create sketch based feature 1: Create sketch based feature
--	---

Note: This system variable can also be set by pressing the **Sketch Feature** toggle button () in the ribbon.

6.111 CREATETHUMBNAILONTHEFLY system variable

6.111.1 Create preview thumbnail on the fly

Generates a preview thumbnail in the **Open** dialog box, if a drawing doesn't have a thumbnail. Does not apply if the drawing was saved with RASTERPREVIEW system variable switched on (1).

	Off (0): Don't create preview thumbnail on the fly On (1): Create preview thumbnail on the fly

6.112 CREATEVIEWPORTS system variable

6.112.1 Automatic viewport creation

Controls if a viewport is automatically included when a new layout is created.

	Off (0): Don't create viewport for new layouts On (1): Create viewport for new layouts



6.113 CROSSHAIRDRAWMODE system variable

6.113.1 Crosshair rendering mode

Controls the way the mouse cursor is rendered while inside the drawing window (crosshair, pickbox, etc.) for 3D visualization. Rendering by RedSDK will be faster, but some old systems might not support rendering by RedSDK.

- In 2dwireframe, render the crosshair in OpenGL. Attempts to eliminate cursor duplicates or flickering, which may happen using the window toolkit.
- In RedSDK visual styles, render the crosshair by RedSDK. Rendering the cursor by RedSDK tends to be faster, but some old systems might not support it.

	0 to 3
	3 (macOS & Linux) 2 (Windows)
	0: Always render crosshair at window toolkit level 1: Render crosshair in OpenGL, for 2d drawings 2: Render crosshair by RedSDK, for 3d drawings

6.114 CROSSINGAREACOLOR system variable

6.114.1 Crossing area color

Controls the color for the crossing selection areas (right-left).

Note: In effect only when SELECTIONAREA setting is on.

	1 to 255
	91



6.115 CTAB system variable

6.115.1 Current tab

The name of the current tab, model or layout.

	Model

6.116 CTABLESTYLE system variable

6.116.1 Current table style

Sets the table style for new table entities.

6.117 CTRL3D MOUSE system variable

6.117.1 3D mouse mode

Enables a 3Dconnexion 3D mouse.

	0 to 1
	1
	0: Disable 3D mouse 1: Enable 3D mouse



6.118 CTRLMBUTTON system variable

6.118.1 Middle Button Click

The CTRLMBUTTON system variable sets the values to turn On or Off the **Temporary tracking points** entity snap when the middle mouse button (mouse wheel) is used during a command.

- If CTRLMBUTTON is set to **1 for ON**, pressing the middle mouse button during a command runs the **TK** transparent shortcut and prompts you in the Command line to specify the temporary tracking points.
- If CTRLMBUTTON is set to **0 for OFF**, the system variable turns Off the **Temporary tracking points** entity snap using the middle mouse button.

Note: This system variable is only available on the Command line.

6.119 CTRLMOUSE system variable

6.119.1 Mouse shortcuts

Toggles mouse shortcuts on/off.

For Windows and Linux short cuts include:

- **Ctrl+Shift + Left button** for realtime zoom.
- **Ctrl+Shift + Right button** for realtime pan.
- **Ctrl + middle button** for view rotation.
- **Ctrl + right button** for view rotation with fixed Z-axis.

For macOS short cuts include:

- **Cmd+Shift + Left button** for realtime zoom.
- **Cmd+Shift + Right button** for realtime pan.
- **Cmd + middle button** for view rotation.
- **Cmd + right button** for view rotation with fixed Z-axis.

	0 to 1
	1
	0: Disable mouse shortcuts 1: Enable mouse shortcuts



6.120 CURSORMODE system variable

6.120.1 Crosshair displaying mode

Controls how the crosshair is displayed.

Values 0 and 1 are accepted.

	Off
	Off (0): Displays the crosshair in XOR mode. On (1): Displays the crosshair in Non-XOR mode.

6.121 CURSORSIZE system variable

6.121.1 Crosshair size

Controls the crosshair size, as a percentage of the screen size.

	1 to 100
	5

6.122 CVALLOWBREAKLINECROSSINGS system variable

6.122.1 Allow breakline crossings

If on, intersections between breakline segments are calculated and added as points to the TIN surface.

	1



6.123 CVANGLESAMPLINGINTERVAL system variable

6.123.1 Angle sampling interval

Controls the angle sampling interval in decimal degrees, used to round gradings at convex vertices.

	0 to 90
	5

6.124 CVARCTESSELLATIONGRADING system variable

6.124.1 Arc approximation mid-ordinate distance

Controls the grading mid-ordinate distance, the maximum distance between the arc and the chord (straight) segment, used for arc approximation.

	0.01

6.125 CVARCTESSELLATIONSURFACE system variable

6.125.1 Arc approximation mid-ordinate distance

Controls the surface mid-ordinate distance, the maximum distance between the arc and the chord (straight) segment, used for arc approximation.

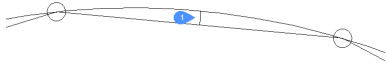
	0.01



6.126 CVARCTESSELLATIONTEMPLATEELEMENT system variable

6.126.1 Template Element arc approximation mid-ordinate distance

Controls the corridor mid-ordinate distance (1), the maximum distance between the arc and the chord (straight) segment, used for arc approximation.



	0.01

6.127 CVASSOCIATIVITY system variable

6.127.1 Associativity

Controls if Civil entities are associative.

	15
	1: TIN Surfaces are associative 2: Gradings are associative 4: TIN Volume Surfaces are associative 8: Corridors are associative

6.128 CVDEFAULTCURVETYPEHA system variable

6.128.1 Default curve type for horizontal alignment

Controls the curve type, used to create new horizontal alignment or to add a new PI.



	0
	-1: None 0: Auto Arc 1: Free Arc 2: Auto Spiral-Curve-Spiral 3: Free Spiral-Curve-Spiral

6.129 CVDEFAULTCURVETYPEVA system variable

6.129.1 Default curve type for vertical alignments

Controls the curve type, used to create new vertical alignment or to add a new PVI.

	2
	-1: None 0: Auto Arc 1: Free Arc 2: Auto Parabola 3: Free Parabola

6.130 CVELEVATIONATBREAKLINECROSSINGS system variable

6.130.1 Elevation at breakline crossings

Controls the elevation at breakline crossings.

	0 to 2
	0
	0: Minimum 1: Maximum 2: Average



6.131 CVERSIONCONTROLPATH system variable

6.131.1 Current version control path

The file path used to store the current version control project.

6.132 CVGRADEUNIT system variable

6.132.1 Format

Controls the unit format for grade units

	0 to 2
	0
	0: percent 1: per mille 2: decimal

6.133 CVGRADEUNITPREC system variable

6.133.1 Precision

Controls the number of decimal places displayed for grade units

	0 to 8
	2



	0: 0 1: 0.0 2: 0:00 3: 0:000 4: 0:0000 5: 0:00000 6: 0:000000 7: 0:0000000 8: 0:00000000
--	--

6.134 CVLENGTHSAMPLINGINTERVAL system variable

6.134.1 Sampling interval for straight segments

Controls the length of sampling intervals, used to sample straight segments.

	1.00

6.135 CVPORT system variable

6.135.1 Current viewport

Changes the identification number of the current viewport on three conditions:

- 1 The identification number is an active viewport.
- 2 Cursor movement in that viewport is not locked by a command in progress.
- 3 Tablet mode is off.

	1 or greater
	2



6.136 CVSLOPEUNIT system variable

6.136.1 Format

Controls the unit format for slope units

	0 to 1
	0
	0: run:rise 1: rise:run

6.137 CVSLOPEUNITPREC system variable

6.137.1 Precision

Controls the number of decimal places displayed for slope units

	0 to 8
	1
	0: 0 1: 0.0 2: 0:00 3: 0:000 4: 0:0000 5: 0:00000 6: 0:000000 7: 0:0000000 8: 0:00000000



6.138 CVSTATIONUNIT system variable

6.138.1 Station delimiter position

Controls the delimiter position for station units

	0 to 5
	3
	0: 0 1: 1+0 2: 1+00 3: 1+000 4: 1+0000 5: 1+00000

6.139 CVSTATIONUNITPREC system variable

6.139.1 Precision

Controls the number of decimal places displayed for station units

	0 to 8
	2
	0: 0 1: 0.0 2: 0:00 3: 0:000 4: 0:0000 5: 0:00000 6: 0:000000 7: 0:0000000 8: 0:00000000



7. D

7.1 DATACOLLECTION system variable

7.1.1 Diagnostics and usage data collection

Controls the sharing of anonymous usage data.

This helps personalize the program and significantly enhances the user experience for everyone.

	-2 to 1
	-2
	-2: Not asked -1: Not set 0: Off 1: On

7.2 DATACOLLECTIONENABLED system variable

7.2.1 Current state of data collection (Read Only)

Controls diagnostic and usage data collection.

	Off (0): Data collection is disabled On (1): Data collection is enabled

Note: The value of this system variable is by default based on the value of the DATACOLLECTION preference variable, however it is possible to override the default by applying an administrative override. The administrative override is applied by manually adding the registry value in *HKLM\Software\Bricsys\BricsCAD\x64\AdminPolicy*.

To add this override follow the next steps:

- Go to: *Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Bricsys\BricsCAD\x64*.
- Right-click the x64 key and choose **New > Key** and rename it to **AdminPolicy**.



- Right-click on the new created key and choose **New > DWORD (32-bit)** and name the value **DATACOLLECTIONENABLED**.
- Change its value to 0 or 1 to override the value of DATACOLLECTION user preference.

7.3 DATACOLLECTIONLOGINTYPE system variable

7.3.1 Latest type of login for data collection (Read Only)

The login type for data collection.

See the DATACOLLECTIONOPTIONS system variable.

	-1: Off 0: Anonymous 1: User/Password

7.4 DATACOLLECTIONOPTIONS system variable

7.4.1 Data Collection Options

Controls what anonymous data is shared.

	0 to 7
	0
	0: Nothing 1: System and Settings Data 2: Application Data 4: Anonymized Geometry

7.5 DATALINKNOTIFY system variable

7.5.1 Data link Notifications

Controls data link notifications.



	0 to 2
	2
	0: Disables data link update notifications. 1: Enables data link notifications. 2: Enables data link notification and balloon message notifications.

7.6 DATE system variable

7.6.1 Current date (Read Only)

Shows the current date and time in Julian Day format.

7.7 DBCSTATE system variable

7.7.1 DbConnect state (Read Only)

Shows if the dbConnect Manager is active or not.

	Off (0): Don't display dbConnect Manager On (1): Display dbConnect Manager

7.8 DBLCLKEDIT system variable

7.8.1 Double click editing

Enables **Block Editor** (BEdit mode) and **Reference Editor** (RefEdit mode) on double click of Blocks and XRefs.



	Off (0): Disable double click editing On (1): Enable edit on double click

7.9 DBMOD system variable

7.9.1 Modification status (Read Only)

The status of drawing modifications.

	1: Entity database modified 4: Database variable modified 8: Window modified 16: View modified 32: Field modified

7.10 DCTCUST system variable

7.10.1 Custom spelling dictionary

The file path and file name of the current, custom spelling dictionary.

During a spelling check, the SPELL command matches the words in the drawing or the current selection set to the words in the current main dictionary and the current custom dictionary. Custom dictionaries are used for discipline-specific words, such as medical or mechanical.

7.11 DCTMAIN system variable

7.11.1 Main spelling dictionary

The file name of the current, main spelling dictionary. Stored in the support folder.



Note: Keywords can be used to set this variable.

7.12 DEFAULTBSYSLIBIMPERIAL system variable

7.12.1 Default Bsyslib imperial

Default location of the Bsyslib central database when MEASUREMENT is 0 (imperial).

7.13 DEFAULTBSYSLIBMETRIC system variable

7.13.1 Default Bsyslib metric

Default location of the Bsyslib library database when MEASUREMENT is 1 (metric).

7.14 DEFAULTLIGHTING system variable

7.14.1 Default lighting

Controls if default lighting overrides other lights in the drawing. Default lighting is a distant light that follows the view direction, can be set per viewport.

	0
	Off (0): Default lighting is used only when no other lights are switched on On (1): Default lighting overrides other lights.



7.15 DEFAULTLIGHTSHADOWBLUR system variable

7.15.1 Default light shadow blur

Controls the default shadow blur for lights.

Values between 1 and 40 are accepted.

	1 to 40
	8

7.16 DEFAULTNEWSHEETTEMPLATE system variable

7.16.1 Default new sheet template

The default drawing template file (DWG or DWT) for new sheets.

7.17 DEFAULTPLOTSTYLETABLE system variable

7.17.1 Default plot style table

Controls the default plot style table for new page setups and new layouts.

Note: Changing this preference will not apply to the layouts that already exist.

7.18 DEFAULTSPACEHEIGHT system variable

7.18.1 Default Space Height

Default height of a space. Used if there are no ceilings to connect to or walls to get the height from.

--	--



	120 for MEASUREMENT=0 (inches) 3000 for MEASUREMENT=1 (millimeters)

7.19 DEFAULTSTORYNAMINGSCHEME system variable

7.19.1 Default Story Naming Scheme

Defines the story naming scheme for new buildings. Use \$0 or \$1 to control the numbering.

	Floor \$1

Note: When you add new stories to an existing building, you can override their naming and numbering by changing the value of the building's **Story Naming Scheme** property in the **Spatial Locations Manager** dialog box.

7.20 DEFAULTSTYLEPIPECROSS system variable

7.20.1 Default style for pipe cross

Controls the default style in use while BIM FlowFittings cross is converts to a Std part.

	ASME B16.9 Cross

7.21 DEFAULTSTYLEPIPEECCENTRICREDUCER system variable

7.21.1 Default style for pipe eccentric reducer

Controls the default style in use while BIM FlowFittings eccentric converts to an Std part.



	ASME B16.9 Eccentric Reducer
--	------------------------------

7.22 DEFAULTSTYLEPIPEELBOW45 system variable

7.22.1 Default style for pipe elbow (45 deg)

Controls the default style in use while BIM FlowBends with 45 degrees angle converts to an Std part.

	ASME B16.9 Elbow LR 45 Deg

7.23 DEFAULTSTYLEPIPEELBOW90 system variable

7.23.1 Default style for pipe elbow (90 deg)

Controls the default style in use while BIM FlowBends with 90 degrees angle converts to an Std part.

	ASME B16.9 Elbow LR 90 Deg

7.24 DEFAULTSTYLEPIPEREDUCER system variable

7.24.1 Default style for pipe reducer

Controls the default style in use while BIM FlowFittings reducer converts to an Std part.

	ASME B16.9 Reducer

7.25 DEFAULTSTYLEPIPESEGMENT system variable

7.25.1 Default style for pipe segment

Controls the default style in use while BIM FlowSegments converts to an Std part.



	ASME B36.10M Pipe

7.26 DEFAULTSTYLEPIPETEE system variable

7.26.1 Default style for pipe tee

Controls the default style in use while BIM FlowFittings tee is converts to an Std part.

	ASME B16.9 Tee

7.27 DEFLPLSTYLE system variable

7.27.1 Default layer plot style

Controls the default plot style for layer 0. "BYCOLOR" in color-dependent mode drawings, read-only. "NORMAL" in named-plot-style mode drawings, can be changed. See also the PSTYLEMODE system variable.

Note: To convert the current drawing to use named or color-dependent plot styles, use CONVERTPSTYLES

7.28 DEFPLSTYLE system variable

7.28.1 Default entity plot style

Controls the default plot style for new entities. "BYCOLOR" in color-dependent mode drawings, read-only. "NORMAL" in named-plot-style mode drawings, can be changed. See also the PSTYLEMODE system variable. Use the CONVERTPSTYLES command to convert the current drawing to use named or color-dependent plot styles.

--	--



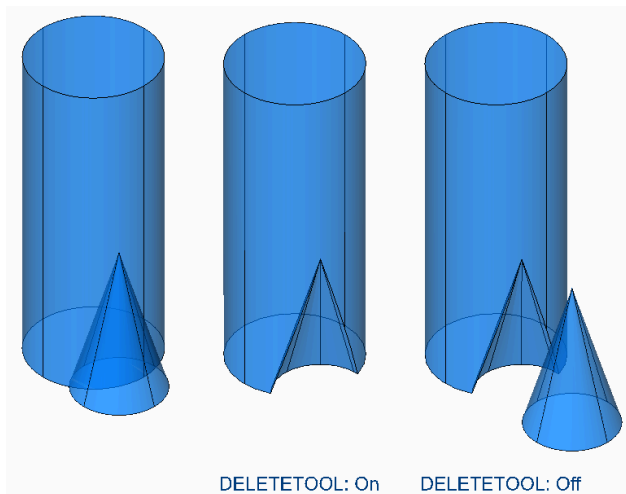
--	--

7.29 DELETETOOL system variable

7.29.1 Delete tool

Controls the behavior of the SUBTRACT command. If on, entities used to subtract are deleted.

	0
	Off (0): Don't delete tool entities in command SUBTRACT On (1): Delete tool entities in command SUBTRACT



7.30 DELOBJ system variable

7.30.1 Delete source entity

Controls if source entities, used to create 3D entities (with commands such as EXTRUDE, REVOLVE and LOFT) are retained or deleted.

	1



	0: Retain defining entities 1: Delete profile entities 2: Delete all defining entities -1: Prompt to delete profile entities -2: Prompt to delete all defining entities (including paths and reference curves)
--	--

7.31 DEMANDLOAD system variable

7.31.1 Demand load

Controls how the program handles custom entities created by third-party applications.

	0 to 3
	3
	1: Demand-load source application when opening a drawing that contains custom entities 2: Demand-load source application when invoking one of the application's commands

Note: If you set this system variable to 0, third-party applications and some internal commands may not function.

7.32 DETAILSPATH system variable

7.32.1 Details directory path

The file path(s) for user created detail files.

Separate file paths with semicolons (;).



7.33 DGNEXPXREFMODE system variable

7.33.1 Export Conversion of XRefs

Controls the conversion of XRefs for DGN export.

The dependent files themselves are not converted when exporting the parent. They must be converted separately.

	0
	0: Convert reference to DGN 1: Keep reference to DWG 2: Bind reference file to the parent DGN 3: Detach Xrefs

7.34 DGNFRAME system variable

7.34.1 DGN frame

Controls the visibility of DGN frames, if the FRAME system variable is set to 'Use individual system variables' (3).

	0 to 2
	2
	0: Hide DGN frames 1: Display and plot DGN frames 2: Display but do not plot DGN frames

7.35 DGNIMP2DCLOSEDBSPLINECURVEIMPORTMODE system variable

7.35.1 2D closed B-spline curve import mode

Controls how to convert DGN closed 2D B-Spline curve elements.



	0 to 1
	0
	0: Convert to spline 1: Convert to region

7.36 DGNIMP2DELLIPSEIMPORTMODE system variable

7.36.1 2D ellipse import mode

Controls how to convert DGN 2D Ellipse elements.

	0 to 1
	0
	0: Convert to ellipse 1: Convert to region

7.37 DGNIMP2DSHAPEIMPORTMODE system variable

7.37.1 2D shape import mode

Controls how to convert DGN 2D Shape and 2D Complex Shape elements.

If an element is filled, then a hatch is created as well.

	0 to 2
	0



	0: Convert to polyline 1: Convert to region 2: Convert to polyface mesh
--	---

7.38 DGNIMP3DCLOSEDBSPLINECURVEIMPORTMODE system variable

7.38.1 3D closed B-spline curve import mode

Controls how to convert DGN closed 3D B-Spline curve elements.

	0 to 1
	1
	0: Convert to spline 1: Convert to region

7.39 DGNIMP3DELLIPSEIMPORTMODE system variable

7.39.1 3D ellipse import mode

Controls how to convert DGN 3D Ellipse elements.

	0 to 1
	0
	0: Convert to ellipse 1: Convert to region

7.40 DGNIMP3DOBJECTIMPORTMODE system variable

7.40.1 3D entity import mode

Controls how 3D entities are converted during DGN import.



	0 to 1
	1
	0: Convert to polyface mesh 1: Convert to 3D Solid, Body or Surface

7.41 DGNIMP3DSHAPEIMPORTMODE system variable

7.41.1 3D shape import mode

Controls how to convert DGN 3D Shape and 3D Complex Shape elements.

If an element is filled, a hatch is created as well.

	0 to 2
	1
	0: Convert to polyline 1: Convert to region 2: Convert to polyface mesh

7.42 DGNIMPBREAKDIMENSIONASSOCIATION system variable

7.42.1 Break dimension association

Breaks DGN dimension associations during DGN import.



	Off (0): Don't break dimension associations On (1): Break dimension associations
--	---

7.43 DGNIMPCONVERTDGNCOLORINDICESTOTRUECOLORS system variable

7.43.1 Convert DGN color indices to true colors

Converts DGN color indexes to RGB true colors. If off, DGN color indexes are converted to DWG color indexes.

	Off (0): Convert DGN color indices to DWG color indices On (1): Convert DGN color indices to RGB true colors

Specifies how Microstation colors are mapped to BricsCAD colors. Microstation assigns color numbers to colors that are different from BricsCAD. If on, then BricsCAD converts DGN color indexes to RGB true colors. Otherwise it tries to convert DGN color indices to DWG color indices. BricsCAD gets the color from the DGN color table and tries to find the same color in DWG color table. If it is not possible, then the color will be saved as an RGB true color to the DWG file.

7.44 DGNIMPCONVERTEEMPTYDATAFIELDSTOSPACES system variable

7.44.1 Convert empty data fields to spaces

Replaces empty field values from a DGN file with space symbols. If off, empty field values from a DGN file are replaced with underscore symbols ("_").

	Off (0): Replace by underscore symbols ("_") On (1): Replace by space symbols



7.45 DGNIMPERASEUNUSEDRESOURCES system variable

7.45.1 Erase unused resources

Erases unreferenced items (text styles, linetypes, etc.) during DGN import.

	Off (0): Import unreferenced elements. On (1): Erase unreferenced imported items

7.46 DGNIMPEXPLODETEXTNODES system variable

7.46.1 Explode text nodes

Imports DGN text nodes as a set of simple entities (text, line, etc.). If off, DGN text nodes are converted to multiline text.

	Off (0): Convert text nodes to multiline text On (1): Convert text nodes to simple entities, such as text and lines

7.47 DGNIMPIMPORTACTIVEMODELTOMODELSPACE system variable

7.47.1 Import active model to Model Space

Imports the active DGN model to Model Space, during DGN import. If off, imports only the first DGN design model from the model table.

Note: Microstation uses the phrase “design model” for model space, and “active model” for the current view of a model.



	Off (0): Import the first design model from the model table to the model space On (1): Import the active model to model space

7.48 DGNIMPIMPORTDGTEXTSASDBMTEXTS system variable

7.48.1 Import Texts as MTexts

Imports simple DGN text entities as multiline texts.

	Off (0): Does not import simple text objects as multiline texts. On (1): Imports simple text objects as multiline texts.

7.49 DGNIMPIMPORTINVISIBLEELEMENTS system variable

7.49.1 Import invisible elements

Imports invisible DGN elements as invisible entities. If off invisible DGN elements are not imported.

	Off (0): Skip invisible elements On (1): Import invisible elements

7.50 DGNIMPIMPORTPAPERSPACEMODELS system variable

7.50.1 Import Paper Space models

Imports all DGN sheet models to paper space layouts. If off, sheet models are not imported.

Note: Microstation uses the phrase “sheet model” for paper space.



	Off (0): Don't import sheet models On (1): Import sheet models to paper space layouts

7.51 DGNIMPIMPORTVIEWINDEX system variable

7.51.1 Import view index

Controls the number of DGN views, level masks and view settings to use.

Values between -1 and 7 are accepted. -1 means that the view is not defined and view settings and level masks are not used.

Note: Microstation uses the word "level" for layers; a "mask" hides content in areas or levels/layers.

	-1 to 7
	-1
	-1: View is not defined 1 to 7: Specifies level mask

7.52 DGNIMPRECOMPUTEDDIMENSIONS AFTERIMPORT system variable

7.52.1 Recompute dimensions after import

Converts DGN dimensions to DWG-based dimensions.

If off creates DGN-based dimensions.



	Off (0): create DGN-style dimension geometry blocks On (1): re-compute all dimensions to create DWG dimension geometry blocks
--	--

7.53 DGNIMPSYMBOLRESOURCEFILES system variable

7.53.1 Symbol resource files

The file path for DGN resource RSC files - fonts, line styles, etc. Analog of the MS_SYMBRSRC MicroStation system variable.

7.54 DGNIMPXREFIMPORTMODE system variable

7.54.1 External references import mode

Controls DGN attachment import.

	0 to 3
	2
	0: Omit - does not import DGN attachments 1: Retain - converts attached DGN files to DWG XRefs 2: Merge to cell - converts attached DGN files to DWG blocks 3: Create DGN Underlay - converts attached DGN files to Underlay entities

7.55 DGNOSNAP system variable

7.55.1 DGN entity snap

Enables entity snap for DGN underlay files.



	Off (0): Disable DGN entity snap On (1): Enable DGN entity snap

7.56 DIASTAT system variable

7.56.1 Dialog state (Read Only)

Shows how the most recent dialog box was exited.

	Off (0): Cancel On (1): OK

7.57 DIMADEC system variable

7.57.1 Dim Angle Precision

Controls the number of decimal places for angular dimensions.

A value of -1 uses the DIMDEC system variable.

	-1 to 8
	0
	-1: Use the DIMDEC system variable 0 - 8: Decimal places

7.58 DIMALT system variable

7.58.1 Alt units

Enables alternate units in dimensions.

--	--



	Off (0): Disable alternate units On (1): Enable alternate units

7.59 DIMALTD system variable

7.59.1 Alt precision

Controls the number of decimal places for alternate dimension units.

	0 to 8
	2 - If MEASUREMENT=0 and INSUNITS=inches 3 - If MEASUREMENT=1 and INSUNITS=millimeters

7.60 DIMALTF system variable

7.60.1 Alt multiplier

Controls the conversion of alternate units. See also the DIMALT system variable.

Multiplies the primary unit to give alternate units. If one drawing unit equals 1 inch and the value is set to 25.4, alternate linear dimensions are expressed in mm.

	25.4 - If MEASUREMENT=0 and INSUNITS=inches 0.0394 - If MEASUREMENT=1 and INSUNITS=millimeters

7.61 DIMALTRND system variable

7.61.1 Alt roundoff

Controls the roundoff for alternate units.



	0.0

7.62 DIMALTTD system variable

7.62.1 Alt tolerance precision

Controls the tolerance precision in the alternate dimension units.

	0 to 8
	3 - If MEASUREMENT=1 and INSUNITS= inches 2 - If MEASUREMENT=0 and INSUNITS=millimeters

7.63 DIMALTTZ system variable

7.63.1 Alt tolerance suppress zeros

Controls the suppression of zeros in tolerance values.

	0
	0: Suppress zero feet and precisely zero inches 1: Include zero feet and precisely zero inches 2: Include zero feet and suppress zero inches 3: Suppress zero feet and include zero inches 4: Suppress leading zeros in decimal dimensions 8: Suppress trailing zeros in decimal dimensions



7.64 DIMALTU system variable

7.64.1 Alt unit type

Controls the alternate unit type for linear dimensions.

	1 to 8
	2
	1: Scientific 2: Decimal 3: Engineering 4: Architectural (stacked) 5: Fractional (stacked) 6: Architectural 7: Fractional 8: Windows Control Panel

7.65 DIMALTZ system variable

7.65.1 Alt suppress zeros

Suppresses leading and/or trailing zeros for alternate unit dimension.

	0 to 12
	0
	0: Suppress zero feet and precisely zero inches 1: Include zero feet and precisely zero inches 2: Include zero feet and suppress zero inches 3: Suppress zero feet and include zero inches 4: Suppress leading zeros in decimal dimensions 8: Suppress trailing zeros in decimal dimensions



7.66 DIMANNO system variable

7.66.1 Style is annotative (Read Only)

Indicates if the current dimension style is annotative.

7.67 DIMAPOST system variable

7.67.1 Alt units prefix/suffix

Controls the prefix and/or suffix that appears in the alternate dimension text, does not apply to angular dimensions. See also the **Drawing Explorer > Dimension Styles** (DIMSTYLE command).

Set to "" to turn off, or use the suffix string 'prefix[]suffix'. Insert a single linefeed with '\X' (often when alternate units are active).

7.68 DIMARCSYM system variable

7.68.1 Arc symbol

Controls the display of arc symbols, in arc length dimensions.

	0 to 2
	0
	0: Arc length symbol is placed before the dimension text 1: Arc length symbol is placed above the dimension text 2: The display of the arc length symbol is suppressed



7.69 DIMASO system variable

7.69.1 Associativity (obsolete)

Replaced by DIMASSOC. Has no effect except to preserve the integrity of scripts.

7.70 DIMASSOC system variable

7.70.1 Associativity

Controls the associativity of dimension entities or if exploded dimensions are created.

	0 to 2
	2
	0: Exploded dimensions 1: Non-associative dimension entities 2: Associative dimension entities

7.71 DIMASZ system variable

7.71.1 Arrow size

Controls the size of dimension and leader line arrowheads.

	0.18 - If MEASUREMENT=0 and INSUNITS=inches 2.5 - If MEASUREMENT=1 and INSUNITS=millimeters



7.72 DIMATFIT system variable

7.72.1 Arrow and text fit

Controls how dimension text and arrows are arranged when there is insufficient space between the extension lines.

When the DIMTMOVE system variable is set to 1, a leader is added if the dimension text is placed outside.

	0 to 3
	3
	0: Place both text and arrows outside extension lines 1: Move arrows first, then text 2: Move text first, then arrows 3: Move either text or arrows, whichever fits best

7.73 DIMAUNIT system variable

7.73.1 Dim angle units

Controls the angular dimension unit type.

	0 to 3
	0
	0: Decimal degrees 1: Degrees/minutes/seconds 2: Gradians 3: Radians

7.74 DIMAZIN system variable

7.74.1 Suppress angle zeros

Suppresses leading and/or trailing zeros for angular dimensions.



	0 to 3
	0
	1: Suppress leading zeros 2: Suppress trailing zeros

7.75 DIMBLK system variable

7.75.1 Arrow

The name of the block displayed at the ends of dimension and leader lines, when the DIMSAH system variable is set to **Set by DIMBLK**.

The block name can be either a standard name or refer to a user-defined arrowhead block.

7.76 DIMBLK1 system variable

7.76.1 Arrow 1

The name of the block displayed at the first end of a dimension line, when the DIMSAH system variable is set to **Set by DIMBLK1 and DIMBLK2**.

7.77 DIMBLK2 system variable

7.77.1 Arrow 2

The name of the block displayed at the second end of a dimension line, when the DIMSAH system variable is set to **Set by DIMBLK1 and DIMBLK2**.

--	--



--	--

7.78 DIMCEN system variable

7.78.1 Center mark

Controls if and how center marks and centerlines of circles and arcs are drawn with the DIMCENTER, DIMDIAMETER and DIMRADIUS commands.

- A value of zero means no center mark.
- Negative numbers mean a line.
- Positive numbers mean a mark.

	0.09 - If MEASUREMENT=0 and INSUNITS=inches 2.5 - If MEASUREMENT=1 and INSUNITS=millimeters
	0: None <0: Line >0: Mark

7.79 DIMCLRD system variable

7.79.1 Dim line color

The color of dimension lines, arrowheads and dimension leader lines.

	0 to 256
	0
	0: ByBlock 1 - 255: index 256: ByLayer



7.80 DIMCLRE system variable

7.80.1 Ext line color

Controls the color for dimension extension lines.

	0 to 256
	0
	0: ByBlock 1 - 255: index 256: ByLayer

7.81 DIMCLRT system variable

7.81.1 Text color

Controls the default dimension text color.

	0 to 256
	0
	0: ByBlock 1 - 255: index 256: ByLayer

7.82 DIMCONTINUEMODE system variable

7.82.1 Dim continue mode

Controls if dimension styles and layers are inherited from the starting dimension, for continued or baseline dimension.

--	--



	1
	0: Use the current dimension style and layer 1: Use the dimension style and layer of the starting dimension

7.83 DIMDEC system variable

7.83.1 Dim precision

Controls the number of decimal places for primary dimension units.

Values between 0 and 8 are accepted.

	0 to 8
	4

7.84 DIMDLE system variable

7.84.1 Dim line ext

Controls the length of dimension lines beyond the extension lines, when obliques or architectural ticks are drawn instead of arrowheads.

	0.0

7.85 DIMDLI system variable

7.85.1 Dim baseline spacing

Controls the spacing between baselines dimension lines.

--	--



	0.38 - If MEASUREMENT=0 and INSUNITS=inches 3.75 - If MEASUREMENT=1 and INSUNITS=millimeters

7.86 DIMDSEP system variable

7.86.1 Decimal separator

Sets the decimal separator character.

7.87 DIMEXE system variable

7.87.1 Ext line ext

Controls the extension of dimension extension lines beyond the dimension line.

	0.18 - If MEASUREMENT=0 and INSUNITS=inches 1.25 - If MEASUREMENT=1 and INSUNITS=millimeters

7.88 DIMEXO system variable

7.88.1 Ext line offset

Controls the offset of dimension extension lines from their origin points.

	0.0625 - If MEASUREMENT=0 and INSUNITS=inches 0.625 - If MEASUREMENT=1 and INSUNITS=millimeters



7.89 DIMFIT system variable

7.89.1 Dim fit (obsolete)

Replaced by DIMATFIT and DIMTMOVE.

	3

7.90 DIMFRAC system variable

7.90.1 Fractional type

Controls the fraction format for Architectural or Fractional linear dimensions. See also the DIMLUNIT system variable.

	0 to 2
	0
	0: Horizontal 1: Diagonal 2: Not stacked

7.91 DIMFXL system variable

7.91.1 Ext line fixed length

Controls the length of extension lines, if the DIMFXLON system variable is on (1).

	1.0



7.92 DIMFXLON system variable

7.92.1 Ext line fixed

Fixes the length of extension lines on dimensions.

	Off (0): Don't use fixed length extension lines On (1): Use fixed length extension lines

7.93 DIMGAP system variable

7.93.1 Text offset

Controls the offset distance around dimension text, and the distance between annotations and hook lines created with the LEADER command.

See the DIMTAD system variable. Negative numbers mean draws a box around the dimension or annotation text.

	0.09 - If MEASUREMENT=0 and INSUNITS=inches 0.625 - If MEASUREMENT=1 and INSUNITS=millimeters

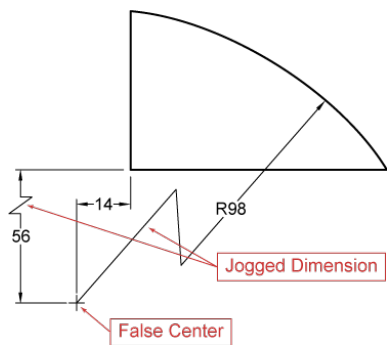
7.94 DIMJOGANG system variable

7.94.1 Jogged angle

Controls the angle of oblique dimension line segments, in jogged radius dimensions.

Note: Jogged radius dimensions are often created when the center point is located off the page.

	45.0



7.95 DIMJUST system variable

7.95.1 Text Position Horizontal

Controls the horizontal position of dimension text.

	0 to 4
	0
	0: Text above the dimension line and center-justified between extension lines 1: Text next to the first extension line 2: Text next to the second extension line 3: Text above and aligned with the first extension line 4: Text above and aligned with the second extension line

7.96 DIMLAYER system variable

7.96.1 Default layer for new dimensions

The default layer for new dimensions.

	.



7.97 DIMLDRBLK system variable

7.97.1 Leader arrow

Controls the arrowhead block for leaders.

7.98 DIMLFAC system variable

7.98.1 Dim Scale Linear

Controls the scale multiplier for linear dimensions, including radius, diameter and ordinate dimensions.

Linear dimensions are multiplied by DIMLFAC.

- Positive values mean that it is used for model space and paper space.
- Negative values mean paper space only.

	1.0

7.99 DIMLIM system variable

7.99.1 Tolerance method

Generates dimension limits as the default text for dimensions.

If On, switches DIMTOL Off.

	Off (0): Don't generate dimension limits as default text On (1): Generate dimension limits as default text



7.100 DIMLTEX1 system variable

7.100.1 Ext line 1 linetype

Controls the linetype for the first extension line of a dimension.

7.101 DIMLTEX2 system variable

7.101.1 Ext line 2 linetype

Controls the linetype for the second extension line of a dimension.

7.102 DIMLTYPE system variable

7.102.1 Dim line linetype

Controls the linetype for dimension lines.

7.103 DIMLUNIT system variable

7.103.1 Dim units

Controls the primary unit type for linear dimensions.

	1 to 6
	2



	1: Scientific 2: Decimal 3: Engineering 4: Architectural 5: Fractional 6: Windows Control Panel
--	--

7.104 DIMLWD system variable

7.104.1 Dim line LW

Controls the lineweight of dimension lines.

	-3 to 211
	Bylayer
	-3: Default (defined by LWDEFAULT) -2: ByBlock -1: ByLayer 0 - 211: Lineweight value in hundredths of millimeters

7.105 DIMLWE system variable

7.105.1 Ext line LW

Controls the lineweight of dimension extension lines.

	-3 to 211
	Bylayer



	-3: Default (defined by LWDEFAULT) -2: ByBlock -1: ByLayer 0 - 211: Lineweight value in hundredths of millimeters
--	--

7.106 DIMMARKTYPE system variable

7.106.1 Dimension override marking

Automatically displays overridden associative dimensions with a special marking, when they do not include the default dimension text.

	0 to 2
	0
	0: Not enabled 1: Display overridden dimensions with an underline 2: Display overridden dimensions with an overline

7.107 DIMPOST system variable

7.107.1 Dim prefix/suffix

Controls the prefix and/or suffix added to dimension text. See also the **Drawing Explorer > Dimension Styles** (DIMSTYLE command).

Set to "" to turn off, or use the suffix string 'prefix[]suffix'. Insert a single linefeed with '\X' when alternate units are active.

7.108 DIMRND system variable

7.108.1 Dim round

Controls the roundoff rules for linear dimensions.

Note: It does not effect angular dimensions.



A value of 0.1 rounds to the nearest 0.1 unit, a value of 1 rounds to the nearest whole number. The number of decimal places is limited by the DIMDEC system variable.

	0.0

7.109 DIMSAH system variable

7.109.1 Arrowheads

Controls how dimension line arrowhead blocks are set.

	0
	Off (0): Set by DIMBLK - uses the same block for the first and the second arrowhead On (1): Set by DIMBLK1 and DIMBLK2 - uses different blocks for the first and the second arrowhead

7.110 DIMSCALE system variable

7.110.1 Dim scale overall

Applies a scale multiplier to dimension variables that specify the size of the components of dimension entities, such as text height, distance or offsets.

Note: It does not affect measured lengths, coordinates, or angles.

	0 or greater
	1.0



7.111 DIMSD1 system variable

7.111.1 Dim line 1

Suppresses the first part of dimension lines - from the first extension line to the text origin.

	Off (0): Don't suppress first dimension line On (1): Suppress first dimension line

7.112 DIMSD2 system variable

7.112.1 Dim line 2

Suppresses the second part of dimension lines - from the text origin to the second extension line.

	Off (0): Don't suppress second dimension line On (1): Suppress second dimension line

7.113 DIMSE1 system variable

7.113.1 Ext line 1

Suppresses the first extension line of a dimension.

	Off (0): Don't suppress first extension line On (1): Suppress first extension line



7.114 DIMSE2 system variable

7.114.1 Ext line 2

Suppresses the second extension line of a dimension.

	Off (0): Don't suppress second extension line On (1): Suppress second extension line

7.115 DIMSHO system variable

7.115.1 Dimension show (Obsolete)

Has no effect except to preserve the integrity of scripts. Controls the redefinition of dimension entities while dragging.

7.116 DIMSOXD system variable

7.116.1 Dim line inside

Suppresses arrowheads outside extension lines if there is insufficient room inside the extension lines and if the DIMITX system variable is on (1).

	Off (0): Don't suppress outside arrowheads On (1): Suppress outside arrowheads



7.117 DIMSTYLE system variable

7.117.1 Dimension style (Read Only)

The current dimension style.

7.118 DIMITAD system variable

7.118.1 Text Position Vert

Controls the vertical position of text in relation to dimension lines. The position above dimension line is set by the DIMGAP system variable.

The **Above dimension line** option does not apply if the DIMITH system variable is set to **Horizontal** and the dimension line is not horizontal.

	0 to 4
	0
	0: Centered between extension lines 1: Above dimension line 2: Farthest from defining points 3: Japanese Industrial Standards 4: Below dimension line

7.119 DIMITDEC system variable

7.119.1 Tolerance precision

Controls the number of decimal places for tolerance values in the primary dimension units.



	0 to 8
	4

7.120 DIMTFAC system variable

7.120.1 Tolerance text height

Controls the scale multiplier used to calculate the text height for dimension fractions and tolerances, relative to the dimension text height, set with the DIMTXT system variable. Only applies if the DIMLUNIT system variable is set to **Fractional** (5).

	1.0

7.121 DIMTFILL system variable

7.121.1 Text fill

Controls the dimension text background.

	0 to 2
	0
	0: No background or fill 1: Background or fill color matches the background of the drawing window 2: Background or fill color matches the value specified by DIMTFILLCLR system variable

7.122 DIMTFILLCLR system variable

7.122.1 Text fill color

Controls dimension text background color, when the DIMTFILL system variable is set to 2.



	0 to 256
	0
	0: ByBlock 1-255: index 256: ByLayer

7.123 DIMTIH system variable

7.123.1 Text inside align

Controls the dimension text position on dimensions.

Note: It does not apply to ordinate dimensions.

	1
	Off (0): Aligned with dimension line On (1): Horizontal

7.124 DIMTIX system variable

7.124.1 Text inside

Draws dimension text between extension lines, even if there is insufficient room.

Note: It does not apply to radius and diameter dimensions.



	Off (0): Don't force text between extension lines On (1): Force text between extension lines
--	---

7.125 DIMTM system variable

7.125.1 Tolerance limit lower

Controls the minimum (lower) tolerance limit for dimension text when the DIMTOL or DIMLIM system variable is on.

	0.0

7.126 DIMTMOVE system variable

7.126.1 Text movement

Controls how dimension text moves.

	0 to 2
	0
	0: Move dimension line with dimension text 1: Add leader when dimension text is moved 2: Allow text to be moved freely without a leader

7.127 DIMTOFL system variable

7.127.1 Dim line forced

Forces a dimension line to be drawn between dimension extension lines, even when text is placed outside.



	Off (0): Don't force dimension lines even when text is outside On (1): Force dimension lines even when text is outside

7.128 DIMTOH system variable

7.128.1 Text outside align

Places dimension text outside extension lines horizontally.

	1
	Off (0): Aligned with dimension line On (1): Horizontal

7.129 DIMITOL system variable

7.129.1 Tolerance display

Adds tolerances to dimension text.

	Off (0): Don't display tolerance On (1): Display tolerance

7.130 DIMITOLJ system variable

7.130.1 Tolerance pos vert

Controls the vertical position for tolerance values relative to the primary dimension text.

--	--



	0 to 2
	1
	0: Bottom 1: Middle 2: Top

7.131 DIMTP system variable

7.131.1 Tolerance limit upper

Controls the maximum (upper) tolerance limit for dimension text when the DIMITOL or DIMLIM system variable is on.

	0.0

7.132 DIMTSZ system variable

7.132.1 Dim tick size

Controls the size of tick marks drawn instead of arrowheads for linear, radius and diameter dimensions. If the value is zero, arrowheads are drawn.

	0.0
	0: Draw arrowheads >0: Draw oblique strokes instead of arrowheads



7.133 DIMTVP system variable

7.133.1 Text offset vertical

Controls the vertical position of dimension above or below the dimension line. Acts as a multiplier of the DIMTXT system variable, when the DIMTAD system variable is set to **Centered between extension lines**.

A value of 1.0 is equivalent to setting the DIMTAD system variable to on (1).

	0.0

7.134 DIMTXSTY system variable

7.134.1 Text style

Controls the default dimension text style.

7.135 DIMTXT system variable

7.135.1 Text height

Controls the default dimension text height, if the text style set in the DIMTXSTY system variable has no fixed height.

	0.18 - If MEASUREMENT=0 and INSUNITS=inches 2.5 - If MEASUREMENT=1 and INSUNITS=millimeters

7.136 DIMTXTDIRECTION system variable

7.136.1 Text direction

Controls the dimension text direction.



	0
	Off (0): Left to right On (1): Right to left

7.137 DIMTZIN system variable

7.137.1 Tolerance suppress zeros

Controls the suppression of zeros in tolerance values.

	0 to 15
	0
	0: Suppress zero feet and precisely zero inches 1: Include zero feet and precisely zero inches 2: Include zero feet and suppress zero inches 3: Suppress zero feet and include zero inches 4: Suppress leading zeros in decimal dimensions 8: Suppress trailing zeros in decimal dimensions

7.138 DIMUNIT system variable

7.138.1 Dim unit type (obsolete)

Replaced by DIMLUNIT and DIMFRAC system variables.

	1 to 8
	2



	1: Scientific 2: Decimal 3: Engineering 4: Architectural (stacked) 5: Fractional (stacked) 6: Architectural 7: Fractional 8: Windows Control Panel
--	---

7.139 DIMUPT system variable

7.139.1 Place text manually

Toggles the placement of dimension text during dimension creation.

	0
	Off (0): Cursor controls only the dimension line location On (1): Cursor controls both the text position and the dimension line location

7.140 DIMZIN system variable

7.140.1 Suppress dim zeros

Suppresses leading and/or trailing zeros for primary units.

	0 to 15
	0



	0: Suppress zero feet and precisely zero inches 1: Include zero feet and precisely zero inches 2: Include zero feet and suppress zero inches 3: Suppress zero feet and include zero inches 4: Suppress leading zeros in decimal dimensions 8: Suppress trailing zeros in decimal dimensions
--	---

7.141 DISPLAYAXES system variable

7.141.1 Display Axes

Displays the axes of structural elements.

	- Off (0): Do not display axes - On (1): Display axes

7.142 DISPLAYAXESFORMEP system variable

7.142.1 Display axes

Controls the display of MEP element axes.

	0

7.143 DISPLAYSCALING system variable

7.143.1 Automatic display scaling (Read Only)

Current display scaling - the same as the system display settings.



	50 to 1000
	100

7.144 DISPLAYSIDESANDENDS system variable

7.144.1 Display Sides and Ends

Displays the sides and ends of structural entities on selection. If on, these are selectable.

	Off (0): Don't display sides and ends On (1): Display side and ends

7.145 DISPLAYSNAPMARKERINALLVIEWS system variable

7.145.1 Snap marker in all views

Controls if snap markers display in all viewports.

	Off (0): Don't display snap marker in all views On (1): Display snap marker in all views

7.146 DISPLAYTOOLTIPS system variable

7.146.1 Snap tooltips

Toggles the display of snap tooltips on/off.



	Off (0): Disable snap tooltips On (1): Enable snap tooltips

7.147 DISPLAYTRUEDIMENSION system variable

7.147.1 Default dimension type

Sets the default dimension type placed on an isometric view.

	0 to 1
	1
	0: Projected - not aligned with geometry. 1: True - aligned with geometry

7.148 DISPPAPERBKG system variable

7.148.1 Paper background

Displays a paper sheet in paper space.

	Off (0): Don't display paper background On (1): Display paper background

7.149 DISPPAPERMARGINS system variable

7.149.1 Printable area

Displays the printable area of a layout in paper space.



	Off (0): Don't display printable area On (1): Display printable area

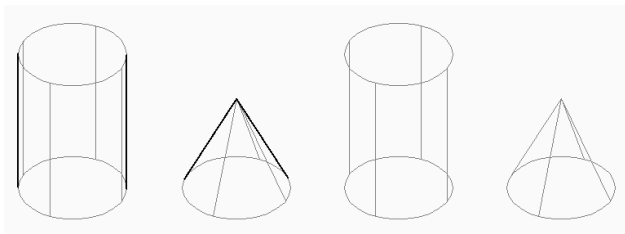
7.150 DISPSILH system variable

7.150.1 Display silhouette curves

Displays silhouette curves on solid entities in Wireframe modes (2D and 3D).

Note: To view changes on existing entities, perform a REGEN.

	Off (0): Don't display silhouette curves On (1): Display silhouette curves



7.151 DISTANCE system variable

7.151.1 Distance (Read Only)

The last calculated distance of the DIST command.



7.152 DMAUDITLEVEL system variable

7.152.1 DMAUDIT command, level of detail

Controls the message types displayed for the DMAUDIT command.

	0 to 3
	1
	1: Ignore dynamic range errors 2: Ignore sliver faces

Dynamic range

The dynamic range is the range of lengths required to create valid geometry. The range is limited because a modeler expresses the coordinates of points in 3D-space in terms of double precision floating point numbers. To represent a number, floating point numbers use a finite number of significant digits, which in the case of double precision numbers is roughly fourteen to sixteen significant digits. The modeler's use of digits is limited to nine significant digits to avoid susceptibility to round-off error. This means that a model's dynamic range can only be nine orders of magnitude wide. Thus, the ratio of the longest to shortest length that can be modeled is 10^9 .

The numbers could be interpreted as inches, millimeters, or any other unit. The modeler has a resolution of 10^{-6} , which means that if the distance between two points is less than that, they are considered to be the same. A guard band of at least one order of magnitude around the resolution value is also required. For practical reasons, there can be ambiguity about distances that are close to the resolution value, so this guard band is a safety margin to improve reliability.

As a result, the valid dynamic range of models is 10^{-5} to 10^4 and is not unit dependent. The dynamic range of parts modeled in millimeters is 0.00001 mm to 10000 mm. The dynamic range of parts modeled in meters is 0.00001 m to 10000 m.

If the dynamic range is exceeded, the behavior of modeling algorithms is unpredictable. This may cause modeler algorithms to produce incorrect results or failures.

Sliver face

Some models may contain long narrow faces that were not intended to be present in the design of the model. Typically, these occur in imported models due to the tolerance differences between geometric modeling systems.

Because the size of a feature cannot be smaller than the resolution of a modeler, genuine faces are at least an order of magnitude larger than the maximum gap in the model. Any face smaller than that is a candidate for being spurious.

The entity's tolerance is calculated as the highest tolerance value among the entity's tolerant edges and vertices.

The maximum distance between the long edges of such a face is smaller than the specified tolerance. It has at least one short and no more than three long edges. A short edge is an edge that is shorter than the specified tolerance. A long edge is longer than the specified tolerance. The tolerance can be calculated automatically based on the entity's bounding box.



Because the dimensions of sliver geometry are close to the modeler resolution, performing operations on it is difficult. Because such geometry isn't usually intended, it is attempted to be replaced with tolerant geometry. In bodies, tolerant edges replace sliver faces, and tolerant vertices replace short edges. When fixing manually, slivers can be removed and adjacent faces extended if needed.

Note: When performing entity check and heal in various contexts, tolerance is taken from the entity as the biggest value of tolerance among entity's tolerant edges and vertices, or some other values on discretion of the caller.

7.153 DMAUTOUPDATE system variable

7.153.1 3D constraints recalculation mode

Updates the model automatically, when constraints are applied or modified.

If off, use the DMUPDATE command to update the model.

	Off (0): Don't update 3D constraints automatically On (1): Update 3D constraints automatically

7.154 DMCONNECTIONCUTTYPE system variable

7.154.1 Connection type

Controls the type of connection created by the BIMSTRUCTURALCONNECT command.

	0 to 1
	0
	0: Smooth 1: Planar



7.155 DMPUSHPULLSUBTRACT system variable

7.155.1 DMPUSHPULL subtract

Controls what happens when an entity, modified with the DMPUSHPULL command, touches an existing entity.

When OFF, a solid that intersects with another solid, no longer subtracts the intersecting areas from the other solid.

	0 to 1
	Off (0): Disable DMPUSHPULL subtract On (1): Enable DMPUSHPULL subtract

7.156 DMRECOGNIZE system variable

7.156.1 Automatic 3D geometry constraints recognition

Automatically constrains geometrical relations between surfaces, when 3D entities are edited or 3D constraints are recalculated.

	-1 to 1023
	0



	Negative: Switch off automatic 3D geometry constraints recognition 1: Tangent surfaces 2: Coincident planes 4: Parallel planes 8: Perpendicular planes 16: Cylinders perpendicular to planes 32: Coaxial surfaces 64: Cylinders and spheres of equal radius 128: Vertices between 4 or more faces 256: Edges between coincident faces 512: Fix a constrained plane lying in XY/YZ/ZX (compatibility)
--	---

7.157 DOCKPRIORITY system variable

7.157.1 Docking Priority

Controls the dock priority of top, left, right and bottom docking bars.

Note: A restart is required.

	1 to 14
	1
	1: Top, Left, Right, Bottom 2: Top, Bottom, Left, Right 3: Top, Left, Bottom, Right 4: Top, Right, Bottom, Left 5: Left, Right, Top, Bottom 6: Left, Top, Bottom, Right 7: Left, Top, Right, Bottom 8: Left, Bottom, Right, Top 9: Right, Top, Left, Bottom 10: Right, Bottom, Left, Top 11: Right, Top, Bottom, Left 12: Bottom, Left, Right, Top 13: Bottom, Left, Top, Right 14: Bottom, Right, Top, Left



7.158 DOCTABPOSITION system variable

7.158.1 Tabs position

Controls where the document control tab is displayed.

	0 to 3
	0
	0: Top 1: Bottom 2: Left 3: Right

7.159 DONUTID system variable

7.159.1 Donut inside diameter

The default inside diameter for the DONUT command.

	0.5

7.160 DONUTOD system variable

7.160.1 Donut outside diameter

The default outside diameter for the DONUT command.

	1.0



7.161 DRAGMODE system variable

7.161.1 Entity drag mode

Controls if a preview displays during the MOVE and COPY commands.

	0 to 2
	2
	0: No dragging 1: When requested 2: Whenever possible

7.162 DRAGMODECONSTRAINTS system variable

7.162.1 Solve 3D constraints dynamically

Solves 3D constraints live when entities are moved.

Turn off to optimize performance.

	Off (0): Disable dynamic solution of 3D constraints On (1): Enable dynamic solution of 3D constraints

7.163 DRAGMODEFACES system variable

7.163.1 MOVE face

Controls the behavior of the MOVE and DMMOVE commands, if these commands are used to move a face.



	1
	0: Move the whole solid 1: Move the face's surface 2: Move the face's edges

7.164 DRAGMODEHIDE system variable

7.164.1 Hide during drag

Hides the original entity during move and stretch actions.

	0 to 3
	0
	1: During 3D Modeling commands 2: During 2D Drafting commands

7.165 DRAGMODEINTERRUPT system variable

7.165.1 Drag interruption mode

Controls the recalculation/redrawing of the model is interrupted when the cursor is in motion.

If on, display a live preview. If off, every drag action must first be completed.

	0 to 3
	1
	0: Disabled 1: Enabled



7.166 DRAGOPEN system variable

7.166.1 Drag open

Controls what to do when a drawing is dragged from the explorer to the program.

	0 to 1
	1
	0: Insert file to current drawing 1: Open file in new tab

7.167 DRAGP1 system variable

7.167.1 Regen-drag rate

Controls the regen-drag input sampling rate.

	0 to 32767
	10

7.168 DRAGP2 system variable

7.168.1 Fast-drag rate

Controls the fast-drag input sampling rate.

	0 to 32767
	25



7.169 DRAGSNAP system variable

7.169.1 Snap dragged entities

Enables rubber band dynamics during modify commands: COPY, PASTECLIP, PASTEBLOCK, MOVE, ROTATE, MIRROR, SCALE, STRETCH and more.

The DRAGSNAP system variable controls the snap behavior while dragging. DRAGSNAP controls whether rubberband dynamics are displayed at the current cursor location or at the current entity snap location.

Note: Rubber band dynamics means that the cursor and the entity being modified will jump to the active snap point, this will make to target location more obvious.

- If on, the cursor and any selected entities will jump to the active snap point, this will make the target location more obvious.
- If off, snap is only in effect during drawing and editing commands.

	Off (0): Don't snap dragged entities On (1): Snap dragged entities

7.170 DRAWINGPATH system variable

7.170.1 Drawings path

The file path used for the fifth folder on the left of the OPEN, SAVEAS and INSERT command dialogs (Windows only).

7.171 DRAWINGVIEWASM system variable

7.171.1 Assemblies optimization

Enables the use of assembly data structures, optimizes the generation of views created with the VIEWBASE command.

Toggles between normal analytical hidden line removal (HLR) and ASM_HLR procedure.

--	--



	Off (0): Disable assemblies optimization On (1): Enable assemblies optimization

7.172 DRAWINGVIEWENTS system variable

7.172.1 Additional entities

Controls entities that will be processed in drawing views created by VIEWBASE command.

	Off (0): Disable displaying of the Points On (1): Point (appearance is controlled by PDSIZE and PDMODE)

7.173 DRAWINGVIEWFLAGS system variable

7.173.1 Drawing View Flags

Enables the settings for drawing view related commands (for example, VIEWBASE, VIEWUPDATE).

	0 to 3
	0
	0: Disable the settings for the drawing views 1: Enable parallel generation and update of views 2: Enable background generation of views



7.174 DRAWINGVIEWPRESET system variable

7.174.1 Drawing view preset

Controls the view preset for the VIEWBASE command.

Presets specify the types of generated drawings and their placement in the layout.

7.175 DRAWINGVIEWPRESETHIDDEN system variable

7.175.1 Drawing view hidden lines preset

Controls the hidden lines preset for the VIEWBASE command.

	Off (0): Don't store the current hidden line preset On (1): Store the current hidden line preset

7.176 DRAWINGVIEWPRESETSCALE system variable

7.176.1 Scale for drawing view preset

Controls the annotation scale for the current drawing view preset.

7.177 DRAWINGVIEWPRESETTANGENT system variable

7.177.1 Drawing view tangent lines preset

Controls the tangent lines preset for the VIEWBASE command.



	Off (0): Don't store the current tangent lines preset On (1): Store the current tangent lines preset

7.178 DRAWINGVIEWPRESETTRAILING system variable

7.178.1 Drawing view trailing lines preset

Controls the trailing lines preset for the VIEWBASE command.

	Off (0): Don't store the current trailing lines preset On (1): Store the current trailing lines preset

7.179 DRAWINGVIEWQUALITY system variable

7.179.1 Quality of drawing views

Controls the quality of views created with the VIEWBASE command.

Turn off to significantly reduce the time needed to generate drawing views. Views with draft-quality geometry are created, it is not possible to put annotations on the edges of entities in these views.

However, they look very similar to a precise (high-quality) drawing view and you can use them to quickly create layouts.

	0 to 1
	1



	0: Draft quality 1: High quality
--	-------------------------------------

7.180 DRAWORDERCTL system variable

7.180.1 Draworder control

Controls draw order functionality. Limits the draw order, use if some editing operations take slightly longer.

	0 to 3
	3
	1: Default display of entities with draw order 2: Draw order inheritance

7.181 DWFFORMAT system variable

7.181.1 Default DWF format

Controls the default export format for the 3DDWF command.

	0 to 1
	1
	0: DWF 1: DWFx

7.182 DWFFRAME system variable

7.182.1 DWF frame

Controls the visibility of DWF or DWFx underlay frames, if the FRAME system variable is set to **Use individual system variables** (3).



	0 to 2
	2
	0: Hide DWF frames 1: Display and plot DWF frames 2: Display but do not plot DWF frames

7.183 DWFOSNAP system variable

7.183.1 DWF entity snap

Enables entity snap for DWF underlay files.

	Off (0): Disable DWF entity snap On (1): Enable DWF entity snap

7.184 DWFVERSION system variable

7.184.1 DWF version

Controls the DWF export version.

	1 to 10
	2



	1: 3D DWF v6.01 2: Binary DWF v6.0 3: Zipped Ascii Encoded 2D Stream DWF v6.0 4: Compressed DWF v5.5 5: Binary DWF v5.5 6: Ascii DWF v5.5 7: Compressed DWF v4.2 8: Binary DWF v4.2 9: Ascii DWF v4.2 10: XPS DWFx
--	--

7.185 DWGCHECK system variable

7.185.1 Drawing check

Executes an automatic data integrity check when a drawing is opened.

	0 to 3
	0
	0: Warn on potential problem 1: Warn on potential problem and on other application 2: Notify on potential problem 3: Notify on potential problem, warn on other application

7.186 DWGCODEPAGE system variable

7.186.1 Drawing codepage (Read Only)

Displays the drawing code page, same as the SYSCODEPAGE system variable.



7.187 DWGGUIDCLOUDAI system variable

7.187.1 Drawing Guid

Unique GUID (Globally Unique Identifier) for this drawing.

	" "

7.188 DWGNAME system variable

7.188.1 Drawing name (Read Only)

The name of the current drawing.

7.189 DWGPREFIX system variable

7.189.1 Drawing prefix (Read Only)

The folder path of the current drawing.

7.190 DWGTITLED system variable

7.190.1 Drawing titled (Read Only)

Shows if the current drawing has been named.

	Off (0): Drawing has not been named On (1): Drawing has been named



7.191 DXEVAL system variable

7.191.1 Data extraction update mode

Controls the notification for data extraction tables.

	0 to 511
	12
	0: No notification 1: Notification on open 2: Notification on save 4: Notification on plot 8: Notification on publish 16: Notification on ETRANSMIT or ARCHIVE 32: Notification on save + automatic update 64: Notification on plot + automatic update 128: Notification on publish + automatic update 256: Notification on ETRANSMIT or ARCHIVE + automatic update

7.192 DXFTEXTADJUSTALIGNMENT system variable

7.192.1 DXF text adjust alignment

Controls if alignment is adjusted when text is loaded from a DXF.

	Off (0): Don't adjust alignment On (1): Adjust alignment

7.193 DYNCONSTRAINTMODE system variable

7.193.1 Dynamic Constraint Mode

Displays hidden dimensional constraints when constrained entities are selected.



	Off (0): Don't display hidden dimensional constraints when constrained entities are selected. On (1): Display hidden dimensional constraints when constrained entities are selected.

7.194 DYNDIGRIP system variable

7.194.1 Show dynamic dimensions

Controls which dynamic dimensions are shown.

	0 to 31
	31
	0: None 1: Resulting length 2: Extended length 4: Absolute angle 8: Relative angle 16: Arc radius

7.195 DYNDIMAPERTURE system variable

7.195.1 Dynamic dimension aperture

Controls the radius around the cursor, used to detect the nearest entity during a command, in pixels.

Applies only when the DYNMODE system variable is set to **Nearest entity dynamic dimensions**.

Values between 1 and 500 are accepted.



	0 to 500
	20

7.196 DYNDIMCOLORHOT system variable

7.196.1 Dynamic dimension hot color

The color of dynamic dimensions, during a grip move action.

Values between 1 and 255 are accepted.

	1 to 255
	142

7.197 DYNDIMCOLORHOVER system variable

7.197.1 Dynamic dimension hover color

The color of dynamic dimensions, when the cursor hovers over a grip point.

Values between 1 and 255 are accepted.

	1 to 255
	142

7.198 DYNDIMDISTANCE system variable

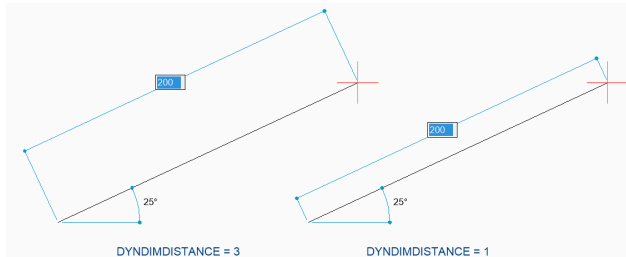
7.198.1 Dynamic dimension distance

Controls the position of the dynamic dimension box - the offset distance from the entity.

--	--



	0.0 to 10.0
	1.0



7.199 DYNDIMLINETYPE system variable

7.199.1 Dynamic dimension linetype

Controls the linetype visualization of dynamic dimensions during a grip move action.

	-1 to 2
	0
	-1: Current 0: Continuous 1: Dotted 2: Dashed

7.200 DYNDIVIS system variable

7.200.1 Dynamic dimension visibility

Controls which dynamic dimensions are displayed when grips are moved.

	0 to 2



	1
	0: Only the first dynamic dimension 1: Only the first two dynamic dimensions 2: All dynamic dimensions, as specified by DYNDIGRIP

7.201 DYNINPUTTRANSPARENCY system variable

7.201.1 Transparency of dynamic input fields

Controls the transparency of dynamic input fields, as a percentage.

- A value of zero means fully transparent.
- A value of 100 means fully opaque.

	0 to 100
	90

7.202 DYNMODE system variable

7.202.1 Dynamic input mode

Toggles dynamic input features on/off.

	-31 to 31
	3
	Negative: Switch all off temporarily 0: No dynamic input 1: Dynamic input at pointer (not yet supported) 2: Editable dynamic dimensions 4: Tracking dynamic dimensions 8: Nearest entity by UCS X/Y axes dynamic dimensions 16: Nearest entity dynamic dimensions



7.203 DYNPICOORDS system variable

7.203.1 Default mode for dynamic coordinates input

The default mode for coordinate entry, during dynamic input.

	0 to 1
	0
	0: Relative 1: Absolute



8. E

8.1 EDGEMODE system variable

8.1.1 Edge mode

Controls how cutting and boundary edges are checked with the TRIM and EXTEND commands, with or without extension.

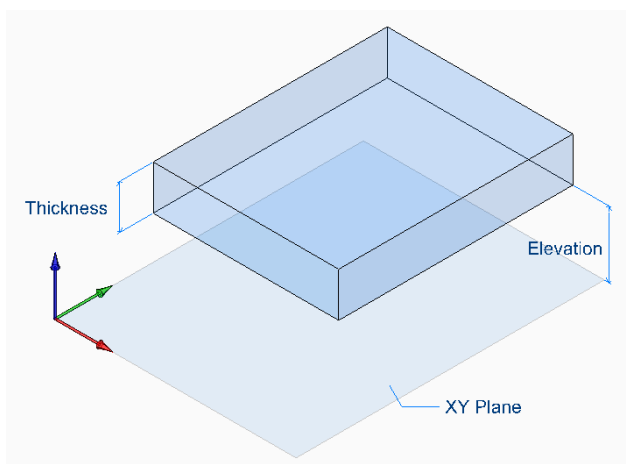
	0
	Off (0): Use the selected edge without an extension On (1): Extend or trim the selected entity to an imaginary extension of the cutting or boundary edge

8.2 ELEVATION system variable

8.2.1 Elevation

The elevation (Z-axis) for new entities, relative to the current UCS.

	0.0





8.3 ENABLEATTRACTION system variable

8.3.1 Grips attraction

Enables grip to grip attraction during move or modify actions on a grip point.

Note: The OSMODE system variable may override this behavior.

	Off (0): Disable grip attraction On (1): Enable grip attraction

8.4 ENABLEBIMBKUPDATE system variable

8.4.1 Enable section update in background

Enables section update in the background, see the BIMBKUPDATE command.

	0

8.5 ENABLEHYPERLINKMENU system variable

8.5.1 Hyperlink menu

Toggles the hyperlink menu on/off.

	Off (0): Disable hyperlink menu On (1): Enable hyperlink menu



8.6 ENABLEHYPERLINKTOOLTIP system variable

8.6.1 Hyperlink tooltip

Toggles the display of the hyperlink tooltip on/off.

	Off (0): Disable hyperlink tooltip On (1): Enable hyperlink tooltip

8.7 ERRNO system variable

8.7.1 Error number (Read Only)

Reports the error type of a LISP program.

	0

8.8 EXPERIMENTALMODE system variable

8.8.1 Enable experimental features

You may experience bugs or performance issues in when the experimental mode is enabled. We encourage you to report them. Experimental features can change or be removed from future versions.

	0
	0: Disable the Experimental mode 1: Enable the Experimental mode



8.9 EXPERIMENTALONSTARTPAGE system variable

8.9.1 Experimental features on start page

Switch to control whether experimental features can be managed from the start page.

	1
	0: Experimental features cannot be managed from the start page 1: Experimental features can be managed from the start page

8.10 EXPERT system variable

8.10.1 Expert

Controls the display of certain prompts. If prompts are suppressed, continues as though y(es) was entered. Can affect scripts, menu macros, LISP and command functions.

	0 to 5
	0
	0: Issue all prompts normally 1: Suppress regen and layer off prompts 2: Also suppress block already defined (BLOCK) and file already exists (SAVE and WBLOCK) prompts 3: Also suppress linetype already loaded prompt 4: Also suppress file already exists (UCS and VPORTS Save) prompts 5: Also suppress dimstyle already exists prompt

8.11 EXPINSALIGN system variable

8.11.1 Explorer Insert Aligned

Align blocks inserted from the Drawing Explorer with selected entities.

--	--



	Off (0): Don't insert blocks aligned On (1): Insert blocks aligned

8.12 EXPINSANGLE system variable

8.12.1 Explorer Insert Angle

The rotation angle used for blocks inserted from the Drawing Explorer.

Applies if the EXPINSFIXANGLE system variable is switched on.

	0.0

8.13 EXPINSFIXANGLE system variable

8.13.1 Explorer Insert Fix Angle

Uses a rotation angle for blocks inserted from the Drawing Explorer. See also the EXPINSANGLE system variable.

	Off (0): Don't insert blocks at fixed angle On (1): Insert blocks at fixed angle

8.14 EXPINSFIXSCALE system variable

8.14.1 Explorer Insert Fix Scale

Inserts blocks from Drawing Explorer at a fixed scale.



See the EXPINSSCALE system variable.

	Off (0): Don't insert blocks at fixed scale On (1): Insert blocks at fixed scale

8.15 EXPINSSCALE system variable

8.15.1 Explorer Insert Scale

The scale multiplier used for blocks inserted from the Drawing Explorer.

Applies if the EXPINSFIXSCALE system variable is switched on (1).

	1.0

8.16 EXPLMODE system variable

8.16.1 Explode mode

Enables the EXPLODE command on nonuniformly scaled (NUS) blocks.

	Off (0): Don't explode nonuniformly scaled blocks On (1): Explode nonuniformly scaled blocks

8.17 EXPORT3DPDFWRITER system variable

8.17.1 3D PDF writer

Controls the writer used to save 3D PDF files.



	1
	0: Communicator 3D PDF writer 1: Internal 3D PDF writer

8.18 EXPORTACISASSEMBLYWRITER system variable

8.18.1 ASAT/ASAB writer

Controls the writer used to save ASAT/ASAB files. The internal ASAT/ASAB writer used if the is not installed.

	0 to 1
	0
	0: Communicator ASAT/ASAB writer 1: Internal ASAT/ASAB writer

8.19 EXPORTACISFORMATVERSION system variable

8.19.1 ACIS export format version

Controls the ACIS file version to export to.

	0



	0: Latest available 1: R18 2: R19 3: R20 4: R21 5: R22 6: R23 7: R24 8: R25 9: 2016 10: 2017 11: 2018 12: 2019 13: 2020 14: 2021 15: 2022 16: 2023 17: 2024
--	--

8.20 EXPORTCATIAV4FORMATVERSION system variable

8.20.1 CATIA V4 export format version

Controls CATIA V4 file version to export to.

	0 to 6
	0
	0: Latest available 1: 4.1.9 2: 4.2.0 3: 4.2.1 4: 4.2.2 5: 4.2.3 6: 4.2.4



8.21 EXPORTCATIAV5FORMATVERSION system variable

8.21.1 CATIA V5 export format version

Controls CATIA V5 file version to export to.

	0 to 17
	0
	0: Latest available 1: CATIA V5 R16 2: CATIA V5 R17 3: CATIA V5 R18 4: CATIA V5 R19 5: CATIA V5 R20 6: CATIA V5 R21 7: CATIA V5 R22 8: CATIA V5 R23 9: CATIA V5 R24 10: CATIA V5 R25 11: CATIA V5-6 R2016 12: CATIA V5-6 R2017 13: CATIA V5-6 R2018 14: CATIA V5-6 R2019 15: CATIA V5-6 R2020 16: CATIA V5-6 R2021 17: CATIA V5-6 R2022 18: CATIA V5-6 R2023 19: CATIA V5-6 R2024

8.22 EXPORTGEOMETRYFLAGS system variable

8.22.1 Export Geometry Flags

Controls how geometry representations in IGES and STEP formats are exported.



	0 to 15
	0
	01: Convert Analytical Curves to Splines 02: Convert Analytical Surfaces to Splines 04: Split Pcurves at G1 Discontinuities (Mac only) 08: Split Periodic Faces

8.23 EXPORTHIDDENPARTS system variable

8.23.1 Hidden parts

Controls how hidden parts are exported.

Entities can be invisible because of:

- The result of the HIDEOBJECTS command.
- Sitting on a hidden layer.
- Owned by an invisible component.

	0 to 1
	0
	0: Export and hide if possible: Exports hidden entities. If the target format supports hidden entities, hidden entities in the source document will be hidden also in target document. 1: Do not export: Invisible entities are skipped.

8.24 EXPORTMODELSPACE system variable

8.24.1 Export model space

Controls what part of model space to export to DWF, DWFx or PDF.



	0 to 2
	0
	0: Display 1: Extents 2: Window

Note: The EXPORTMODELSpace, EXPORTPAPERSpace and EXPORTPAGESETUP system variables currently are dummies for DWF exports.

8.25 EXPORTPAGESETUP system variable

8.25.1 Export page setup

Toggles the page setup for DWF, DWFx or PDF export.

	0 to 1
	0
	0: Default 1: Override

Note: The EXPORTMODELSpace, EXPORTPAPERSpace and EXPORTPAGESETUP system variables currently are dummies for DWF exports.

8.26 EXPORTPAPERSpace system variable

8.26.1 Export paper space

Controls which layout(s) to export to DWF, DWFx or PDF, from paper space.

	0 to 1



	0
	0: Current layout 1: All layouts

Note: The EXPORTMODELSpace, EXPORTPAPERSpace and EXPORTPAGESETUP system variables currently are dummies for DWF exports.

8.27 EXPORTPARASOLIDFORMATVERSION system variable

8.27.1 Parasolid export format version

Controls the Parasolid file version to export to.

	0 to 23
	0



	0: Latest available 1: Parasolid 12 2: Parasolid 13 3: Parasolid 14 4: Parasolid 15 5: Parasolid 16 6: Parasolid 17 7: Parasolid 18 8: Parasolid 19 9: Parasolid 20 10: Parasolid 21 11: Parasolid 22 12: Parasolid 23 13: Parasolid 24 14: Parasolid 25 15: Parasolid 26 16: Parasolid 27 17: Parasolid 28 18: Parasolid 29 19: Parasolid 30 20: Parasolid 31 21: Parasolid 32 22: Parasolid 33 23: Parasolid 34 24: Parasolid 35 25: Parasolid 36
--	--

8.28 EXPORTPRODUCTSTRUCTURE system variable

8.28.1 Product structure

Controls if a product structure is exported.

	0 to 1
	1



	0: No product structure: Exports a flat structure without components in the target document, whether the BricsCAD® document has a product structure or not. 1: Export product structure: Exports the BricsCAD® product structure data (if existing) to the target document.
--	---

Note: The option [1] is valid for Pro (or higher) license level. It works as [0] otherwise.

8.29 EXPORTSTEPFORMATVERSION system variable

8.29.1 STEP export format version

Controls the STEP file version to export to.

	0 to 2
	1
	0: AP203 1: AP214 2: AP242

8.30 EXPORTXCGMFORMATVERSION system variable

8.30.1 XCGM export format version

Controls the XCGM file version to export to.

	0 to 16
	0



	0: Latest available 1: CGM R2013x 2: CGM R2014 3: CGM R2014x 4: CGM R2015x B1 5: CGM R2015x B5 6: CGM R2015x B5 SP1 7: CGM R2016 1.0 8: CGM R2016 1.1 9: CGM R2017 1.0 10: CGM R2017 1.1 11: CGM R2018 1.0 12: CGM R2018 1.1 13: CGM R2019 1.0 14: CGM R2020 1.0 15: CGM R2021 1.0 16: CGM R2022 1.0 17: CGM R2023 1.0 18: CGM R2024 1.0
--	--

8.31 EXTMAX system variable

8.31.1 Extents maximum (Read Only)

The drawing extents' upper-right coordinate.

It increases as new entities are created outside the existing extents.

8.32 EXTMIN system variable

8.32.1 Extents minimum (Read Only)

The drawing extents' lower-left coordinates.



8.33 EXTNames system variable

8.33.1 Extend names

Controls the maximum characters for the names of named entities (for example: linetypes and layers) saved in symbol tables.

	1
	Off (0): Names up to 31 characters On (1): Names up to 255 characters

8.34 EXTRUDEINSIDE system variable

8.34.1 Extrude behavior inside

Controls how new entities, modify a parent entity when they intersect. Applies to entities as they are created with the EXTRUDE and REVOLVE commands, when the **Auto** option is selected.

A parent entity is any entity that touches the contour from which the extruded/revolved entity was created.

The EXTRUDEINSIDE system variable is one of the four system variables found under the **Extrude mode** group.

	0 to 2
	0 - for Workspaces Drafting and Modeling 1 - for Workspaces Mechanical and BIM
	0: Do not modify 1: Subtract created entity from parent 2: Unite created entity with parent



8.35 EXTRUDEOUTSIDE system variable

8.35.1 Extrude behavior outside

Controls how new entities, modify a parent entity when they touch. Applies to entities as they are created with the EXTRUDE and REVOLVE commands, when the **Auto** option is selected.

A parent entity is any entity that touches the contour from which extruded/revolved entity was created.

The EXTRUDEOUTSIDE system variable is one of the four system variables found under the **Extrude mode** group.

	0 to 2
	0 - for Workspaces Drafting and Modeling 1 - for Workspaces Mechanical and BIM
	0: Do not modify 1: Subtract the new entity from the existing entity 2: Unite the entities



9. F

9.1 FACETRATIO system variable

9.1.1 Faceting aspect ratio

Controls the aspect ratio of faceting for cylindrical and conic ACIS solids.

	0 to 1
	0
	0: Creates an N by 1 mesh for cylindrical and conic ACIS solids 1: Creates an N by M mesh for cylindrical and conic ACIS solids

9.2 FACETRES system variable

9.2.1 Facet resolution

Controls the smoothness of shaded, rendered and hidden line views.

Values between 0.01 and 10.0 are accepted. Large values can have a significant impact on memory usage and performance.

	0.01 to 10.0
	0.5

9.3 FBXEXPORTCAMERAS system variable

9.3.1 FBX Export Cameras

Enables the export of cameras to FBX.



	Off (0): Disable export of cameras On (1): Enable export of cameras

9.4 FBXEXPORTENTITIES system variable

9.4.1 FBX Export Entities

Enables the export of entities to FBX.

	Off (0): Disable export of entities On (1): Enable export of entities

9.5 FBXEXPORTENTITIESSELTYPE system variable

9.5.1 FBX entities to export

Controls which entities are exported to FBX.

	0 to 1
	0
	0: Visible Entities 1: Selected Entities

9.6 FBXEXPORTLIGHTS system variable

9.6.1 FBX Export Lights

Enables the export of lights to FBX.



	Off (0): Disable export of lights On (1): Enable export of lights

9.7 FBXEXPORTMATERIALS system variable

9.7.1 FBX Export Materials

Enables the export of materials to FBX.

	Off (0): Disable export of materials On (1): Enable export of materials

9.8 FBXEXPORTTEXTURES system variable

9.8.1 FBX Export Textures

Sets the material type used for an FBX file export.

	0 to 2
	0
	0: Embed 1: Reference 2: Copy textures to location



9.9 FBXEXPORTTEXTURESPATH system variable

9.9.1 Fbx Export Textures path

The file path for FBX Export Textures.

This setting is only used when the FBXEXPORTTEXTURES system variable is set to 2.

9.10 FEATURECOLORS system variable

9.10.1 Feature colors

Colors sheet metal parts based on feature type.

	On (1): Solid faces are colored by specified color of related feature Off (0): All feature faces are colored with the default 3d solid color

9.11 FIELDDISPLAY system variable

9.11.1 Field display

Applies a gray fill behind field text.

	Off (0): No gray background On (1): Gray background



9.12 FIELDEVAL system variable

9.12.1 Field update mode

Controls the way fields are updated.

	0 to 31
	31
	0: Not updated 1: Updated on open 2: Updated on save 4: Updated on plot 8: Updated on use of ETRANSMIT 16: Updated on regeneration

Note: Date fields are only updated by the UPDATEFIELD command; they are not automatically updated based on the FIELDEVAL system variable value.

9.13 FILEDIA system variable

9.13.1 File dialog

Toggles the display of file dialog boxes. If off, enter a tilde (~) to bring up the file dialog. This also works for LISP functions and command fields in tool definitions.

	Off (0): Don't display dialog boxes On (1): Display dialog boxes

9.14 FILLETRAD system variable

9.14.1 Fillet radius

The last radius used with the FILLET command.



	0.5 - If MEASUREMENT=0 and INSUNITS=inches 10.0 - If MEASUREMENT=1 and INSUNITS=millimeters

9.15 FILLETWELDINGCOMBINEADJACENT system variable

9.15.1 Combine adjacent fillet welds

Makes it possible to combine adjacent fillet weld segments into one fillet welding feature.

	Off (0): Don't combine adjacent fillet weld segments. On (1): Combine adjacent fillet weld segments.

9.16 FILLETWELDINGMAXGAPRATIO system variable

9.16.1 Maximal ratio of a gap to a weld size

Sets the default maximal ratio of a gap between a welding part and the fillet weld size, see the FILLETWELDINGZSIZE system variable.

Values between 0.0 and 0.8 are accepted.

	0 to 0.8
	0.4

9.17 FILLETWELDINGZSIZE system variable

9.17.1 Default fillet weld Z size

Sets default Z-size of symmetric fillet welds.



Values between 0 and 50 are accepted.

	0 to 50
	5

9.18 FILLMODE system variable

9.18.1 Fill mode

Shows fills for multilines, traces, solids, hatches (includes solid-fill), and wide polylines.

A REGEN is required.

If off, all filled entities display and print as outlines, this will also reduce the time it takes to display or print a drawing.

	Off (0): Entities are not filled On (1): Entities are filled

9.19 FITLINEFITARCMODE system variable

9.19.1 FitLine FitArc mode

The FITLINEFITARCMODE system variable sets the values for the options **Use entire drawing**, **Fit in 3d**, and **Delete original entities after fitting**, that are used by the FITLINE and FITARC commands. The value is stored as a bit code using the sum of the values of all selected options.

Note: This system variable is only available at the Command line.

	0 to 255



	0
	0: None 1: Use entire drawing 2: Fit in 3D 4: Delete original entities after fitting

9.20 FITTINGRADIUSTYPE system variable

9.20.1 Fitting Radius Type

Sets the default flow fitting radius type.

	0
	(0): Profile Width Ratio (1): Absolute Value

9.21 FITTINGRADIUSVALUE system variable

9.21.1 Fitting Radius Value

Sets default flow fitting radius value.

	1.5

9.22 FLANGEASMDEFAULTGASKET system variable

9.22.1 Default gasket

Controls the default gasket for flange assemblies.



	ASME B16.21 Gasket FullFace for ASME B16.5
--	--

9.23 FONTALT system variable

9.23.1 Alternate font

The substitute font used when a text font cannot be found.

	simplex.shx

Note:

- This system variable specifies the substitute font used when a text font cannot be found.
- If a font is missing and no replacements are defined in the default.fmp or fontalt.fmp files, uses the **simplex.shx**, which is set by default by the FONTALT system variable.
- When FONTALT cannot replace the missing font, the operating system tries to substitute it. If the operating system also cannot find a replacement, the text appears as ???.
- It is recommended to always use the original font to maintain a consistent visual appearance across different platforms. In addition, it is recommended to choose fonts that support the language in which the text is written.

9.24 FONTALTMAP system variable

9.24.1 Font mapping optional file

The font mapping file for missing fonts.

	fontalt.fmp

Note:

- This system variable specifies the font mapping file for missing fonts.
- When a replacement is defined in the fontalt.fmp file, it is only applied if the original font is missing. already includes some suggested replacements in this file.
- If a font is missing and no replacements are defined in the default.fmp or fontalt.fmp files, uses the **simplex.shx**, which is set by default by the FONTALT system variable.



- It is recommended to always use the original font to maintain a consistent visual appearance across different platforms. In addition, it is recommended to choose fonts that support the language in which the text is written.

9.25 FONTMAP system variable

9.25.1 Font mapping file

The font mapping file for existing fonts.

	default.fmp

Note:

- This system variable specifies the font mapping file.
- A font mapping file has one font mapping per line.
- The semicolon (;) separates the original font used in the drawing from the font that replaces it.
- If a font style is written without an extension, the mapping is done for styles containing the font map with SHX and TTF extensions.
- **Example:**
 - If you have a line, such as font:simplex.shx, the mapping is done for styles containing **font.shx** and **font.ttf**, using **simplex.shx**.
 - If the mapping includes an extension, such as font.shx:simplex.shx, the mapping to **simplex.shx** will work for styles including **font.shx** but not for **font.ttf**.
- When a replacement is specified in the default.fmp file, the specified font is always used, even if the original font is available.
- If a font is missing and no replacements are defined in the default.fmp or fontalt.fmp files, uses the **simplex.shx**, which is set by default by the FONTALT system variable.
- It is recommended to always use the original font to maintain a consistent visual appearance across different platforms. In addition, it is recommended to choose fonts that support the language in which the text is written.

9.26 FRAME system variable

9.26.1 Frame

Controls the visibility of frames for XRefs, images and underlays.

Overrides the IMAGEFRAME, DWFFRAME, PDFFRAME, DGNFRAME, and XCLIPFRAME system variables.



	0 to 3
	3
	0: Hide frames 1: Display and plot frames 2: Display but do not plot frames 3: Use individual system variables

9.27 FRAMESELECTION system variable

9.27.1 Frame selection

Controls if the hidden frame of an image, underlay, clipped XRefs, or wipeout can be selected.

	1
	Off (0): Hidden frames cannot be selected On (1): Hidden frames can be selected

9.28 FRONTZ system variable

9.28.1 Front clipping plane offset

Displays the **CLipping** option of the DVIEW command.

	0.0



9.29 FULLOPEN system variable

9.29.1 Full open (Read Only)

Indicates the state of the current drawing.

	0 to 1
	0: Drawing is partially open 1: Drawing is fully open



10. G

10.1 GEARTEETHNUMBER system variable

10.1.1 Maximum number of sprocket teeth

Controls the number of teeth for sprockets, during the -BMHARDWARE command. Use this option to insert sprockets with simplified or full geometry.

Values between 0 and 1000 are accepted.

Note: This number must be greater or equal to the number of teeth of the inserted sprocket to create a sprocket with full geometry. 1000 is enough to insert any sprocket from the library with a full set of teeth.

	1

10.2 GENERATEASSOCATTRS system variable

10.2.1 Generate associative attributes

Enables the generation of associative attributes on 3D entities.

	Note: The default value is On for Mechanical and BIM workspaces.
	Off (0): Do not generate associative attributes for 3D entities On (1): Generate associative attributes for 3D entities

10.3 GENERATEASSOCVIEWS system variable

10.3.1 Generate associative drawings

Enables associative dimensions for drawings generated with the BIMSECTIONUPDATE, VIEWBASE and VIEWSECTION commands.

As a result, dimensions are updated in the associated Paper Space viewports and BIM section drawings.

--	--



	Note: The default value is Off for 2D Drafting , 2D Drafting (Modern) and Toolbars (Classic) workspaces.
	Off (0): Deactivate associative dimensions On (1): Activate associative dimensions

10.4 GEOCSMAPPRIORITY system variable

10.4.1 CSMAP priority

Controls priority of CSMAP engine over internal engine.

	Off (0): Internal engine is preferred, with CSMAP as fallback On (1): CSMAP engine is preferred, with internal as fallback

10.5 GEOLATLONGFORMAT system variable

10.5.1 Geographic latitude/longitude format

Controls the format of geographical latitude and longitude values.

	0 to 1
	0: Decimal degrees 1: Degrees/minutes/seconds



10.6 GEOMAPMODE system variable

10.6.1 Online map style

Reports the online maps style for the active viewport.

	0: Online maps are not displayed. 1: The online maps style is set to Aerial. 2: The online maps style is set to Road. 3: The online maps style is set to Hybrid. 4: The online maps style is set to Esri Imagery. 5: The online maps style is set to Esri Open Street Map. 6: The online maps style is set to Esri Streets. 7: The online maps style is set to Esri Light Gray. 8: The online maps style is set to Esri Dark Gray.

10.7 GEOMARKERVISIBILITY system variable

10.7.1 Geographic marker visibility

Controls the visibility of the geographic marker.

	Off (0): Geographic marker is not visible On (1): Geographic marker is visible

10.8 GEOMRELATIONS system variable

10.8.1 Geometric relationship indication

Controls if geometric relationships are recognized and maintained when a 2D entity is dragged.



	0 to 3
	0
	1: Recognize tangent relationships 2: Recognize perpendicular relationships

10.9 GETSTARTED system variable

10.9.1 Get Started

Controls if the Launcher is displayed on startup.

	Off (0): Don't show Launcher dialog On (1): Show Launcher dialog

10.10 GFANG system variable

10.10.1 Gradient fill angle

Controls the default gradient fill angle.

	0.0

10.11 GFCLR1 system variable

10.11.1 Gradient fill primary color

Controls the default first color of a gradient fill.



	5
--	---

10.12 GFCLR2 system variable

10.12.1 Gradient fill secondary color

Controls the default second color of a gradient fill.

	7

10.13 GFCLRLUM system variable

10.13.1 Gradient fill tint level

Controls the default tint intensity in a one-color gradient fill.

	1.0

10.14 GFCLRSTATE system variable

10.14.1 Number of colors for a gradient fill

Controls the default number of colors for a gradient fill.

	0
	Off (0): Two colors On (1): One color



10.15 GFNAME system variable

10.15.1 Gradient fill name

Controls the pattern of a gradient fill.

	1 to 9
	1
	1: LINEAR 2: CYLINDER 3: INVCYLINDER 4: SPHERICAL 5: HEMISPHERICAL 6: CURVED 7: INVSPHERICAL 8: INVHEMISPHERICAL 9: INVCURVED

10.16 GFSHIFT system variable

10.16.1 Gradient fill shift

Controls if a gradient fill pattern is centered or is shifted up and to the left.

	0
	Off (0): Centered On (1): Shifted

10.17 GLSWAPMODE system variable

10.17.1 GL Swap Mode

Controls the swap method used when drawing with the GL engine. Depending on the hardware driver used, the visual effect may differ between these options.



	0 to 4
	2
	0: Call glCopyPixels to copy back to front, don't call glXSwapBuffers. 1: Call glCopyPixels to copy back to front, then call glXSwapBuffers. 2: Call glXSwapBuffers, don't call glCopyPixels. 3: Call glXSwapBuffers, then call glCopyPixels to copy front to back. 4: Do nothing - for testing purposes only.

10.18 GRADIENTCOLORBOTTOM system variable

10.18.1 Background gradient color bottom

Controls the default bottom color for gradient backgrounds and the default for solid view backgrounds.

	RGB:210,210,210

10.19 GRADIENTCOLORMIDDLE system variable

10.19.1 Background gradient color middle

Controls the default middle color for gradient backgrounds.

Applies only if the GRADIENTMODE system variable is set to **Three-color gradient**.

	RGB:250,250,250

10.20 GRADIENTCOLORTOP system variable

10.20.1 Background gradient color top

Controls the default top color for gradient backgrounds.



10.21 GRADIENTMODE system variable

10.21.1 Background gradient mode

Controls if and how a gradient is applied in the default background. Can be adjusted in the **Background** dialog box.

	0 to 2
	0
	0: No gradient background 1: Two-color gradient (top/bottom) 2: Three-color gradient (top/middle/bottom)

10.22 GRIDAXISCOLOR system variable

10.22.1 Grid axis color

Controls the color of the grid axis lines.

	1 to 255
	254

10.23 GRIDDISPLAY system variable

10.23.1 Grid display

Controls how the grid is displayed.



	0 to 15
	2
	0: Restrict to LIMITS area 1: Display beyond LIMITS area 2: Adaptive grid display 4: Allow subdivision below grid spacing 8: Follow Dynamic UCS

10.24 GRIDMAJOR system variable

10.24.1 Grid major

Controls the frequency of major versus minor grid lines.

Values between 1 and 100 are accepted.

	1 to 100
	5

10.25 GRIDMAJORCOLOR system variable

10.25.1 Grid major color

Controls the color of the major grid lines.

	1 to 255
	251



10.26 GRIDMINORCOLOR system variable

10.26.1 Grid minor color

Controls the color of the minor grid lines.

	1 to 255
	250

10.27 GRIDMODE system variable

10.27.1 Grid mode

Turns the grid on.

	Off (0): Grid off On (1): Grid on

10.28 GRIDSTYLE system variable

10.28.1 Grid style

Controls if the grid is displayed as dots or lines.

	0 to 7
	0



	0: Lined grid 1: Dotted grid in 2D model space 2: Dotted grid in Block Editor 4: Dotted grid in Sheet/Layout
--	---

10.29 GRIDUNIT system variable

10.29.1 Grid unit

Controls the X and Y grid spacing for the current viewport.

	0.5,0.5 - If MEASUREMENT=0 and INSUNITS=inches 10.0,10.0 - If MEASUREMENT=1 and INSUNITS=millimeters

10.30 GRIDXYZTINT system variable

10.30.1 Grid XYZ tint

Applies the UCS axis colors for grid lines. See also the COLORX, COLORY and COLORZ system variables.

	0 to 7
	1
	1: Apply XYZ tint to grid axis lines 2: Apply XYZ tint to major grid lines 4: Apply XYZ tint to minor grid lines

10.31 GRIPBLOCK system variable

10.31.1 Grips in blocks

Displays grips on entities inside a block, when a block is selected.

The insertion point of the block is displayed regardless of this setting.



	Off (0): Doesn't display grips on entities within the block On (1): Display grips on entities within the block

10.32 GRIPCOLOR system variable

10.32.1 Grip color

Controls the color of unselected grips.

	1 to 255
	72

10.33 GRIPDYNCOLOR system variable

10.33.1 Dynamic grip color

Controls the color of custom grips for dynamic blocks.

	1 to 255
	140

10.34 GRIPHOT system variable

10.34.1 Selected grip color

Controls the color of selected grips.



	1 to 255
	240

10.35 GRIPHOVER system variable

10.35.1 Hover grip color

Controls the color of an unselected grip, when the cursor hovers over it.

	1 to 255
	150

10.36 GRIPOBJLIMIT system variable

10.36.1 Grip entity limit

Sets the maximum number of grips to display for a selection.

Values between 0 and 32767 are accepted.

- The display of grips is suppressed if the number of selected entities exceeds the value of this system variable.
- If set to 0, grips are always displayed.

	0 to 32767
	100



10.37 GRIPS system variable

10.37.1 Grips

Controls how grips display when entities are selected.

	2
	0: Turn off grips 1: Turn on endpoint grips 2: Turn on endpoint and midpoint grips

10.38 GRIPSIZE system variable

10.38.1 Grip size

Controls the grip display size, in pixels.

Values between 1 and 255 are accepted.

	1 to 255
	4

10.39 GRIPTIPS system variable

10.39.1 Grip tips

Controls if grip tips display when the cursor hovers over grips on custom entities or dynamic blocks that support grip tips (Not yet supported).

	On



	Off (0): Don't display grip tips On (1): Display grip tips
--	---

10.40 GSDEVICETYPE2D system variable

10.40.1 2D graphic system device

Sets current graphic system device used for wireframe.

GDI+ option is strongly recommended, extra options are available only for testing purposes.

	0 to 3
	0
	0: GDI+ 1: OpenGL (not recommended, available only for testing) 2: RedOpenGL (not recommended, available only for testing) 3: GDI (not recommended, available only for testing)

10.41 GSDEVICETYPE3D system variable

10.41.1 3D graphic system device

Set current graphic system device for rendered output for Hidden, Gouraud (with edges) and Flat (with edges) visual styles.

Other rendered visual styles, such as Modeling and Realistic, will always use RedOpenGL.

	0 to 1
	1
	0: OpenGL 1: RedOpenGL



11. H

11.1 HALOGAP system variable

11.1.1 Halo gap

Controls the value of the gap displayed if an entity is hidden by another entity. Applies to 2D views only. Specified as a percent of one drawing unit, independent of the zoom level.

	0 to 100
	0

11.2 HANDLES system variable

11.2.1 Publish Handles (Read Only)

Shows if entity handles can be accessed by applications or not.

	Off (0): Handles cannot be accessed by applications On (1): Handles can be accessed by applications

11.3 HANDSEED system variable

11.3.1 Handle seed (Read Only)

Indicates the handle used to create new entities.

	25



11.4 HEALTHADVISOR system variable

11.4.1 Health Advisor

Controls whether the health advisor is activated. When activated it does analyses of your drawing in the background.

	Off (0): Do not run background advisor process On (1): Run background advisor process

11.5 HIDEPRECISION system variable

11.5.1 Hide and shade precision

Controls the accuracy of hides and shades. If on, uses double precision, more memory is needed, which might affect performance.

	Off (0): Disable double precision On (1): Enable double precision

11.6 HIDESYSTEMPRINTERS system variable

11.6.1 Hide system printers

Hides system printers.



11.7 HIDE TEXT system variable

11.7.1 Hide text on HIDE

Controls if text can be hidden with the HIDE command.

	0 to 1
	1
	0: Text is not hidden and does not hide other entities 1: Text is hidden but does hide other entities

11.8 HIDE XREF SCALES system variable

11.8.1 Hide xref scales

Hides XRefs scales.

	On
	Off (0): Don't hide XRefs scales On (1): Hide XRefs scales

11.9 HIGHLIGHT system variable

11.9.1 Highlight

Highlights entities when they are selected.

Note: Does not affect entities selected with grips.



	Off (0): Do not highlight entity selection On (1): Highlight entity selection
--	--

11.10 HIGHLIGHT_ALPHA system variable

11.10.1 Highlighted area transparency

Controls the transparency of a filled area when selected.

Values between 0 and 100 are accepted. A value of zero means fully transparent. A value of 100 means fully opaque.

	0 to 100
	85

11.11 HIGHLIGHTCOLOR system variable

11.11.1 Selection Highlight Color

Controls the highlight color used when GLSelectionHighlightStyle is set to **Use a different color for highlight**.

Note: The HIGHLIGHTCOLOR system variable is effective only in the **2dWireframe** visual style.

	1 to 255
	150

11.12 HIGHLIGHTEFFECT system variable

11.12.1 Selection Highlight Style

Controls how entities are highlighted.

Note: The HIGHLIGHTEFFECT system variable is effective only in the **2dWireframe** visual style.



	0 to 3
	3
	0: Use line stipple for highlight 1: Use a different color for highlight 2: Use a thickened line for highlight 3: Use a different color and thickened line for highlight

11.13 HORIZONBKG_ENABLE system variable

11.13.1 Horizon background

Controls if horizon background is shown in perspective views.

	Off (0): Disable horizon background On (1): Enable horizon background

11.14 HORIZONBKG_GROUNDHORIZON system variable

11.14.1 Ground horizon

Controls the color of the ground horizon.

	RGB:67,74,80



11.15 HORIZONBKG_GROUNDORIGIN system variable

11.15.1 Ground origin

Controls the color of the ground.

	RGB:95,103,112

11.16 HORIZONBKG_SKYHIGH system variable

11.16.1 Sky high

Controls the color of the higher regions of the sky.

	RGB:204,229,234

11.17 HORIZONBKG_SKYHORIZON system variable

11.17.1 Sky horizon

Controls the color at the lowest part of the sky at the horizon. This effect can be very subtle. This color is also used as the color of the "sky" when the camera is below the "earth".

	RGB:238,248,250

11.18 HORIZONBKG_SKYLOW system variable

11.18.1 Sky low

Controls the color of the lower regions of the sky.

--	--



	RGB:238,248,250

11.19 HOTKEYASSISTANT system variable

11.19.1 Hotkey Assistant

Displays the Hotkey Assistant.

The Hotkey Assistant appears in the bottom-middle of the screen and displays keyboard shortcut tips, during some commands.

	Off (0): Don't show Hotkey Assistant On (1): Show Hotkey Assistant

11.20 HPANG system variable

11.20.1 Hatch pattern angle

The hatch pattern angle.

	0.0

11.21 HPANNOTATIVE system variable

11.21.1 Hatch pattern annotative

Controls if new hatch patterns are created as annotative hatch patterns.



	Off (0): Do not create annotative patterns On (1): Create annotative patterns

11.22 HPASSOC system variable

11.22.1 Hatch pattern associativity

Controls if new hatch patterns and gradient fills are associative. Associative hatches and gradient fills are updated automatically when their boundaries change.

	Off (0): Don't associate hatch patterns and gradient fills with their boundaries On (1): Associates hatch patterns and gradient fills with their boundaries

11.23 HPBACKGROUNDCOLOR system variable

11.23.1 Hatch background default color

The default hatch background color.

Enter '.' for none.

	.

11.24 HPBOUND system variable

11.24.1 Hatch pattern boundary

Controls the entity type created by the BHATCH and BOUNDARY commands.

--	--



	0 to 1
	1
	0: Region 1: Polyline

11.25 HPBOUNDRETAIN system variable

11.25.1 Hatch pattern boundary retain

Creates boundary entities for hatches and gradient fills.

	0 to 1
	0
	0: Do not create boundary entities 1: Create boundary entities

11.26 HPCOLOR system variable

11.26.1 Hatch default color

Controls the default hatch foreground color.

Enter '.' to use the current color, defined by the CECOLOR system variables.

	.



11.27 HPDOUBLE system variable

11.27.1 Hatch pattern doubling

Controls user-defined hatch pattern crosshatching.

- If on, creates a cross hatch.
- If off, creates a single hatch.

	Off (0): Hatch pattern doubling off On (1): Hatch pattern doubling on

11.28 HPDRAWORDER system variable

11.28.1 Hatch pattern draw order

Controls the draw order of hatches and gradient fills, defined by the **Draw order** setting in the **Hatch and Gradient** dialog box.

	0 to 4
	3
	0: None 1: Send to back 2: Bring to front 3: Send behind boundary 4: Bring in front of boundary



11.29 HPGAPTOL system variable

11.29.1 Hatch pattern gap tolerance

Controls the tolerance for a boundary created with the BHATCH or BOUNDARY commands. When zoomed in closely, boundary detection will fail. When zoomed so the contour 'looks' closed, the boundary is detectable.

Values between 0.0 and 500.0 are accepted.

	0 or greater
	0.0

11.30 HPISLANDDETECTION system variable

11.30.1 Hatch pattern island detection

Controls hatch creation when islands are within a hatch boundary.

	0 to 2
	0
	0: Nested - Hatches areas within islands. 1: Outer - Hatches areas outside of islands. 2: Ignore - Hatches whole the boundary.

11.31 HPLAYER system variable

11.31.1 Default layer for new hatches

The default layer for new hatches.



	<Use Current>
--	---------------

11.32 HPLINETYPE system variable

11.32.1 Hatch pattern linetype

Applies non-continuous linetypes to hatch entities (decreases performance).

When turned off, lines in the hatch pattern display as continuous, even if a non-continuous linetype is applied to the hatch entity. When turned on, lines in the hatch pattern display with the linetype that's applied to the hatch entity. This is not recommended because it can impact performance. Instead, you can choose a hatch pattern that is predefined with a non-continuous linetype.

	Off (0): Don't apply non-continuous linetypes to hatch entities On (1): Apply non-continuous linetypes to hatch entities

11.33 HPMAXAREAS system variable

11.33.1 Fill mode for sparse hatches

Converts sparse hatches to fills.

	0 to 1
	0
	0: Sparse hatches are left blank 1: Sparse hatches are changed to solid fills



11.34 HPMAXCONTOURPOINTS system variable

11.34.1 Maximum number of points on a hatch contour

Controls the maximum number of points on a contour (outline) that a hatch entity can contain and still render.

Values between 0 and 10,000,000 are accepted.

Hatches do not render if the number of points exceeds the specified value.

Setting to 0 disables the check, meaning the variable is not used.

	0 to 10000000
	100000

11.35 HPNAME system variable

11.35.1 Hatch pattern name

The default hatch pattern name.

11.36 HPOBJWARNING system variable

11.36.1 Hatch pattern entity warning

Controls how many hatch boundary entities can be selected before a warning message appears.

Values between 1 and 100,000,000 are accepted.

	1 to 100000000
	10000



11.37 HPORIGIN system variable

11.37.1 Hatch pattern origin

Stores the origin point for new hatches, relative to the current UCS.

	0,0

11.38 HPSCALE system variable

11.38.1 Hatch pattern scale

The default hatch pattern scale.

	1.0

11.39 HPSEPARATE system variable

11.39.1 Hatch pattern separate

Controls if separate hatches or a single hatch is created when several hatch boundaries are selected, during the HATCH command.

	Off (0): Don't create separate hatches On (1): Create separate hatches

11.40 HPSPACE system variable

11.40.1 Hatch pattern spacing

Controls the hatch pattern line spacing for user-defined hatch patterns.



	1.0

11.41 HPTRANSPARENCY system variable

11.41.1 Default transparency for new hatches

The default transparency for new hatches, as a percentage.

Values accepted: ByLayer, ByBlock, '.' (use current), 0 (fully opaque), and 90 (maximum transparency).

	.
	.: Use current ByLayer: Apply the layer's transparency ByBlock: Apply the block's transparency 0: Apply no transparency (fully opaque) 1-90: Apply transparency percentage from least (1) to most (90) transparent

11.42 HYPERLINKBASE system variable

11.42.1 Hyperlink base

The file path for relative hyperlinks in the drawing.



12. I

12.1 IFCCREATEUNIQUEGUID system variable

12.1.1 Export with unique guids

Controls if unique GUIDs (Globally Unique Identifiers) for nested elements are generated during IFC export.

	0 to 3
	3
	1: Inside classified blocks 2: Inside classified XRefs

12.2 IFCEXPLODEEXTERNALREFERENCES system variable

12.2.1 Explode external references in IFC spatial structure

Explodes external references in IFC spatial structures during IFC export.

	0

12.3 IFCEXPORTALLVISIBILITYSTATES system variable

12.3.1 Export Elements hidden by Visibility State

Exports elements hidden by Visibility State during IFC export.

	0



12.4 IFCEXPORTAUTHOR system variable

12.4.1 Export Author Name

Author name defined in the IFC file header.

	" "

12.5 IFCEXPORTAUTHORIZATION system variable

12.5.1 Export Authorization

Authorization defined in the IFC file header.

	" "

12.6 IFCEXPORTBASEQUANTITIES system variable

12.6.1 Export base quantities

Export derived base quantities (quantities calculated from two or more measurements) from BIM entities during IFC export.

	0

Note: Ply quantities are exported when both IFCEXPORTMULTIPLYELEMENTSASAGGREGATED and IFCEXPORTBASEQUANTITIES system variables are set to ON. For **IFC4 Reference View file**, next to the quantities for the wall as a whole, the ply quantities are exported as a sub set for each ply (as IfcPhysicalComplexQuantity).



12.7 IFCEXPORTELEMENTSONOFFANDFROZENLAYER system variable

12.7.1 Export elements on Off and Frozen layers

Exports elements on Off and Froze layers during IFC export.

	1

12.8 IFCEXPORTIDSPROPERTIESONLY system variable

12.8.1 Export IDS Properties Only

When an IDS-XML file has been imported, this setting controls whether only the properties required by the IDS file should be exported to the IFC file or all properties should be exported.

	Off (0): Export all properties On (1): Export only the properties required by the IDS

12.9 IFCEXPORTMAPPINGPATH system variable

12.9.1 Export mapping file path

Exports file paths during IFC export.

	" "

12.10 IFCEXPORTMULTIPLYELEMENTSASAGGREGATED system variable

12.10.1 Export multi-ply elements as aggregated elements

Export multi-ply elements as aggregated elements.



	0

Note: Ply quantities are exported when both IFCEXPORTMULTIPLYELEMENTSASAGGREGATED and IFCEXPORTBASEQUANTITIES system variables are set to ON. For **IFC4 Reference View file**, next to the quantities for the wall as a whole, the ply quantities are exported as a sub set for each ply (as IfcPhysicalComplexQuantity).

12.11 IFCEXPORTORGANIZATION system variable

12.11.1 Export Organization Name

Organization defined in the IFC file header.

	" "

12.12 IFCEXPORTPROFILECENTEROFGRAVITY system variable

12.12.1 Export profile center of gravity

Export profile center of gravity during IFC export, applies only to IFC2x3.

Warning: May cause linear solids to appear in the wrong position.

	0

12.13 IFCEXPORTSUBTRACTOPENINGS system variable

12.13.1 Subtracts the openings from the host geometry before export

Use this to increase the reliability of the geometry when opening in another software (it avoids relying on the boolean operations of the target software).

It will make editing the model in the target software more difficult.



Note: This behavior is the default for **IFC4 Reference View file** export.

	0

12.14 IFCEXPORTSWEPTSOLIDSASBREP system variable

12.14.1 Always export swept solids as BRep

Exports extrusions, revolutions, swept 3D solids with clippings and subtractions with a boundary representation during IFC export.

	0

12.15 IFCEXPORTTESSELLATION system variable

12.15.1 Level of tessellation

Controls the exported geometry tessellation level during IFC export. When the **Current** faceting option is chosen, no regeneration is required, the faceting as set by FACETRES system variables or the Modeler Properties.

The **Low**, **Medium**, or **High** options cause regeneration of facets, which takes longer.

	0 to 3
	0
	0: Current 1: Low 2: Medium 3: High



12.16 IFCEXPORTVALIDATEMODEL system variable

12.16.1 Apply IFC model validation

Checks that an IFC model complies with schema rules during IFC export. Problems are reported in an export log next to IFC file.

Warning: Validation takes extra time and can slow down the export of big IFC files.

	0

12.17 IFCIMPORTSETTINGSCONFIG system variable

12.17.1 IFC import settings configuration

Specifies the name of the IFC import settings configuration file.

	"bim_ifc_settings.xml"

12.18 IFCTESSELATEBSPLINECURVESANDSURFACES system variable

12.18.1 Tessellate complex curves and surfaces

Tessellates BSpline curves and surfaces in IFC4 and IFC4.1 during IFC export.

Note: BSpline curves are not supported by some software products in IFC import.

	0

12.19 IMAGECACHEFOLDER system variable

12.19.1 Image disk cache folder

The file path used to store temporary image cache file.



See the IMAGEDISKCACHE system variable.

	{User}AppData/Local/Temp/ImageCache

12.20 IMAGECACHEMAXMEMORY system variable

12.20.1 Maximum used memory

Maximum size of the in-memory image cache, in MiB.

	160

12.21 IMAGEDISKCACHE system variable

12.21.1 Image disk cache

Stores temporary image cache files.

	Off (0): Disable image disk cache On (1): Enable image disk cache

12.22 IMAGEFRAME system variable

12.22.1 Image frame

Controls the visibility of image frames, if the FRAME system variable is set to **Use individual system variables** (3).

--	--



	0 to 2
	1
	0: Hide image frames 1: Display and plot image frames 2: Display but do not plot image frames

12.23 IMAGEHLT system variable

12.23.1 Image highlight

Controls how an image is highlighted when selected.

- If on, highlights the whole image.
- If off, highlights the border only.

	Off (0): Don't highlight entire raster image On (1): Highlight entire raster image

12.24 IMAGENOTIFY system variable

12.24.1 Image notify

Displays a warning, when a drawing is opened, if there are missing raster images.

	Off (0): Disable image notification On (1): Enable image notification



12.25 IMPORTCATIAV5EDGEATTRIBUTES system variable

12.25.1 Import edge attributes mode

Controls the import of edge attributes, by edge type, during a Catia V5 import.

	0 to 3
	1
	0: None 1: Edges that are parts of wire entities 2: Edges that are owners of part PMI 3: All edges

12.26 IMPORTCATIAV5REPRESENTATION system variable

12.26.1 Import representation

Controls the data that the imports during a Catia V5 import.

Preview graphics are only imported and shown if the COMMUNICATORBACKGROUNDMODE system variable is on.

	0 to 2
	1
	0: Graphics 1: Geometry 2: Geometry with preview graphics

12.27 IMPORTCATIAV5SEARCHPATHSPREFERENCE system variable

12.27.1 Search path preference

Controls the priority of file paths during a Catia V5 import.



Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

	1 to 3
	1
	1: Sub-folders first 2: Root folder only 3: Root folder first

12.28 IMPORTCOLORS system variable

12.28.1 Translate colors

Controls how colors are converted during import.

	0 to 2
	1
	0: To RGB 1: To RGB, if there is no matching palette index 2: To nearest palette index

- If 0: all entity colors will be converted to RGB, regardless of the current palette.
- If 1: if the entity color is found in the palette, the entity gets an index color. Otherwise, it is given a true color.
- If 2: for any true color of the imported entity, the nearest match is searched in the palette and this index color is assigned to the entity.

12.29 IMPORTCREOALTERNATESEARCHPATHS system variable

12.29.1 Alternate search paths

The alternate file used during a Creo import.



Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with a semicolon.

12.30 IMPORTCREOCONFIGURATION system variable

12.30.1 Import configuration

Sets the name of the configuration to import. If no configuration name is specified, then the part's default configuration is imported.

Note: A named configuration sets a collection of body entities in a part that can be imported as a group while suppressing the import of other body entities.

12.31 IMPORTCUIFILEEXISTS system variable

12.31.1 Import cui file exists

Controls what to do when a CUI file already exists, when a MNU or CUIX file is imported.

	0 to 2
	0: Prompt 1: Overwrite 2: Rename

12.32 IMPORTHIDDENPARTS system variable

12.32.1 Hidden parts

Controls how hidden parts are imported.

--	--



	0 to 2
	0
	0: Import and hide 1: Import and set visible 2: Do not import

- If 0: all entities are imported; invisible entities are hidden. Note that currently there are no user tools to make these hidden entities visible again.
- If 1: all entities are imported and visible, regardless of the visibility in the source file.
- If 2: hidden entities in the source file are not imported.

12.33 IMPORTIGESSIMPLIFY system variable

12.33.1 Perform simplification

Automatically runs the DMSIMPLIFY command during an IGES import.

If on, overrides the IMPORTSIMPLIFY system variable on IGES models.

	1

12.34 IMPORTIGESSTITCH system variable

12.34.1 Perform stitching

Automatically runs the DMSTITCH command during an IGES import.

If on, overrides the IMPORTSTITCH system variable on IGES models.

	1



12.35 IMPORTINVENTORALTERNATESEARCHPATHS system variable

12.35.1 Alternate search paths

Controls the list of alternate file system paths used during an Inventor file import.

Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with semicolon.

12.36 IMPORTINVENTORSEARCHPATHSPREFERENCE system variable

12.36.1 Search paths preference

Controls the priority order of search paths during an Inventor file import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

	1 to 3
	1
	1: Sub-folders first 2: Root folder only 3: Root folder first

12.37 IMPORTJTREPRESENTATION system variable

12.37.1 Import representation

Controls the data to import during a JT import.

Note: This option is only taken into account when import in background is enabled.



	0 to 2
	1
	0: Graphics 1: Geometry 2: Geometry with graphics

12.38 IMPORTNXALTERNATESEARCHPATHS system variable

12.38.1 Alternate search paths

Controls the list of alternate file paths used during an NX import.

Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with semicolon.

12.39 IMPORTNXCONFIGURATION system variable

12.39.1 Import configuration

Sets the name of the configuration that should be imported. If no configuration name is specified, then the part's default configuration will be imported.

Note: A named configuration sets a collection of body entities in a part that can be imported as a group while suppressing the import of other body entities.

12.40 IMPORTNXSEARCHPATHSPREFERENCE system variable

12.40.1 Search paths preference

Controls the priority of file paths during an NX import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

--	--



	1 to 3
	1
	1: Sub-folders first 2: Root folder only 3: Root folder first

12.41 IMPORTPMI system variable

12.41.1 Product and manufacturing information

Enables the import of product and manufacture information.

Note: Currently, such information is imported as exploded data (lines, text, etc.) instead of compound entities (for example: annotations).

	1

12.42 IMPORTPRODUCTSTRUCTURE system variable

12.42.1 Product structure

Controls the way a product structure is represented for an imported model.

As mechanical blocks automatically runs the BMMECH command after import.

	0 to 2
	2



	0: None 1: As blocks 2: As mechanical blocks
--	--

- If 0: creates a flat structure without blocks in the model space of the target database, regardless of whether the imported data have an assembly structure or not.
- If 1: the imported data have an assembly structure, which will be converted into a hierarchy of plain blocks; so the structure will be preserved, while the assembly metadata are lost. If the imported data is composed of entities only, they are placed in the modelspace of the target database.
- If 2: in this mode, data will be translated to BricsCAD® assembly data, the structure and its properties (physical materials – BLMATERIALS command). If the imported file has no assembly data, a mechanical block will nevertheless be created in the BricsCAD® target document root.

12.43 IMPORTREPAIR system variable

12.43.1 Repair model on import

Automatically runs the DMAUDITALL command on imported models.

3D geometry is analyzed and problems are fixed automatically, in order to improve the quality of the imported geometry. Geometry modeled in CAD systems which use a kernel different from ACIS, often needs to be healed because of possible flaws.

	Off (0): Do not repair model on import On (1): Repair model on import

12.44 IMPORTSIMPLIFY system variable

12.44.1 Perform simplification

Automatically runs the DMSIMPLIFY command on imported models. See also the IMPORTIGESSIMPLIFY system variable.

Note: The IMPORTIGESSIMPLIFY system variable can set an override for the IGES file format.

- Convert imported splines into canonical surfaces.
- Simplify topology (remove imprinted edges) if possible.



	0

12.45 IMPORTSOLIDEDGEALTERNATESEARCHPATHS system variable

12.45.1 Alternate search paths

Controls the list of alternate file paths used during a Solid Edge file import.

Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with semicolon.

12.46 IMPORTSOLIDEDGESEARCHPATHSPREFERENCE system variable

12.46.1 Search paths preference

Controls the priority order of files paths during a Solid Edge file import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

	1 to 3
	1
	1: Sub-folders first 2: Root folder only 3: Root folder first

12.47 IMPORTSOLIDWORKSALTERNATESEARCHPATHS system variable

12.47.1 Alternate search paths

Controls the list of alternate file system paths to search during a import.



Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with a semicolon.

12.48 IMPORTSOLIDWORKSCONFIGURATION system variable

12.48.1 Import configuration

Sets the name of the configuration that should be imported. If no configuration name is specified, then the part's default configuration will be imported.

Note: A named configuration sets a collection of body entities in a part that can be imported as a group while suppressing the import of other body entities.

12.49 IMPORTSOLIDWORKSREPRESENTATION system variable

12.49.1 Import representation

Controls the data imported during a import. Preview graphics are only imported and shown if the COMMUNICATORBACKGROUNDMODE system variable is on.

	0 to 2
	1
	0: Graphics 1: Geometry 2: Geometry with preview graphics



12.50 IMPORTSOLIDWORKSROTATEYZ system variable

12.50.1 Map SolidWorks Y to current Z axis

Enables the conversion of a SolidWorks coordinate system to the current coordinate system.

	Off (0) On (1)

12.51 IMPORTSOLIDWORKSSEARCHPATHSPREFERENCE system variable

12.51.1 Search paths preference

Controls the priority order for search paths during a import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

	1 to 3
	1
	1: Sub-folders first 2: Root folder only 3: Root folder first

12.52 IMPORTSTEPROTATEYZ system variable

12.52.1 Map Y to current Z axis

Enables conversion of a SolidWorks coordinate system to the current coordinate system, during a STEP import.

--	--



	Off (0) On (1)

12.53 IMPORTSTITCH system variable

12.53.1 Perform stitching

Automatically runs the DMSTITCH command on imported models. See the IMPORTIGESSTITCH system variable.

In some cases, imported geometry represents solid geometry as a set of separate surfaces. Use the DMSTITCH command to work with solid operations on the imported geometry. If IMPORTSTITCH is set to ON, the DMSTITCH command is executed automatically when the geometry is imported.

Note:

- Stitch operations are time-consuming when importing large files.
- Check the IMPORTIGESSTITCH setting, which can set an override for the IGES file format.

	0

12.54 INCLUDEPLOTSTAMP system variable

12.54.1 Include Plot Stamp

Includes a plot stamp when printing.

	Off (0): Don't include Plot Stamp On (1): Include Plot Stamp



12.55 INDEXCTL system variable

12.55.1 Index control

Controls if layer and/or spatial indexes are created and saved.

	0 to 3
	0
	0: No indexes 1: Layer index 2: Spatial index

12.56 INETLOCATION system variable

12.56.1 Internet location

The default website for the BROWSER command.

	"http://www.bricsys.com"

12.57 INSBASE system variable

12.57.1 Insertion base point

The drawing's insertion point, used when the drawing is inserted into other drawings as a block. Set by the BASE command, and expressed as a UCS coordinate for the current space.

	0,0,0



12.58 INSNAME system variable

12.58.1 Insertion name

Stores the default block name for the INSERT command.

12.59 INSUNITS system variable

12.59.1 Insertion units

Controls the unit used to scale blocks, images or XRefs, when they are inserted into a drawing. When both the INSUNITS and PROPUNITS system variables are on, length, area, volume and/or inertia properties are formatted with their respective unit(s).

Note: It does not convert current drawing units.

See also the *LUNITS* and *MEASUREMENT* system variables

	0 to 24
	1



	0: Unspecified (No units) 1: Inches 2: Feet 3: Miles 4: Millimeters 5: Centimeters 6: Meters 7: Kilometers 8: Microinches 9: Mils 10: Yards 11: Ångströms 12: Nanometers 13: Microns 14: Decimeters 15: Decameters 16: Hectometers 17: Gigameters 18: Astronomical Units 19: Light-years 20: Parsecs 21: US Survey Feet 22: US Survey Inch 23: US Survey Yard 24: US Survey Mile
--	--

12.60 INSUNITSDEFSOURCE system variable

12.60.1 Insertion units default source

Controls the source content units value.

Note: If INSUNITS in the source drawing is **Unspecified**, INSUNITSDEFSOURCE is used instead.

	0 to 24
	0



	0: Unspecified (No units) 1: Inches 2: Feet 3: Miles 4: Millimeters 5: Centimeters 6: Meters 7: Kilometers 8: Microinches 9: Mils 10: Yards 11: Ångströms 12: Nanometers 13: Microns 14: Decimeters 15: Decameters 16: Hectometers 17: Gigameters 18: Astronomical Units 19: Light-years 20: Parsecs 21: US Survey Feet 22: US Survey Inch 23: US Survey Yard 24: US Survey Mile
--	--

12.61 INSUNITSDEFTARGET system variable

12.61.1 Insertion units default target

Controls the target drawing units value, if the INSUNITS system variable is zero.

Values between 0 and 20 are accepted.

	0 to 24
	0



	0: Unspecified (No units) 1: Inches 2: Feet 3: Miles 4: Millimeters 5: Centimeters 6: Meters 7: Kilometers 8: Microinches 9: Mils 10: Yards 11: Ångströms 12: Nanometers 13: Microns 14: Decimeters 15: Decameters 16: Hectometers 17: Gigameters 18: Astronomical Units 19: Light-years 20: Parsecs 21: US Survey Feet 22: US Survey Inch 23: US Survey Yard 24: US Survey Mile
--	--

12.62 INSUNITSSCALING system variable

12.62.1 Insertion units scaling

Controls how the INSUNITS system variable is applied when entities are inserted, imported or pasted.

	0 to 3
	1
	1: Scale with the INSUNITS system variable, if inactive, uses the INSUNITSDEFSOURCE system variable 2: Use paper size unit instead of INSUNITS in paper space.



When inserting or attaching Xrefs, Blocks or images the inserted content is scaled with respect to the value of INSUNITS in the target and source drawing.

- If INSUNITS in the source drawing is **Unspecified**, INSUNITSDEFSOURCE is used instead.
- If INSUNITS in the target drawing is **Unspecified**, INSUNITSDEFTARGET is used instead.

12.63 INTERFERECOLOR system variable

12.63.1 Interference color

Controls the color of interference entities.

12.64 INTERFERELAYER system variable

12.64.1 Interference layer

Controls the layer used for interference entities.

	"Interferences"

12.65 INTERFERENCELEVEL system variable

12.65.1 Interference Check Level

Controls the interference check between details, copied details and/or the rest of the model.

	0 to 3
	0



	0: No interference checking 1: Check overlap of detail volumes 2: Full interference check, ignore background spatial elements 3: Full interference checking
--	--

12.66 INTERFEREOBJVS system variable

12.66.1 Interference entity visual style

Controls the interference entity visual style.

12.67 INTERFEREVPVS system variable

12.67.1 Interference viewport visual style

Controls the interference checking visual style for the viewport.

12.68 INTERIORELEVATIONMINLENGTH system variable

12.68.1 Interior Elevation Minimum Length

Minimum length of a wall for an Interior Elevation to generate.

	20 - for MEASUREMENT=0 (inches) 500 - for MEASUREMENT=1 (millimeters)



12.69 INTERIORELEVATIONOFFSET system variable

12.69.1 Interior Elevation Offset Distance

Offset distance, for an Interior Elevation volume, from wall surfaces.

	2 - for MEASUREMENT=0 (inches) 50 - for MEASUREMENT=1 (millimeters)

12.70 INTERSECTEDENTITIES system variable

12.70.1 Resolve intersection

Controls how new entities, modify existing entities when they intersect. Applies to entities as they are created with the EXTRUDE and REVOLVE commands, when the **Auto** option is selected.

The INTERSECTEDENTITIES system variable is one of the four system variables found under the **Extrude mode** group.

	0 to 2
	0 - for Workspaces Drafting and Modeling 1 - for Workspaces Mechanical and BIM
	0: Do not modify 1: Subtract from intersection 2: Unite at intersection

12.71 INTERSECTIONCOLOR system variable

12.71.1 Intersection color

Controls the polyline color at the intersection of 3D surfaces in 2D Wireframe views, if INTERSECTIONDISPLAY is on (Not yet supported).

--	--



	0 to 257
	257
	0: ByBlock 1 - 255: index 256: ByLayer 257: ByEntity

12.72 INTERSECTIONDISPLAY system variable

12.72.1 Intersection display

Toggles the display of polylines at the intersection of 3D surfaces in 2D Wireframe views (Not yet supported).

	Off (0): Don't display intersection polylines On (1): Display intersection polylines

12.73 ISAVEBAK system variable

12.73.1 Incremental save backup

Creates backup files (BAK) for active drawings. If off, improves the speed of incremental saves, especially for large drawings.

	Off (0): Don't create BAK file On (1): Create BAK file



12.74 ISAVEPERCENT system variable

12.74.1 Save percent

Controls the "wasted space" allowed for QUICKSAVE actions, before a full save is executed,as a percentage.

Values between 0 and 100 are accepted. A value of zero means Each save is a full save.

	0 to 100
	50

12.75 ISOLINES system variable

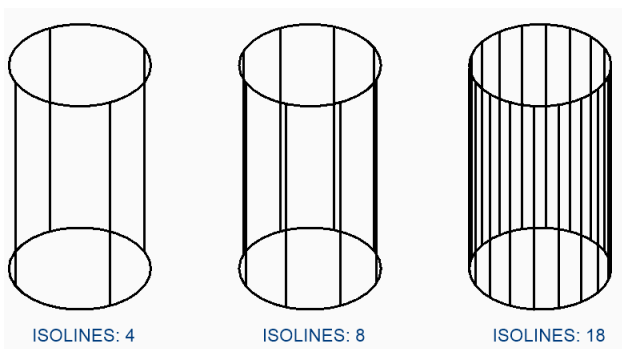
12.75.1 Isolines

Controls the number of isolines (contour lines) per curved surface.

Values between 0 and 2047 are accepted.

Note: To view changes on existing entities, perform a REGEN.

	0 to 2047
	4





13. K

13.1 KEEPCONNECTIONS system variable

13.1.1 Solve interferences and gaps

Controls whether interferences or gaps should be solved.

If on: When a modification of a solid through TCONNECT, BIMUPDATETHICKNESS, BIMATTACHCOMPOSITION or BIMAUTOMATCH, causes interferences, these will be subtracted from the other solids; when it causes gaps, these will be filled.

	Off (0): Don't solve interferences after commands On (1): Solve interferences and gaps after commands



14. L

14.1 LASTANGLE system variable

14.1.1 Last angle (Read Only)

The end angle of the last arc drawn.

14.2 LASTPOINT system variable

14.2.1 Last point

The coordinates of the last point entered - the value used by the '@' symbol in the Command line.

Note: Expressed as a UCS coordinate for the current space; referenced by the at symbol (@) during keyboard entry.

14.3 LASTPROMPT system variable

14.3.1 Last prompt (Read Only)

The last string in Command line.

14.4 LATITUDE system variable

14.4.1 Latitude

Controls the latitude of the current drawing, in decimal format.

Values between -90.0 and 90.0 are accepted. Positive values represent north latitudes.



	-90.0 to 90.0
	37.795

14.5 LAYERFILTEREXCESS system variable

14.5.1 Layer Filter Excess

Specifies the maximum number of layer filters allowed in a drawing before suggesting some be removed. You can create any number of layer filters. However, if the number of layer filters exceeds this value and exceeds the number of layers, a message dialog displays the next time you open the drawing. It recommends deleting all layer filters to improve performance.

If LAYERFILTEREXCESS is 0, dialog is suppressed.

	250

14.6 LAYERPMODE system variable

14.6.1 Layer previous mode

Tracks layer settings modification and enables the LAYERP command.

	Off (0): Doesn't allow tracking of layer settings modification and enables LAYERP command On (1): Allows tracking of layer settings modification and enables LAYERP command



14.7 LAYLOCKFADECTL system variable

14.7.1 Locked layer fade control

Controls the fade level for entities on locked layers to contrast them with entities on unlocked layers and reduces the visual complexity of a drawing. Entities on locked layers are still visible for reference and for object snapping.

Values between -90 and 90 are accepted. Negative values disable fading.

	-90 to 90
	50

14.8 LAYOUTREGENCTL system variable

14.8.1 Layout regeneration control

Controls how the display of the Model and layout tabs is updated. If performance is poor in general or when switching between tabs.

Setting LAYOUTREGENCTL to 1 or 0 might improve performance.

	0 to 2
	2
	0: Always regenerate between when a tab is activated 1: Suppress the regeneration of the Model tab and last layout made current regenerate all other tabs when activated 2: Regenerate only the first time the tab is active

14.9 LAYOUTTAB system variable

14.9.1 Layout and model tabs

Controls the display of layout and model tabs.



	Off (0): Don't show layout and model tabs On (1): Show layout and model tabs

14.10 LEGACYCODESEARCH system variable

14.10.1 Legacy code search mode (Read Only)

Enables unsafe search for executable code in drawing folders.

	Off (0): Disable unsafe searching for executable code On (1): Enable unsafe searching for executable code

14.11 LENGTHUNITS system variable

14.11.1 Length units

Controls a list of units used to display lengths, if length properties are formatted with the PROPUNITS system variable. The string contains a space-separated list of unit abbreviations.

	"in ft mi μm mm cm m km"

14.12 LENSLENGTH system variable

14.12.1 Lens length (Read Only)

Displays the current viewport's lens length, in millimeters, used for perspective mode.



	50.0

14.13 LEVELOFDETAIL system variable

14.13.1 Composition Level of detail

Controls the composition level of detail (LOD).

	0
	0: Low 2: High

- If 0: Composition plies do not display.
- If 2: Composition plies display.

14.14 LICFLAGS system variable

14.14.1 Licensed components (Read Only)

Controls if certain components are licensed or not. The value is stored as a bitcode using the sum of the values of all selected options.

	0 to 7
	0



	0: No components licensed 1: VBA is licensed 2: Acis editing is licensed 4: Pro
--	--

14.15 LIGHTGLYPHCOLOR system variable

14.15.1 Color for light glyph

Controls the color of light glyphs (icons used to indicate the placement of lights in model space).

	1 to 255
	30

14.16 LIGHTGLYPHDISPLAY system variable

14.16.1 Light display

Displays a visual representation of lights for all light locations.

	Off (0): Don't display light On (1): Display light

14.17 LIGHTINGUNITS system variable

14.17.1 Lighting units

Controls the light units type.



	0 to 2
	2
	0: Obsolete. Generic lighting 1: Photometric, American units (foot-candles) 2: Photometric, International units (lux)

14.18 LIGHTWEBGLYPHCOLOR system variable

14.18.1 Color for web light glyph

Controls the color for web light glyphs (icons used to indicate the placement of web lights in model space).

	1 to 255
	1

14.19 LIMCHECK system variable

14.19.1 Limits check

Prevent the creation of entities outside the drawing limits.

	Off (0): Can create entities outside limits On (1): Cannot create entities outside limits

14.20 LIMMAX system variable

14.20.1 Limits maximum

The upper-right corner of the drawing limits, expressed in world coordinates.



	12,9

14.21 LIMMIN system variable

14.21.1 Limits minimum

The lower-left corner of the drawing limits, expressed in world coordinates.

	0,0

14.22 LINEARARROWHEADLENGTH system variable

14.22.1 Default head length

Sets the default head length of linear arrows.

	1 - if INSUNITS=1 (inches) 25 - if INSUNITS=4 (millimeters) 2.5 - if INSUNITS=5 (centimeters) 0.025 - if INSUNITS=6 (meters)

14.23 LINEARARROWHEADWIDTH system variable

14.23.1 Default head width

Sets the default head width of linear arrows.



	1.5 - if INSUNITS=1 (inches) 37.5 - if INSUNITS=4 (millimeters) 3.75 - if INSUNITS=5 (centimeters) 0.0375 - if INSUNITS=6 (meters)
--	---

14.24 LINEARARROWTHICKNESS system variable

14.24.1 Default thickness

Sets the default thickness of linear arrows.

	0.5 - if INSUNITS=1 (inches) 12.5 - if INSUNITS=4 (millimeters) 1.25 - if INSUNITS=5 (centimeters) 0.0125 - if INSUNITS=6 (meters)

14.25 LINEARBRIGHTNESS system variable

14.25.1 Linear brightness

Controls the intensity of lights, can be specified per viewport.

Values between -10 and 10 are accepted. A value of zero means no scaling.

Smaller values decrease light intensity and bigger values increase light intensity. This setting can be specified per viewport.

	-10 to 10
	0

14.26 LINEARCONTRAST system variable

14.26.1 Linear contrast

Controls ambient light intensity. Only effects materials with a non-black ambient color, can be set per viewport.



Values between -10 and 10 are accepted.

- A value of -10 means maximum ambient light.
- A value of 10 means no ambient light.

This setting only has effect on materials that have a non-black ambient color. This setting can be specified per viewport.

	-10 to 10
	0

14.27 LINETYPE3DPLINE system variable

14.27.1 3D Polyline linetype

Controls applying line type to 3D Polyline.

	0
	0: Continuous Linetype is always applied to 3D Polyline 1: Complex Linetype is applied to 3D Polyline

14.28 LISPINIT system variable

14.28.1 LISP init

Controls if LISP variables and functions are preserved between drawings.

	0 to 1
	1



	0: Preserved from drawing to drawing 1: Valid in current drawing only
--	--

14.29 LOADMECHANICAL2D system variable

14.29.1 Mechanical 2D Editor

Controls if Mechanical 2D enablers can load.

	Off (0): Loading of Mechanical 2D enablers is not permitted On (1): Loading of Mechanical 2D enablers is permitted

Note: Changing the value of this variable will take effect after restarting the application.

14.30 LOCALE system variable

14.30.1 Locale (Read Only)

The ISO language code of this version of the program.

	"en_US"

14.31 LOCALROOTPREFIX system variable

14.31.1 Local root prefix (Read Only)

The path of the folder, where local files for the current user, such as templates, were installed.

The Template and Textures folders are in this location, and you can add any customizable files that you do not want to roam on the network. See ROAMABLEROOTPREFIX for the location of the roamable files.



14.32 LOCKUI system variable

14.32.1 Lock user interface elements

Locks interface elements and prevents repositioning.

- Windows and Linux: hold the Ctrl key to override.
- macOS: hold the Cmd key to override.

	-7 to 7
	0
	negative: Locking temporarily disabled 1: Lock docked toolbars 2: Lock docked panels 4: Lock floating panels and toolbars

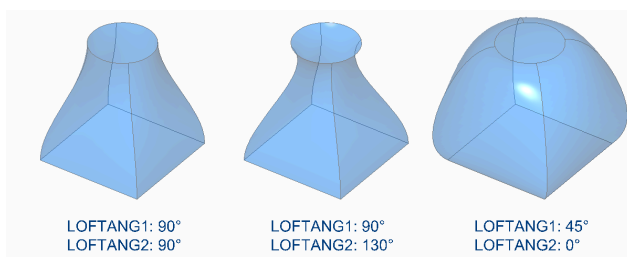
14.33 LOFTANG1 system variable

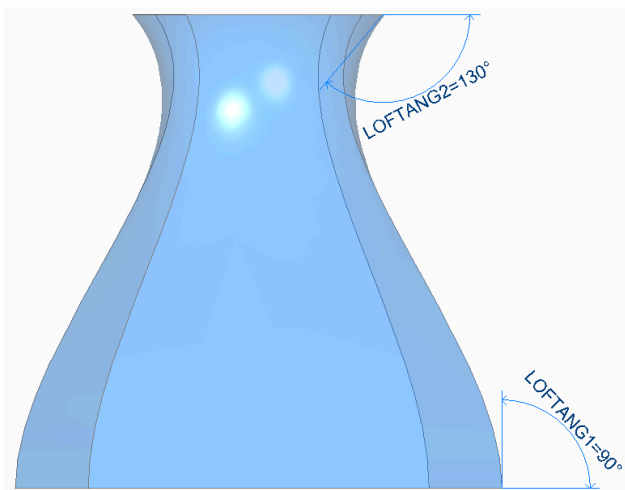
14.33.1 Loft angle 1

Sets the angle at the first cross-section, for the LOFT command, modifies the loft shape. Works only if the LOFTNORMALS system variable is set to **Surface uses draft angle and magnitude**.

Values between 0.0 and 360.0 are accepted.

	0.0 to 360.0
	90.0





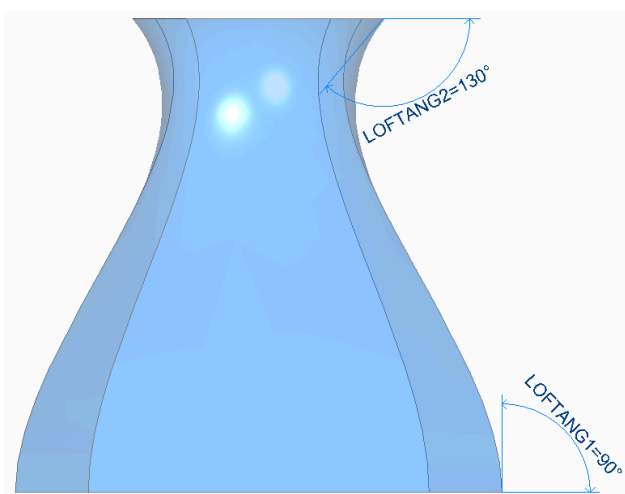
14.34 LOFTANG2 system variable

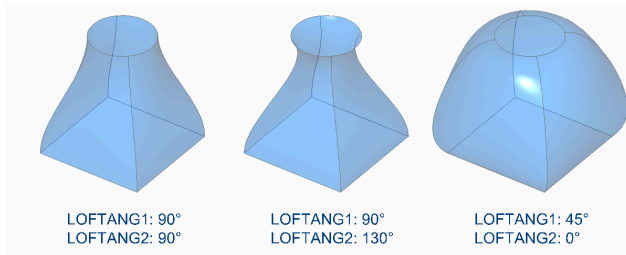
14.34.1 Loft angle 2

Sets the angle at the last cross-section, for the LOFT command, modifies the loft shape. Works only if the LOFTNORMALS system variable is set to **Surface uses draft angle and magnitude**.

Values between 0.0 and 360.0 are accepted.

	0.0 to 360.0
	90.0



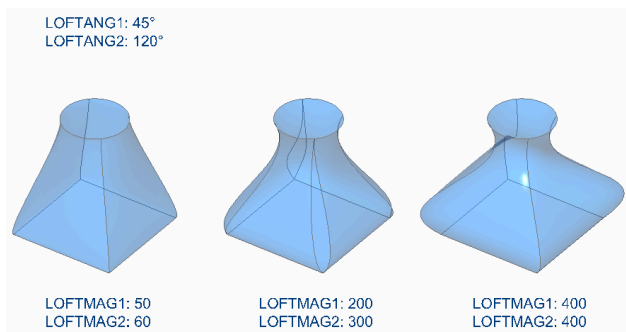


14.35 LOFTMAG1 system variable

14.35.1 Loft magnitude 1

Sets the relative distance of the surface from the cross section in the direction of the LOFTANG1 system variable, before the surface starts to bend towards the next section. Works only if the LOFTNORMALS system variable is set to **Surface uses draft angle and magnitude**.

	0.0

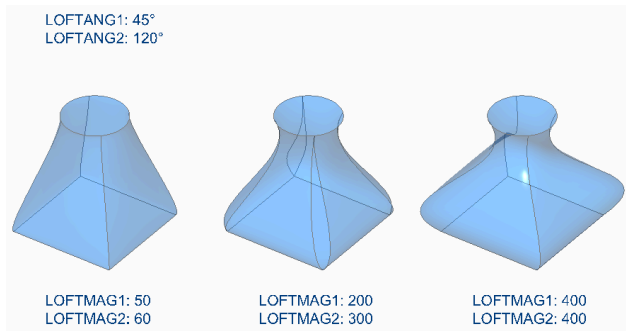


14.36 LOFTMAG2 system variable

14.36.1 Loft magnitude 2

Sets the relative distance of the surface from the cross section in the direction of the LOFTANG2 system variable, before the surface starts to bend towards the next section. Works only if the LOFTNORMALS system variable is set to **Surface uses draft angle and magnitude**.

	0.0



14.37 LOFTNORMALS system variable

14.37.1 Loft normals

Controls the behavior of surfaces and solids created with the LOFT command as they pass through a cross section.

	0 to 6
	1
	0: Ruled surface 1: Smooth surface 2: Surface is perpendicular to the first cross section 3: Surface is perpendicular to the last cross section 4: Surface is perpendicular to the first and last cross sections 5: Surface is perpendicular to all cross sections 6: Surface uses draft angle and magnitude

14.38 LOFTPARAM system variable

14.38.1 Loft param

Controls the shape of surfaces and solids created with the LOFT command.

	0 to 15



	7
	0: No parameters 1: No twist between cross sections 2: Align directions of cross sections 4: Create simple surfaces and solids 8: Close between the first and last cross sections

14.39 LOGFILEMODE system variable

14.39.1 Log file mode

Maintains a logfile.

A logfile contains each executed command. These logfiles are saved in the folder specified by the LOGFILEPATH system variable.

	Off (0): Don't maintain log file On (1): Maintain log file

14.40 LOGFILENAME system variable

14.40.1 Log file name (Read Only)

The name of the log file. See also the LOGFILEMODE system variable.

14.41 LOGFILEPATH system variable

14.41.1 Log file path

The file path used for the log file.

--	--



--	--

14.42 LOGGEDINSTATUS system variable

14.42.1 Logged in (Read Only)

Shows if a Bricsys account is currently logged in to this version of the program.

14.43 LOGINNAME system variable

14.43.1 Login name (Read Only)

Shows the Windows login name, saved to the file properties statistics of the drawing.

14.44 LONGITUDE system variable

14.44.1 Longitude

Controls the longitude of the drawing, in decimal format.

Values between -180.0 and 180.0 are accepted. Positive values represent east longitudes.

	-180.0 to 180.0
	-122.394

14.45 LOOKFROMDIRECTIONMODE system variable

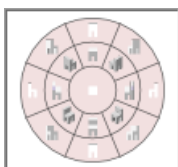
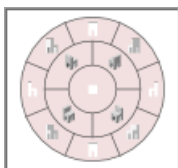
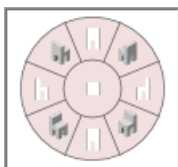
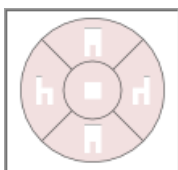
14.45.1 LookFrom direction mode

Controls how many view directions can be selected in isometric mode.

- Windows and Linux: hold the Ctrl key to switch from top to down directions.
- macOS: hold the Cmd key to switch from top to down directions.



	0 to 3
	1
	0: Orthogonal only (6 directions) 1: No flat view at corners (14 directions) 2: 4 top/down corners(18 directions) 3: 8 top/down corners(26 directions)



14.46 LOOKFROMFEEDBACK system variable

14.46.1 LookFrom feedback

Controls if the LookFrom control displays messages in tooltips or on the Status bar.



	0 to 2
	1
	0: None 1: Tooltips 2: Status bar

14.47 LOOKFROMZOOMEXTENTS system variable

14.47.1 LookFrom zoom extents

Zooms to extents whenever a view direction is selected from the LookFrom control.

	Off (0): Zoom extents off On (1): Zoom extents on

14.48 LTGAPSELECTION system variable

14.48.1 Linetype gap selection

Makes it possible to snap to gaps on non-continuous linetypes.

	Off (0): No selection or snapping within gaps (legacy behavior) On (1): Selection or snapping within gaps

14.49 LTSCALE system variable

14.49.1 Linetype scale

Sets the default linetype scale multiplier.



	1.0

14.50 LUNITS system variable

14.50.1 Linear unit type

Controls the unit type for lengths.

	1 to 5
	2
	1: Scientific 2: Decimal 3: Engineering 4: Architectural 5: Fractional

14.51 LUPREC system variable

14.51.1 Linear unit precision

Controls the number of decimal places displayed for linear units. See also the MEASUREMENT and INSUITS system variables.

	0 to 8
	4



	0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000
--	--

14.52 LWDEFAULT system variable

14.52.1 Default lineweight

Controls the default lineweight, in hundredths of millimeters.

	0 to 211
	25
	-3: Default (defined by LWDEFAULT) -2: ByBlock -1: ByLayer 0 - 211: Lineweight value in hundredths of millimeters

14.53 LWDISPLAY system variable

14.53.1 Lineweight display

Displays lineweights.

	Off (0): Don't display lineweight On (1): Display lineweight



14.54 LWDISPSCALE system variable

14.54.1 Lineweight display scale

Controls the lineweight display scale in Model space.

Values between 0.0 and 1.0 are accepted.

	0.0 to 1.0
	0.55

14.55 LWUNITS system variable

14.55.1 Lineweight units

Controls the lineweight display unit.

	0 to 1
	1
	0: Inches 1: Millimeters



15. M

15.1 MACROREC system variable

15.1.1 Macro recording

Controls if a macro is currently being recorded.

	Off (0): Macro is not being recorded On (1): Macro is being recorded

15.2 MANIPULATOR system variable

15.2.1 Manipulator

Controls when the Manipulator is displayed.

	0 to 2
	2
	0: Manipulator is not displayed 1: Display Manipulator whenever entities are selected 2: Display Manipulator if left mouse button was pressed longer than MANIPULATORDURATION

Note: The manipulator can be displayed manually through the Quad.

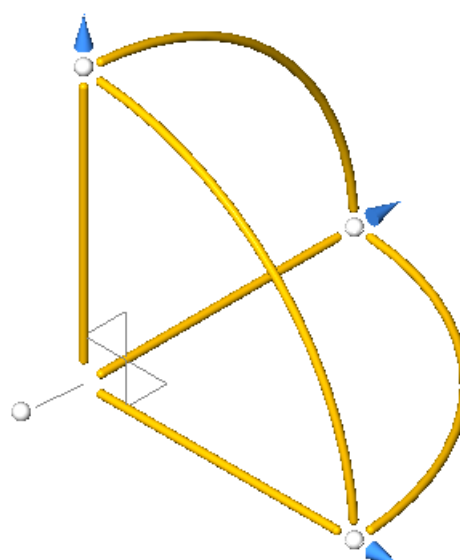
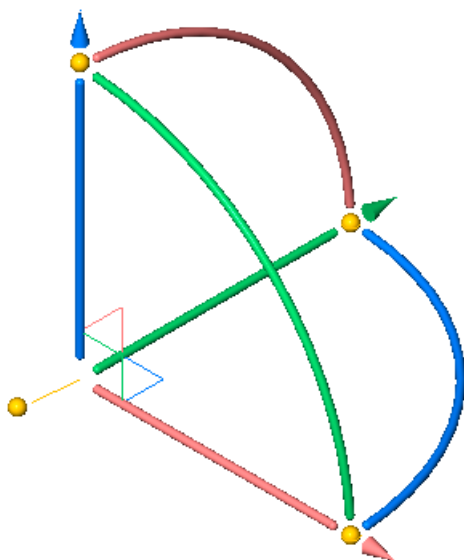
15.3 MANIPULATORCOLORTHEME system variable

15.3.1 Color theme of Manipulator

Controls the color theme of the Manipulator.



	0 to 1
	1
	0: Monochrome color theme 1: Classic color theme



15.4 MANIPULATORDURATION system variable

15.4.1 Manipulator duration

Controls the delay before the Manipulator is displayed, on a long left-click, when an entity is selected, in milliseconds.

Values between 100 and 10,000 are accepted.

	100 to 10000
	250



15.5 MANIPULATORHANDLE system variable

15.5.1 Manipulator handle

Controls the behavior of the Manipulator anchor handles (the bars of the Manipulator).

The handle can be used for unconstrained move and copy operations. Unconstrained meaning: not along an axis or constrained to a plane.

	0 to 1
	0
	0: Handles move the Manipulator 1: Handles move the selected entities unrestricted

15.6 MANIPULATORSIZE system variable

15.6.1 Size of Manipulator

Controls the size of the Manipulator.

Values between 0.5 and 2.0 are accepted.

	0.5 to 2
	1

15.7 MASSPREC system variable

15.7.1 Mass precision

Controls the number of decimal places displayed for masses, if mass properties are formatted with the PROPUNITS system variable.

Note: If negative, LUPREC (Linear Unit Precision) is used.

--	--



	-1 to 8
	-1
	-1: Use LUPREC 0: 0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000 8: 0.00000000

15.8 MASSPROPACCURACY system variable

15.8.1 Mass properties calculation relative accuracy

Controls the accuracy used for mass properties calculations. This accuracy is relative. For a value of 3 the calculated values may deviate up to 0.1% from the actual value, for 12 it is 1.e-10%. For value of 2 the deviation may exceptionally exceed 1% and we assume a margin of 2%.

	2 to 12
	2



	2: 2% accuracy 3: 0.1% accuracy 4: 0.01% accuracy 5: 0.001% accuracy 6: 1.e-4% accuracy 7: 1.e-5% accuracy 8: 1.e-6% accuracy 9: 1.e-7% accuracy 10: 1.e-8% accuracy 11: 1.e-9% accuracy 12: 1.e-10% accuracy
--	---

15.9 MASSUNITS system variable

15.9.1 Mass units

Controls the units used to display mass, if mass properties are formatted with the PROPUNITS system variable. If empty, all masses are displayed without units.

The MASSUNITS setting affects the mass values only. Other mass properties such as density or moments of inertia are formatted in SI units for the metric system and in imperial units for the imperial system, regardless of the MASSUNITS setting.

The string contains a space-separated list of unit abbreviations.

	oz lb st mg g kg t

15.10 MAXACTVP system variable

15.10.1 Maximum active viewports

Controls the maximum number of viewports that can be active simultaneously in a layout. Has no effect on the number of viewports that are plotted.

	64



15.11 MAXHATCH system variable

15.11.1 Maximum hatch dashes

Controls the maximum number of dashes in a hatch pattern.

Hatches of which the number of dashes exceeds the maximum number of dashes cannot be created.

Values between 100 and 10,000,000 are accepted.

	100 to 10000000
	100000

15.12 MAXSORT system variable

15.12.1 Maximum sort

Controls the maximum number of symbol, file and/or block names sorted by commands that list.

If the number of items exceeds this value, the items are not sorted into alphabetical order.

Values between 0 and 200 are accepted.

	200

15.13 MAXTHREADS system variable

15.13.1 Maximum number of threads

Controls the maximum number of threads used to display and load drawings and point cloud operations.

See also the MTFLAGS system variable.

Values between 0 and 16 are accepted. A value of zero means automatically use the optimal number of threads.



	0 to 16
	0

15.14 MBSTATE system variable

15.14.1 Mechanical browser state (Read Only)

Mechanical browser status.

	0 to 1
	1
	0: Mechanical browser is invisible 1: Mechanical browser is visible

15.15 MBUTTONPAN system variable

15.15.1 Middle button pan

Controls how the middle mouse button/wheel responds.

	0 to 1
	1
	0: Action defined in menu file 1: Pan

15.16 MEASUREINIT system variable

15.16.1 Measurement initial

Controls drawing units as Imperial or Metric for new drawings



Also controls the hatch pattern and linetype files used: ANSI for Imperial and ISO for Metric units.

	0 to 1
	1
	0: Imperial (use ANSI Hatch and ANSI Linetype) 1: Metric (use ISO Hatch and ISO Linetype)

15.17 MEASUREMENT system variable

15.17.1 Measurement

Controls the current drawing units as Imperial or Metric, also controls if ANSI or ISO hatch pattern and linetype files are used. See also the LUNITS and INSUNITS system variables.

	0 to 1
	1
	0: Imperial (use ANSI Hatch and ANSI Linetype) 1: Metric (use ISO Hatch and ISO Linetype)

15.18 MECH2DSAVEFORMAT system variable

15.18.1 Mechanical 2D save format

Controls the save format of Mechanical 2D entities.

	2013 to 2018



	2021
	2013: 2013 Mechanical 2D 2014: 2014 Mechanical 2D 2015: 2015 Mechanical 2D 2016: 2016 Mechanical 2D 2018: 2018 Mechanical 2D 2021: 2021 Mechanical 2D

15.19 MECHANICALBLOCKSOPTIONS system variable

15.19.1 Mechanical blocks options

Controls how blocks and mechanical blocks are used in the drawing.

	0 to 1
	0
	0: Do not convert new blocks to mechanical blocks 1: Automatically convert new blocks to mechanical blocks

15.20 MECHANICALBROWSERSETTINGS system variable

15.20.1 Mechanical browser options

Sets the default mechanical browser options.

	0 to 511
	179



	1: Expressions of constraints 2: Block parameters 4: Expressions of block parameters 8: Nested mechanical blocks of standard part 16: Arrays 32: Block and External References 64: Keep values list order 128: Asynchronous properties load 256: Expose all solids
--	--

15.21 MENUBAR (EXCEPT OS X) system variable

15.21.1 Menu bar

Displays the Menu bar.

	0 to 1
	Off (0): Don't show menubar On (1): Show menubar

15.22 MENUCTL system variable

15.22.1 Menu control

Controls if the screen menu switches pages in response to keyboard command entry.

	Off (0): Screen menu doesn't switch pages in response to keyboard command entry On (1): Screen menu switches pages in response to keyboard command entry



15.23 MENUCHO system variable

15.23.1 Menu echo

Controls menu echo and prompt control.

	0 to 15
	0
	1: Suppress menu item echo 2: Suppress system prompts during menu 4: Disable ^P toggle 8: Display input/output strings (DIESEL macros debugging)

15.24 MENUNAME system variable

15.24.1 Menu name (Read Only)

The file path for the menu file.

15.25 MESHTYPE system variable

15.25.1 Mesh type

Controls the type of mesh that is created by REVSURF, TABSURF, RULESURF and EDGESURF commands (Not yet supported).

	0 to 1
	1



	0: Create legacy polygon or polyface mesh 1: Create full-featured mesh entities (recommended)
--	--

15.26 MIDDLECLICKCLOSE system variable

15.26.1 Middle click close (Mac & Linux)

Allows a tab to be closed with a middle button click on the tab bar.

15.27 MILLISECS system variable

15.27.1 Milliseconds (Read Only)

Counts the number of milliseconds that have passed since system startup.

15.28 MIRR Hatch system variable

15.28.1 Mirror hatch patterns

Controls if hatch patterns are mirrored by the MIRROR command.

	Off (0): Don't mirror hatch patterns On (1): Mirror hatch patterns

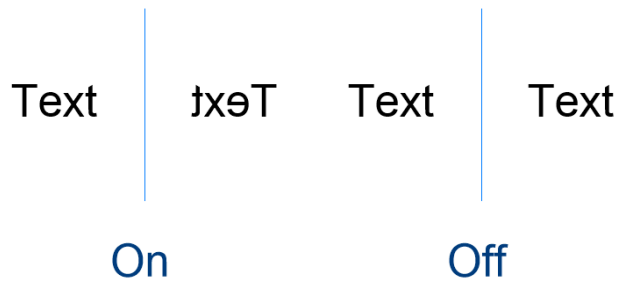


15.29 MIRRTEXT system variable

15.29.1 Mirror text

Controls if text is mirrored by the MIRROR command.

	Off (0): Don't mirror text On (1): Mirror text



15.30 MLEADERSCALE system variable

15.30.1 Multileader scale

Controls the width scale for entities created with the MLEADER command.

Note: The scale must have a positive value.

	1.0

15.31 MODEMACRO system variable

15.31.1 Mode macro

Displays a text string on the status line, such as the name of the current drawing,time/date stamp or special modes. Used to help debug Diesel programs.



15.32 MSLTSCALE system variable

15.32.1 Model space linetype scale

Controls the linetype annotation scale behavior, in model space.

Note: When changing MSLTSCALE, REGEN or REGENALL is needed to update the display.

	0 to 1
	1
	0: Linetypes are not scaled by annotation scale 1: Linetypes are scaled by the annotation scale

15.33 MSOLESCALE system variable

15.33.1 Model space OLE scale

Controls the size of an OLE (Object Linking & Embedding) entity, that contains text, when pasted into model space. Entities already placed in the drawing are not affected.

If set to zero, uses the DIMSCALE system variable.

	0.0 or greater
	1.0



15.34 MTEXTAUTOSTACK system variable

15.34.1 Multiline text autostack

If enabled, numeric characters appearing before and after a fraction delimiter (forward slash, pound, or caret character) will be automatically stacked as a fraction when followed by a space or new line.

	Off (0): Turn off automatic stacking On (1): Enable automatic stacking

15.35 MTEXTCOLUMN system variable

15.35.1 Multiline text column setting

Controls the default column property for multi-line text.

	0 to 2
	0
	0: No columns 1: Dynamic columns with auto height 2: Dynamic columns with manual height

15.36 MTEXTDETECTSPACE system variable

15.36.1 Space detection for creating lists in mtext editor

Creates formatted list items, when the space bar is pressed after a letter, number or symbol, in mtext editor mode.



	Off (0): Don't allow spaces for mtext editor lists On (1): Allow spaces for mtext editor lists

15.37 MTEXTED system variable

15.37.1 Multiline text editor

Controls the text editors to use for multiline text entities.

15.38 MTEXTFIXED system variable

15.38.1 Multiline text fixed

Controls whether the application zooms, rotates and/or pans the view to fit the multiline text to be edited.

	0 to 2
	2
	0: Do nothing when mtext editor is opened 1: Do nothing when mtext editor is opened 2: Rotate / zoom / pan view to fit multiline text

15.39 MTEXTTOOLBAR system variable

15.39.1 MText Formatting toolbar

Controls if the formatting toolbar is displayed when multiline text is edited.



	Off (0): Don't show formatting toolbar On (1): Show formatting toolbar

15.40 MTFLAGS system variable

15.40.1 Multi-Threading Flags

Bit flags for parallel processing of display and loading.

	0 to 4095
	3015
	0: No parallel processing 1: Parallelized regeneration of display. 2: Parallelized redraw of display. 4: Parallelized loading of drawings. 8: Parallelized calculation of hidden line removal. 16: Parallelized generation of BIM sections to separate destination files. 32: Parallelized generation of BIM sections to the same destination file. 64: Parallelized computations in Direct Modeling commands and operations. 128: Parallelized computations in Assembly commands and operations. 256: Parallelized computations in Sheet Metal commands and operations. 512: Parallelized interference checking 1024: Delayed XREF loading 2048: Parallelized point cloud operations

15.41 MULTISELECTANGULARTOLERANCE system variable

15.41.1 BimMultiSelect angular tolerance

Controls the maximum angle between two linear solids axes, for these solids to still be considered parallel.



	0 to 90
	3

15.42 MYDOCUMENTSPREFIX system variable

15.42.1 MyDocuments root prefix (Read Only)

The path of the user documents folder.



16. N

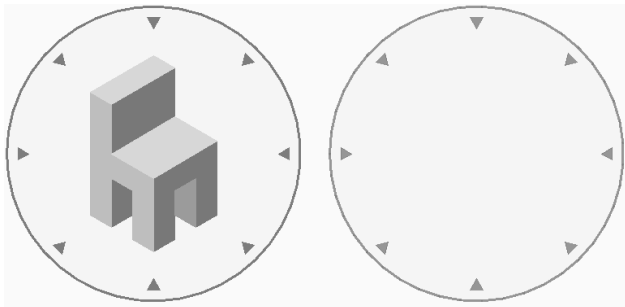
16.1 NAVVCUBEDISPLAY system variable

16.1.1 LookFrom display

Toggles the LookFrom control on/off.

The LookFrom is the navigation control, by default this appears in the top-right corner.

	0 to 3
	Off (0): Don't display the LookFrom control On (1): Display the LookFrom control



16.2 NAVVCUBELOCATION system variable

16.2.1 LookFrom location

Controls the location of the LookFrom control.

	0 to 3
	0



	0: Top-right corner 1: Top-left corner 2: Bottom-left corner 3: Bottom-right corner
--	--

16.3 NAVVCUBEOPACITY system variable

16.3.1 LookFrom opacity

Controls the opacity of the LookFrom control while inactive.

	0 to 100
	50

16.4 NAVVCUBEORIENT system variable

16.4.1 LookFrom orientation

Controls if the LookFrom control reflects the current WCS (World Coordinate System) or UCS (User Coordinate System).

	0 to 1
	0
	0: WCS 1: UCS

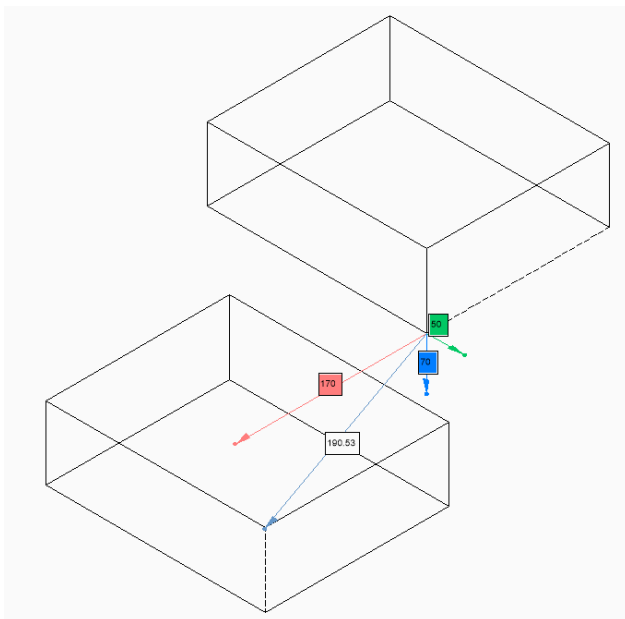
16.5 NEARESTDISTANCE system variable

16.5.1 Nearest Distance

Controls nearest distance dimension between a pair of selected entities. The value is stored as a bitcode using the sum of the values of all selected options.



	0 to 15
	1
	1: Show nearest distance dimension 2: Show OX aligned nearest distance dimension 4: Show OY aligned nearest distance dimension 8: Show OZ aligned nearest distance dimension



16.6 NOMUTT system variable

16.6.1 No muttering

Suppresses text in the Command line.

When on, the Command line will stop prompting all the options and actions.



	Off (0): Don't suppress Command line prompts On (1): Suppress Command line prompts
--	---

16.7 NORTHDIRECTION system variable

16.7.1 North direction

Controls the angle of the sun, from north, in the context of the world coordinate system (WCS).

	0.0



17. 0

17.1 OBJECTISOLATIONMODE system variable

17.1.1 Object Isolation Mode

Controls if entities hidden with HIDEOBJECTS or ISOLATEOBJECTS commands remain hidden after a drawing is saved, closed and reopened.

	0 to 3
	0
	0: Entities are hidden only for the current session, includes interference solids 1: Entities remain hidden between sessions, includes interference solids 2: Entities are hidden only for the current session, does not include interference solids 3: Entities remain hidden between sessions, does not include interference solids

17.2 OBSCUREDColor system variable

17.2.1 Obscured color

Controls the color of obscured lines.

Visible only if the OBSCUREDTYPE system variable is in use.

	0 to 257
	257
	0: ByBlock 1 - 255: index 256: ByLayer 257: ByEntity



17.3 OBSCUREDLTTYPE system variable

17.3.1 Obscured linetype

Controls the linetype of obscured lines. Unlike regular linetypes, obscured linetypes are zoom level independent.

	0 to 11
	0
	0: Off 1: Solid 2: Dashed 3: Dotted 4: Short Dash 5: Medium Dash 6: Long Dash 7: Double Short Dash 8: Double Medium Dash 9: Double Long Dash 10: Medium Long Dash 11: Sparse Dot

17.4 OFFSETDIST system variable

17.4.1 Offset distance

Stores the last distance used for the OFFSET command.

	-1.0
	<0: draws a parallel copy of an entity through a specified point



17.5 OFFSETERASE system variable

17.5.1 Offset erase

Erases the source entity for the OFFSET command.

	Off (0): Offset erase off On (1): Offset erase on

17.6 OFFSETGAPTYPE system variable

17.6.1 Offset gap type

Controls how possible gaps, in parallel copies of closed polylines, are filled.

	0 to 2
	0
	0: Extend polyline segments 1: Filleted arc segments 2: Chamfered line segments



17.7 OLEFRAME system variable

17.7.1 OLE frame

Controls the display of a frame around an OLE object, if the FRAME system variable is set to **Use individual system variables** (3).



	0 to 2
	2
	0: No OLE frames 1: Display and plot OLE frames 2: Display but do not plot OLE frames

17.8 OLEHIDE system variable

17.8.1 OLE hide

Controls the visibility of OLE objects for both screen display and plotting.

	0 to 3
	0
	0: All OLE entities are visible and plot 1: OLE entities are visible and plot in paper space only 2: OLE entities are visible and plot in model space only 3: No OLE entities are visible and do not plot

17.9 OLEQUALITY system variable

17.9.1 OLE quality

Controls the default plot quality of OLE entities. When set to **Automatically Select** (3), the quality level is assigned automatically depending on the entity type (for example, photographs are set to **High**).

	0 to 3



	3
	0: Monochrome 1: Low graphics 2: High graphics 3: Automatically Select

17.10 OLESTARTUP system variable

17.10.1 OLE startup

Loads the OLE entity source when plotting.

	Off (0): Don't load OLE source application when plotting On (1): Load OLE source application when plotting

17.11 OPMSTATE system variable

17.11.1 Properties panel state (Read Only)

Properties panel status.

	0 to 1
	1
	0: Properties panel is invisible 1: Properties panel is visible

17.12 ORBITAUTOTARGET system variable

17.12.1 Orbit Auto Target

Controls the behavior of the RTROT command.



	0 to 1
	1
	0: Mouse - The rotation point is located at the mouse click location 1: Center - The target point is located at the center of the selected entities(s), or the entities displayed on screen

17.13 ORTHOMODE system variable

17.13.1 Orthogonal mode

Constrains cursor movement perpendicularly. When on the cursor can only move horizontally or vertically, relative to the current UCS and grid rotation angle. See also the SNAPANG system variable.

	Off (0): Orthogonal mode off On (1): Orthogonal mode on

17.14 OSMODE system variable

17.14.1 Entity snap mode

Controls the 2D entity snap types.

	0 to 32767
	4135



	0: None 1: Endpoint 2: Midpoint 4: Center 8: Node 16: Quadrant 32: Intersection 64: Insertion 128: Perpendicular 256: Tangent 512: Nearest 1024: Geometric center 2048: Apparent intersection 4096: Extension 8192: Parallel 16384: Turn off all snaps
--	--

17.15 OSNAPCOORD system variable

17.15.1 Entity snap coordinates

Controls if entity snaps override manually entered coordinates.

	0 to 2
	2
	0: Entity snap settings override keyboard coordinate entry 1: Keyboard entry overrides entity snap settings 2: Keyboard entry overrides entity snap settings except in scripts

17.16 OSNAPZ system variable

17.16.1 Ignore entity snap elevation

Overrides the Z coordinate of an entity snap with the current ELEVATION system variable value.



	Off (0): Don't replace Z value with current elevation On (1): Replace Z value with current elevation

17.17 OSOPTIONS system variable

17.17.1 Entity snap options

Suppresses entity snaps on certain entity types.

	0 to 7
	7
	1: Entity snap ignores hatches 2: Entity snap ignores negative Z values in Dynamic UCS mode 4: Entity snap ignores end points of dimension extension lines 8: Entity snap ignores invisible geometry in shaded and hidden-line views

17.18 OVERKILLLAYER system variable

17.18.1 Duplicate Entities Layer

The layer that entities are moved to during the OVERKILL command - the **Move duplicates to Duplicate Entities layer** option.

	Duplicate Entities



18. P

18.1 PANBUFFER system variable

18.1.1 Pan buffer

Enables faster panning, particularly in complex drawings.

	Off (0): Disable faster panning On (1): Enable faster panning

18.2 PANELBUTTONSIZE system variable

18.2.1 Panel control button size

Controls the size of the icons used for panels.

	1
	0 to 2
	0: Small buttons 1: Large buttons 2: Extra-large buttons

18.3 PAPERUPDATE system variable

18.3.1 Paper update

Controls paper size adaption when printers are switched in the **Print** dialog box.

- If Off: does not update the paper size, preserving the paper size currently selected. If the printer has no close match, the size will be displayed as **Previous paper size**. On print, your confirmation is required before substitution with default values.
- If On: updates the paper size, using the default paper size of the selected printer.



	0 to 1
	0
	Off (0): Use default paper size of the selected printer On (1): Use configured paper size of the plotter configuration file

18.4 PARAMETERCOPYMODE system variable

18.4.1 Parameter copy mode

Controls how constraints and related parameters are copied with the COPY command.

	0 to 4
	3
	0: Do not copy 2D constraints 1: Replace all expressions with constants 2: Use existing parameters, if parameter is missing replace it with constant 3: Use existing parameters, create new parameter if it is missing 4: Use existing parameters, create new parameter if it is missing or has different value

18.5 PARAMETERMATCHMODE system variable

18.5.1 Match Parametric Blocks by parameters

The option is not stored in registry, however for some designated blocks it is known that the individual copy is required for each separate insert.



	0 to 2
	0
	0: Re-use existing block if insert has same expressions 1: Use separate copy for each block insert 2: Force default behavior for previously separated blocks

18.6 PARAMETRICBLOCKS2DPATH system variable

18.6.1 Parametric blocks 2D directory path

The file path(s) for user created 2D Parametric Blocks files.

Separate file paths with semicolons (;).

18.7 PARAMETRIZECONNECTIONS system variable

18.7.1 Parametrize Connections

Controls if constraints connect components for the BMCONVERT, BMCONNECT and BMINSERT (SMART insert option) commands.

	0 to 1
	1
	0: Don't use constraints 1: Use constraints

18.8 PBLOCKREFERENCEOPERATIONSVISUALIZATION system variable

18.8.1 Visualize parametric operations on block references

Enables the visualization of the parametric operations' information when hovering the cursor over parametric block references.



	Off (0): Visualization off On (1): Visualization on

18.9 PDFANIMATIONFPS system variable

18.9.1 Frames per second

Controls the number of frames per second for an animation.

	24

18.10 PDFCACHE system variable

18.10.1 PDF cache

Enables/disables the PDF cache.

A multi-resolution persistent image cache is used to display attached Pdf underlays, enabling (very) fast zoom and pan operations. The highest cached resolution is 5000 x 5000 pixels. Still, when zooming in very close, the display of the Pdf underlay will become pixelated. So a hybrid modus can be used which switches to real-time generation of crisp Pdf underlay display when zooming in very close. The initial generation of the image cache may take a few seconds, from then on processing gets (very) fast, and remains like that in subsequent sessions.

	0 to 2
	2 (Windows) 0 (Mac & Linux)



	0: No caching, always real time generation 1: Use pdf cache, only use real time generation when zooming in close 2: Always use pdf cache
--	--

18.11 PDFCREATEBOOKMARKS system variable

18.11.1 Create bookmarks

Create bookmarks for PDF exports.

	Off (0): Do not create bookmarks On (1): Creates bookmarks

18.12 PDFEMBEDDEDTTF system variable

18.12.1 Pdf embedded fonts

Embeds True Type fonts for PDF exports.

	Off (0): Disable embedded TTF fonts On (1): Enable embedded TTF fonts

18.13 PDFEXPORTHYPERLINKS system variable

18.13.1 Export hyperlinks

Exports entity hyperlinks for PDF exports.



	Off (0): Disables export of entity hyperlinks On (1): Enables export of entity hyperlinks

18.14 PDFFRAME system variable

18.14.1 PDF frame

Controls the visibility of PDF underlay frames, if the FRAME system variable is set to **Use individual system variables** (3).

	0 to 2
	1
	0: Hide PDF frames 1: Display and plot PDF frames 2: Display but do not plot PDF frames

18.15 PDFIMAGEANTIALIAS system variable

18.15.1 Image anti-aliasing

Enables anti-aliasing for images that are upscaled during PDF export.

	Off (0): Disables anti-aliasing for images On (1): Enables anti-aliasing for images

18.16 PDFIMAGECOMPRESSION system variable

18.16.1 Image compression

Compresses images to JPEG during PDF export.



	0 to 1
	1
	0: None 1: JPEG

18.17 PDFIMAGEDPI system variable

18.17.1 Image DPI

Controls the minimal resolution for an image exported to PDF.

Cannot exceed the value of the PDFVECTORRESOLUTIONDPI system variable.

	300

18.18 PDFIMPORTAPPLYLINEWEIGHT system variable

18.18.1 Apply lineweight properties

Retains the lineweight properties of imported entities, during PDF import.

	Off (0): Ignore the lineweight properties of the imported entities On (1): Retain the lineweight properties of the imported entities



18.19 PDFIMPORTASBLOCK system variable

18.19.1 Import as block

Imports PDF files as blocks.

	Off (0): Don't import PDF files as a block On (1): Import PDF files as a block

18.20 PDFIMPORTCHARSPACEFACTOR system variable

18.20.1 Inter-character space factor

The multiplier for the width of the space between characters in a word, used during PDF import.

If the distance between the text objects in the string is less than the width of the space taken from the font metric multiplied by this factor, the text objects are combined into one word.

Note: Applies only if PDFIMPORTCOMBINETEXTOBJECTS is turned on.

	0.6

18.21 PDFIMPORTCOMBINETEXTOBJECTS system variable

18.21.1 Combine text entities

Controls if text entities, that use the same font and are on the same line, are combined, during PDF import.



	Off (0): Text entities are not combined On (1): Text entities are combined
--	---

18.22 PDFIMPORTCONVERTSOLIDSTOHATCHES system variable

18.22.1 Convert solid fills to hatches

Converts 2D solid entities into solid-filled hatches, during PDF import.

	Off (0): Don't convert solid fills to hatches from imported PDF files On (1): Convert solid fills to hatches from imported PDF files

18.23 PDFIMPORTIMAGEPATH system variable

18.23.1 Raster Images Folder

The file path used to save images, during PDF import, absolute or relative.

- If relative, the PDF image path is relative to the folder of the current drawing file.
- If empty, the folder of the current drawing is used, if the drawing has not yet been saved the images will be saved in the same folder as the imported PDF.

	PDF Images

18.24 PDFIMPORTJOINLINEANDARCSEGMENTS system variable

18.24.1 Join line and arc segments

Joins continuous segments into a polyline, where possible, during PDF import.



	Off (0): Don't join the line and arc segments from imported PDF files On (1): Join the line and arc segments from imported PDF files

18.25 PDFIMPORTLAYERSUSETYPE system variable

18.25.1 Layers

Controls layers during PDF import.

	0 to 2
	0
	0: Use PDF Layers 1: Create layers per entity type 2: Use current layer

18.26 PDFIMPORTRASTERIMAGES system variable

18.26.1 Raster Images

Extracts images to PNG files and attaches these to the current drawing, during PDF import. These images are stored in the folder set in the PDFIMPORTIMAGEPATH system variable.

	Off (0): Don't extract raster images On (1): Extract raster images



18.27 PDFIMPORTSOLIDFILLS system variable

18.27.1 Solid fills

Ignore or import solid-filled areas during PDF import, if the information is in the PDF. Solid-filled areas include solid-filled hatches, 2D solids, wipeout entities, wide polylines, and triangular arrowheads.

Note: Solid-filled hatches are assigned a 50% transparency.

	Off (0): Ignore solid-filled areas. On (1): Import solid-filled areas.

18.28 PDFIMPORTSPACEFACTOR system variable

18.28.1 Inter-word space factor

Controls the multiplier for the width of the space between words on a line.

If the distance between the text objects in the string is greater than the width of the space between characters in a word (specified by the PDFIMPORTCHARSPACEFACTOR system variable), but less than the width of the space taken from the font metrics multiplied by this factor, the text objects are combined into one word.

Note: Applies only if PDFIMPORTCOMBINETEXTOBJECTS is turned on.

	1.5

18.29 PDFIMPORTTRUETYPETEXT system variable

18.29.1 TrueType text

Import TrueType text as a TrueType text, the textstyle named is inherited from the font, during PDF import.



	Off (0): Don't import the TrueType text On (1): Import the TrueType text

18.30 PDFIMPORTTRUETYPETEXTASGEOMETRY system variable

18.30.1 Import True Type text as geometry

Imports True Type Text as geometry, during PDF import.

	Off (0): Don't import TrueType text as geometry On (1): Import TrueType text as geometry

18.31 PDFIMPORTUSECLIPPING system variable

18.31.1 Apply clipping

Clips entities, during PDF import.

	Off (0): Clipping is not applied to entities on import On (1): Clipping is applied to entities on import

18.32 PDFIMPORTUSEGEOMETRYOPTIMIZATION system variable

18.32.1 Import geometry with optimization

Optimizes geometry, during PDF import.

--	--



	Off (0): Don't import geometry with optimization On (1): Import geometry with optimization

18.33 PDFIMPORTUSEIMAGECLIPPING system variable

18.33.1 Clip images

Clips images during a PDF import. The clipped part images becomes transparent.

Note: Applies only if PDFIMPORTUSECLIPPING is on (1).

	Off (0): Images are not clipped on import On (1): Images are clipped on import

18.34 PDFIMPORTUSEPAGEBORDERCLIPPING system variable

18.34.1 Apply clipping at page border

Clips entities at the page border during, PDF import.

Note: Applies only if the PDFIMPORTUSECLIPPING system variable is on (1).

	Off (0): Clipping at page border is not applied on import. On (1): Clipping at page border is applied on import.



18.35 PDFIMPORTVECTERGEOMETRY system variable

18.35.1 Vector geometry

Imports vector geometry during PDF import.

If on, linear paths and Beziér curves are imported as polylines within a tolerance. Curves that resemble arcs, circles, and ellipses are also converted. Solid-filled areas are imported as 2D solids or solid-filled hatches. Patterned hatches are imported as many separate entities.

	Off (0): Don't import vector geometry On (1): Import vector geometry

18.36 PDFLAYERSSETTING system variable

18.36.1 PDF layer support

Controls the way layers are exported to PDF.

	1
	0: Don't use layers 1: Use all layers with visible entities 2: Use all layers with entities, including OFF and FROZEN layers.

18.37 PDFLAYOUTSTOEXPORT system variable

18.37.1 PDF layouts to export

Controls the layout(s) exported to PDF (paper space).



	0 to 2
	0
	0: Active layout 1: All layout(s) in multi-sheet files 2: All layout(s) in single-sheet files

18.38 PDFMERGECONTROL system variable

18.38.1 PDF Merge Control

Controls the appearance of lines that cross in PDF exports.

	0
	0: Lines Overwrite - Uses the last plotted line and obscures the line(s) under it 1: Lines Merge - Merges the colors of crossing lines

18.39 PDFNOTIFY system variable

18.39.1 PDF notify

Displays a warning, when a drawing is opened, if there are missing PDFs.

	Off (0): Disable PDF notification On (1): Enable PDF notification

18.40 PDFOPENINVIEWER system variable

18.40.1 Open in viewer

Open result file in system default PDF viewer.



	Off (0): Do not open in PDF viewer. On (1): Open in PDF viewer.

18.41 PDFOSNAP system variable

18.41.1 PDF entity snap

Enables entity snap for PDF underlay files.

	Off (0): Disable PDF entity snap On (1): Enable PDF entity snap

18.42 PDFPAPERHEIGHT system variable

18.42.1 PDF override - paper height

Paper height for PDF export, in millimeters, if the PDFPAPERSIZEOVERRIDE system variable is on (1).

	297

18.43 PDFPAPERSIZEOVERRIDE system variable

18.43.1 PDF papersize override

Enables papersize override for PDF export.

If On, the papersize as defined in the BricsCAD Print settings is overridden. The papersize width and height defined by PDFPAPERWIDTH and PDFPAPERHEIGHT are used instead.



	Off (0): Disable papersize override On (1): Enable papersize override

18.44 PDFPAPERWIDTH system variable

18.44.1 PDF override - paper width

Paper width for PDF export, in millimeters, if the PDFPAPERSIZEOVERRIDE system variable is on (1).

	210

18.45 PDFPDFA system variable

18.45.1 PDF/A format support

Controls archived PDF support.

	0
	0: Don't use PDF/A 1: Use version PDF/A-1b 2: Use version PDF/A-2b 3: Use version PDF/A-3b

18.46 PDFPRCCOMPRESSION system variable

18.46.1 PRC Compression

Controls the compression of PRC 3D data (3D PDF).



	0 to 2
	0
	0: No compression 1: Medium compression 2: High compression

18.47 PDFPRCEXPORT system variable

18.47.1 PRC Export Mode

PRC mode for the export of PRC 3D data (3D PDFs).

Export as BREP is an experimental mode which may work incorrectly. We recommend using **Export as Mesh** mode.

	0 to 2
	0
	0: No export 1: Export as BREP (Experimental) 2: Export as Mesh

18.48 PDFPRCPROJECTION system variable

18.48.1 PRC Projection

Controls the projection type for PRC 3D data (3D PDF).

	0



	0: Orthogonal 1: Perspective
--	---------------------------------

18.49 PDFPRCVIEWMODE system variable

18.49.1 PRC View mode

Controls how 2D entities and 3D entities are exported for PRC PDFs (3D PDFs).

	0 to 2
	0
	0: All entities in single view 1: Only 3D entities in single view 2: Only 3D entities in multiple views

18.50 PDFSHXTEXTASGEOMETRY system variable

18.50.1 PDF SHX text as geometry

Converts SHX font text to geometry for PDF exports. This might be necessary if the receiving party does not have the same SHX fonts on their computer.

	Off (0): Don't convert SHX text to geometry On (1): Convert SHX text to geometry

18.51 PDFSIMPLEGEOMOPTIMIZATION system variable

18.51.1 Pdf simple geometry optimization

Simplifies geometry for PDF exports (merges separate line segments to one polyline and uses Bezier curve control points).



	Off (0): Disable simple geometry optimization On (1): Enable simple geometry optimization

18.52 PDFTTFTEXTASGEOMETRY system variable

18.52.1 PDF TTF text as geometry

Converts True Type font text to geometry for PDF exports.

This is useful for when the TTF files are covered by a license that prohibits sharing, or you want to make it harder to extract text.

	Off (0): Don't convert TTF text to geometry On (1): Convert TTF text to geometry

18.53 PDFUSEPLOTSTYLES system variable

18.53.1 Use PDF plotstyles

Enables plotstyles for PDF exports.

If On, the plotstyle of the layout controls the color and lineweight in the PDF export.

	Off (0): Disables usage of plotstyles On (1): Enables usage of plotstyles



18.54 PDFVECTORRESOLUTIONDPI system variable

18.54.1 Vector Resolution DPI

Resolution of vector graphics for PDF export from model space.

	72 to 40000
	2400

18.55 PDFZOOMTOEXTENTSMODE system variable

18.55.1 PDF zoom to extents mode

Scales the layout geometry of papersize layouts for PDF exports.

If switched off, uses the scale and papersize from the pagesetup data.

	Off (0): Don't zoom to extents On (1): Zoom to extents

18.56 PDMODE system variable

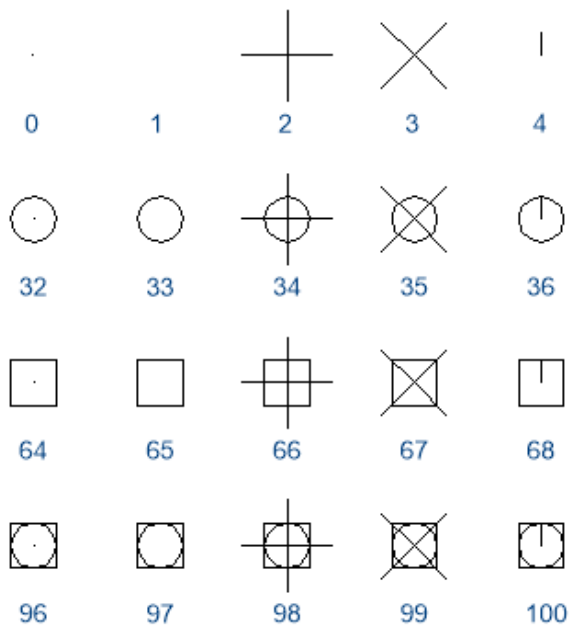
18.56.1 Point display mode

Controls the display style for point entities.

	0 to 100
	0



	1: none 0: . 2: + 3: x 4: ' 32: circle 64: square
--	---



18.57 PDSIZE system variable

18.57.1 Point display size

Controls the display size for point entities.

	0
	0: 5% of the drawing area height >0: Absolute size <0: Percentage of the viewport size



18.58 PEDITACCEPT system variable

18.58.1 Polyline edit accept

Displays a warning, when non-polylines are selected during the PEDIT command. When suppressed, the selected entity is automatically converted to a polyline.

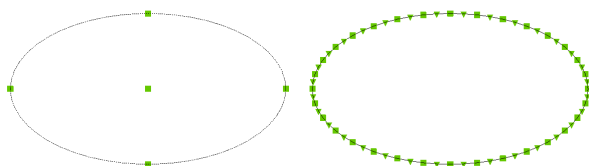
	0
	Off (0): Display prompt On (1): Suppress prompt

18.59 PELLIPSE system variable

18.59.1 Polyline ellipse

Controls the entity type created with the ELLIPSE command.

	Off (0): Create real ellipses On (1): Create polyline representations of an ellipse



18.60 PERIMETER system variable

18.60.1 Last perimeter (Read Only)

The last perimeter calculated by the AREA, LIST, or DBLIST commands.

--	--



--	--

18.61 PERSPECTIVE system variable

18.61.1 Perspective

Turns on perspective view for the current viewport.

	Off (0): Perspective view off On (1): Perspective view on

18.62 PFACEVMAX system variable

18.62.1 Polyface mesh maximum vertices (Read Only)

The maximum number of vertices for each face.

	3 or greater
	4

18.63 PICKADD system variable

18.63.1 Pick add

Controls how the Shift key selects entities.

	0 to 1



	On
	Off (0): Press SHIFT to add entities to the current selection On (1): Press SHIFT to remove entities to the current selection

18.64 PICKAUTO system variable

18.64.1 Selection window behavior

Controls the selection behavior - window and lasso - used to select multiple entities at the same time.

See also the PICKDRAG system variable.

	-7 to 7
	5
	Negative: No window selection, saving earlier value 0: No window selection 1: Window selection, pick the first and last point, if the cursor does not start above an entity 2: Window selection, for click and drag, if the cursor starts above an entity 4: Lasso selection, for click and drag, if the cursor does not start above an entity

Note: A negative value is the same as 0, but helps in storing the earlier value.

18.65 PICKBOX system variable

18.65.1 Pick box

Controls the selection area size around the cursor, in pixels.

Values between 0 and 50 are accepted.

Note: If you select an entity by clicking, the Pick Box must touch or overlap the entity.

	0 to 50



	4

18.66 PICKDRAG system variable

18.66.1 Pick drag

Controls the window selection behavior used to select multiple entities at the same time.

See also the PICKAUTO system variable.

	0
	Off (0): Draw selection window with two points On (1): Draw selection window with click and drag

18.67 PICKFIRST system variable

18.67.1 Pick first

Makes it possible to select entities first, then issue a command.

	1
	Off (0): First issue a command, then select entities On (1): First select entities, then issue a command

18.68 PICKSTYLE (EXCEPT OS X) system variable

18.68.1 Pick style

Controls the selection of groups and associative hatches.

Use **Ctrl+H** to toggle this system variable.

--	--



	0 to 3
	1
	0: No group selection or associative hatch selection 1: Group selection - if a member of a selectable group is selected, all members of the group are selected 2: Associative hatch selection - the hatch and its boundary are selected, no matter what is picked (the hatch or the boundary)

18.69 PICTUREEXPORTSCALE system variable

18.69.1 Picture format export scale factor

Controls the output resolution scale for WMF, EMF or BMP exports. Used in commands EXPORT, WMFOUT, COPYCLIP, CUTCLIP and in COM/VBA function AcadDocument. The output view size is the current view size-in pixels, multiplied by this value.

Trouble: Scale values of 10 or more may cause slow system response.

	0.0 or greater
	1.0

18.70 PLACESBARFOLDER1 system variable

18.70.1 First folder

Controls the first folder in the places bar of the nonstandard **Open file** dialog box (Windows only).

This enables you to place shortcuts to your favorite drawing folders on your desktop or in your Favorites folder.

See also the USESTANDARDOPENFILEDIALOG system variable.



	0 to 5
	0
	0: Desktop 1: My Computer 2: My Documents 3: Favorites 4: Network 5: My Recent Documents

18.71 PLACESBARFOLDER2 system variable

18.71.1 Second folder

Controls the second folder in the places bar of the nonstandard **Open file** dialog box (Windows platform only).

This enables you to place shortcuts to your favorite drawing folders on your desktop or in your Favorites folder.

See also the USESTANDARDOPENFILEDIALOG system variable.

	0 to 5
	1
	0: Desktop 1: My Computer 2: My Documents 3: Favorites 4: Network 5: My Recent Documents

18.72 PLACESBARFOLDER3 system variable

18.72.1 Third folder

Controls the third folder in the places bar of the nonstandard **Open file** dialog box (Windows platform only).



This enables you to place shortcuts to your favorite drawing folders on your desktop or in your Favorites folder.

See also the USESTANDARDOPENFILEDIALOG system variable.

	0 to 5
	3
	0: Desktop 1: My Computer 2: My Documents 3: Favorites 4: Network 5: My Recent Documents

18.73 PLACESBARFOLDER4 system variable

18.73.1 Fourth folder (Windows)

Controls the fourth folder in the places bar of the nonstandard **Open file** dialog box (Windows platform only).

This enables you to place shortcuts to your favorite drawing folders on your desktop or in your Favorites folder.

See also the USESTANDARDOPENFILEDIALOG system variable.

	0 to 5
	5
	0: Desktop 1: My Computer 2: My Documents 3: Favorites 4: Network 5: My Recent Documents



18.74 PLATFORM system variable

18.74.1 Platform (Read Only)

Displays the current Operating System version.

18.75 PLINECACHE system variable

18.75.1 Polyline cache

Controls the creation of a cache of polyline vertices, when a drawing is opened.

	Off (0): Disable polyline cache On (1): Enable polyline cache

18.76 PLINECONVERTMODE system variable

18.76.1 Polyline convert mode

Controls how splines are converted to polylines.

	0 to 1
	0
	0: Create polylines with linear segments 1: Create polylines with arc segments

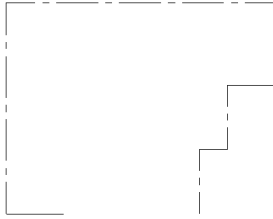


18.77 PLINEGEN system variable

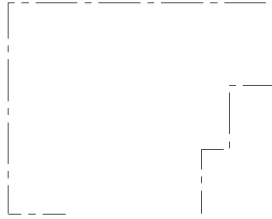
18.77.1 Polyline generation

Controls how linetype patterns are generated around 2D polyline vertices.

Linetypes are normally generated from vertex to vertex (0). Polylines of which the vertices are very close together might be rendered as a continuous line, if the linetype pattern does not fit between two subsequent vertices. When set to 1, the linetype is drawn from one end of the polyline to the other end, instead of from vertex to vertex.



Polyline starts and ends with a dash at each vertex. The linetype will not display on parts that are too small.



The linetype displays in a continuous pattern around the polyline vertices.

	0
	Off (0): Polylines start and end with a dash at each vertex On (1): Linetype in a continuous pattern around the polyline vertices

18.78 PLINEREVERSEWIDTHS system variable

18.78.1 Reverse widths

Controls whether polyline segment widths are reversed when the polyline is reversed.

	0
	0: Do not reverse polyline segment widths when reversing polyline 1: Reverse polyline segment widths when reversing polyline



18.79 PLINETYPE system variable

18.79.1 Polyline type

Controls how polylines are created with the PLINE command and if old-format polylines are converted. It saves disk space and memory by using the optimized format.

	0 to 2
	2
	0: Old-format polylines are not converted; PLINE creates old-format polylines 1: Old-format polylines are not converted; PLINE creates optimized polylines 2: Old-format polylines are converted; PLINE creates optimized polylines

18.80 PLINEWID system variable

18.80.1 Polyline width

The default width for new polyline.

	0.0

18.81 PLOTCONFIGPATH system variable

18.81.1 Plotter configuration path

The file path used for the Plotter configuration folders. Separate file paths with semicolons (;).

When printing a layout, the available paper size settings are controlled by a Plotter Configuration File. The Printer/Plotter Configuration list is composed of all printer drivers that are installed on your computer. The Printer Configuration are the files in the folder which is specified by the Plotter Configuration Path. If this is set to a large folder with many files and subfolders, then the entire folder and subfolders are searched for appropriate files. This might cause the print dialog to take a long time to open.



18.82 PLOTID system variable

18.82.1 Plot id (Obsolete)

Obsolete, has no effect except to preserve the integrity of old scripts and LISP routines.

18.83 PLOTOUTPUTPATH system variable

18.83.1 Plot output path

The default file path used for the creation of plot files.

18.84 PLOTSTYLEPATH system variable

18.84.1 Plot styles path

The file path used for the Plot styles folders.

Separate file paths with semicolons (;).

18.85 PLOTTER system variable

18.85.1 Plotter (Obsolete)

Has no effect except to preserve the integrity of older scripts and LISP routines.

--	--



--	--

18.86 PLOTTRANSPARENCYOVERRIDE system variable

18.86.1 Plot transparency override

Controls if transparencies are enabled for print.

	0 to 2
	1
	0: Transparencies are disabled 1: Value from page setup dialog is used 2: Transparencies are enabled

18.87 PLQUIET system variable

18.87.1 Plot quiet

Controls if optional dialog boxes and nonfatal errors display during batch plot or when a script is run.

	0
	Off (0): Display plot dialog boxes and nonfatal errors On (1): Log nonfatal errors and don't display plot-related dialog boxes

18.88 POINTCLOUD2DVSDISPLAY system variable

18.88.1 Toggle show/hide bounding box in 2d wireframe mode

Controls the display of a bounding box and warning message when the 2D Wireframe visual style is active and there are point clouds in the drawing. Point clouds are not displayed when the 2D Wireframe visual style is active.



	0 to 1
	0
	0: Display a bounding box and warning message that point clouds are not displayed in 2D wireframe visual style 1: Do not display bounding box and warning message

18.89 POINTCLOUDADAPTIVEDISPLAY system variable

18.89.1 Toggle adaptive vs. fixed point sizes

Uses adaptive point sizes for point cloud display. If off, uses fixed point sizes.

	0 to 1
	0
	0: Use fixed point sizes - all points have the same size 1: Use adaptive point sizes - point sizes are adjusted for a better visual appearance

18.90 POINTCLOUDBOUNDARY system variable

18.90.1 Show/hide point cloud extent boundary

Controls how the point cloud boundary is displayed.

	0 to 2
	1



	0: Don't show 1: Show only when selected 2: Always show
--	---

18.91 POINTCLOUDCACHEFOLDER system variable

18.91.1 Disk cache folder

The file path(s) used to store point cloud cache files.

Multiple paths are supported. The first one will be used for adding new cached/preprocessed data.

Separate file paths with semicolons (;).

	C:\Users\%username%\AppData\Roaming\Bricsys\BricsCAD\x64\en_US\PointCloudCache

18.92 POINTCLOUDEYEDOMELIGHTING system variable

18.92.1 Eye dome lighting strength

Eye dome lighting strength. If 0, eye dome lighting is disabled.

Values between 0 and 10 are accepted (default 1).

	0 to 10
	1

18.93 POINTCLOUDGAPFILLING system variable

18.93.1 Gap filling size

Gap between points to fill in pixels. If 0, gap filling is disabled.

Values between 0 and 10 are accepted (default 0).

--	--



	0 to 10
	0

18.94 POINTCLOUDHSPC system variable

18.94.1 Point Cloud format (hspc/bcad)

Specifies the format used for processing point clouds (HSPC or BCAD).

Note: The HSPC file format (Hexagon Smart Point Cloud) is a proprietary format developed by Hexagon VCH (Visual Computing Hub). Using this format enables storing per point information which will be used to have more point cloud functionalities (in the future).

	Off (0): Use BCAD format. On (1): Use HSPC format.

18.95 POINTCLOUDIGNOREGEOTAGS system variable

18.95.1 Ignore geo tags in source data (deprecated!)

Ignores geo tags in source data. The setting is kept for v25 but has no effect.

	Off (0): Don't ignore geo tags in source data On (1): Ignore geo tags in source data



18.96 POINTCLOUDNORMALS system variable

18.96.1 Normal calculation

Calculates normals during point cloud preprocessing, used to identify planar (flat surfaces) such as walls and floors.

Note: Applies if the POINTCLOUDHSPC system variable is on (1).

When a point cloud is structured (in other words it has bubbles), the normal vectors will be computed automatically during preprocessing.

Structured point clouds already available in the cache in HSPC which have no normal vectors yet can be computed with the POINTCLOUDNORMALS command.

	Off (0): Disable normal calculation during HSPC preprocessing. On (1): Enable normal calculation during HSPC preprocessing.

18.97 POINTCLOUDPOINTMAX system variable

18.97.1 Maximum number of points displayed on screen (in millions)

Maximum number of points displayed per point cloud. This is independent of the number of points in the dataset.

Note: Values between 1 and 50 are accepted.

	1 to 50
	10

18.98 POINTCLOUDPOINTSIZ system variable

18.98.1 Point size

Point cloud point display size, in pixels.

Values between 1 and 10 are accepted.



	1 to 10
	2

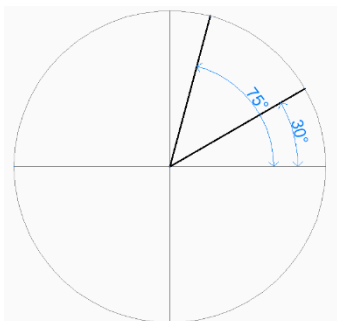
18.99 POLARADDANG system variable

18.99.1 Polar add angles

Contains a list of custom polar snap angles, if the POLARMODE system variable is set to **Use additional polar tracking angles**.

Up to 10 angles, up to 25 characters each, separated with semicolons (;).

Requires POLARMODE flag 0x04 to be set (**Use additional polar tracking angles**). The AUNITS system variable sets the format for display of angles. Unlike POLARANG, POLARADDANG angles do not result in multiples of their values.



18.100 POLARANG system variable

18.100.1 Polar angle

Controls the polar angle increments, in degrees.



	90.0

18.101 POLARDIST system variable

18.101.1 Polar distance

Controls the snap increment for polar snap (if the SNAPTTYPE system variable is set to **Polar snap**).

	0.0

18.102 POLARMODE system variable

18.102.1 Polar mode

Controls entity snap tracking and polar snap tracking.

	0 to 15
	1
	1: Relative 2: Use polar tracking settings in entity snap tracking 4: Use additional polar tracking angles 8: Press SHIFT to acquire entity snap tracking points

18.103 POLYSIDES system variable

18.103.1 Polygon sides

The number of sides last used with the POLYGON command.

--	--



	3 to 1024
	4

18.104 POPERATIONSCOLOR system variable

18.104.1 Parametric operations color

Controls the color of the parametric operations' geometry.

	RGB:238,173,60

18.105 POPUPS system variable

18.105.1 Popups (Read Only)

Shows the status of the currently configured display driver.

	On
	Off (0): Don't support dialog boxes, the menu bar, and icon menus On (1): Support dialog boxes, the menu bar, and icon menus

18.106 PREVIEWDELAY system variable

18.106.1 Delay to preview selection

Controls the delay, before entities are highlighted on hover, in milliseconds.

Values between 0 and 1000 are accepted.



	0 to 1000
	30

18.107 PREVIEWEFFECT system variable

18.107.1 Selection preview effect

Controls how a selection preview is displayed (Not yet supported).

	0 to 2
	2
	0: Dashed lines 1: Thickened lines 2: Dashed and thickened lines

18.108 PREVIEWFILTER system variable

18.108.1 Selection filter

Controls the entity types that can not be selected.

	0 to 63
	3
	1: Exclude entities on locked layers 2: Exclude entities in xrefs 4: Exclude tables 8: Exclude multiline text entities 16: Exclude hatch entities 32: Exclude entities in groups



18.109 PREVIEWTYPE system variable

18.109.1 Preview type

Controls which view is used for drawing preview thumbnails (Not yet supported).

	0 to 1
	0
	0: Last saved view 1: Home view

18.110 PREVIEWWNDINOPENDLG system variable

18.110.1 Preview window in open dialog

Shows a file preview in the Open dialog box. Can be set from the dialog (check box).

	Off (0): Don't display preview in the Open dialog box On (1): Display preview in the Open dialog box

18.111 PRINTFILE system variable

18.111.1 Print file

Alternate name for plot files.

	.



18.112 PRINTPDFPREVIEW system variable

18.112.1 Print As PDF Preview

Controls if the Print As PDF preview uses the system default PDF viewer or an internal program window.

	0 to 1
	1
	0: Use internal window 1: Use external viewer

18.113 PRODUCT system variable

18.113.1 Product (Read Only)

Displays the product name.

	BricsCAD

18.114 PROFILEOFFSETBEHAVIOR system variable

18.114.1 Profile offset behavior

Controls the position of a solid or its axis, when the profile offset is changed.

	0 to 1
	0



	0: Keep axis 1: Keep solid
--	-------------------------------

18.115 PROGBAR system variable

18.115.1 Progress bar

Controls the display of the progress bar.

	Off (0): Don't show progress bar On (1): Show progress bar

18.116 PROGRAM system variable

18.116.1 Program (Read Only)

Displays the program name.

	BRICSCAD

18.117 PROJECTIONTYPE system variable

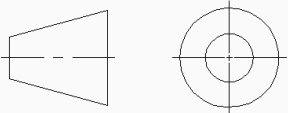
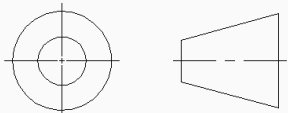
18.117.1 Drawing view projection type

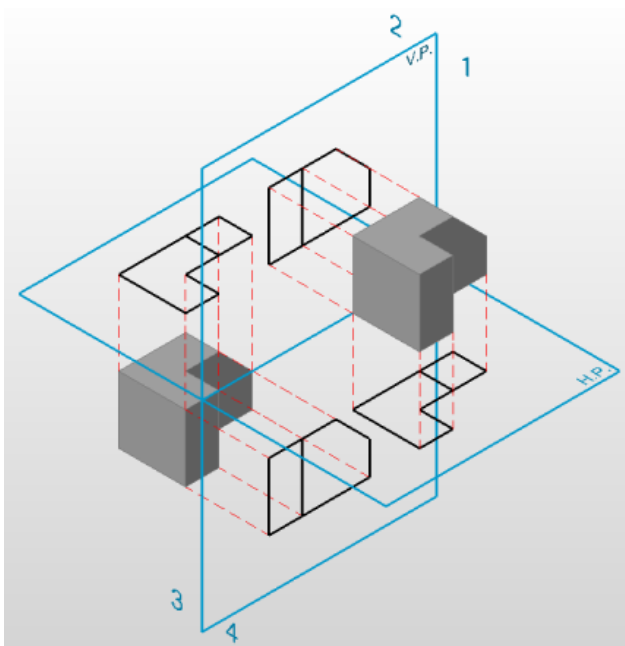
Switches between first and third angle projection types.

These angle projections are a way to represent 3D entities in 2D drawing views. These projection types will show the same views but the difference between the two types is the position of these views (top, right, left, bottom). See **Generated drawing views** to learn more about it.



	0 to 1
	0
	0: First angle projection type - Europe 1: Third angle projection type - United States, Canada, Australia

Projection	Symbol
First angle	
Third angle	



18.118 PROJECTLOCATIONVISIBILITY system variable

18.118.1 Project location marker visibility

Controls the visibility of the Project location marker.

--	--



	1
	OFF (0): Does not display the Project location marker in the drawing ON (1): Displays the Project location marker in the drawing

18.119 PROJECTNAME system variable

18.119.1 Project name

The project name of the current drawing.

Project names help to keep track of Xrefs and images easier by assigning additional support paths specific to the project only.

18.120 PROJECTSEARCHPATHS system variable

18.120.1 Project search paths

Stores a list of project names, each with a list of file paths to search.

If external references and images are not found in the saved path, the project search paths are used to find the external references and images.

Separate file paths with semicolons (;).

18.121 PROJMODE system variable

18.121.1 Projection mode

Controls the projection mode for the TRIM and EXTEND commands.

If the cutting entity is not in the same plane as the entity you want to TRIM/EXTEND, this system variable defines how the intersection is to be calculated.

--	--



	0 to 2
	1
	0: True 3D mode (no projection) 1: Project to the XY plane of the current UCS 2: Project to the current view plane

18.122 PROMPTMENU system variable

18.122.1 Prompt menu

Controls the command prompt menu dialog.

	0 to 5
	0
	0: Don't display prompt menu 1: Display prompt menu 2: Display prompt menu top-left 3: Display prompt menu top-right 4: Display prompt menu bottom-left 5: Display prompt menu bottom-right

18.123 PROMPTMENUFLAGS system variable

18.123.1 Prompt menu flags

Controls the behavior of the prompt menu.

See the PROMPTMENU system variable.

	0 to 7



	0
	1: Show hidden options - hidden options display in italics 2: Hide prompt menu during selection 4: Disable selection options in the prompt menu

18.124 PROMPTOPTIONFORMAT system variable

18.124.1 Prompt option format

Controls how command options are displayed in the Command line.

A command option has a keyword, a description and a shortcut. The shortcut is the keyword without lower case characters (a-z).

For example, the third option of the CIRCLE command:

Keyword = **TanTanRad**

Description = **Tangent-Tangent-Radius**

Shortcut = **TTR**

Note: The PROMPTOPTIONTRANSLATEKEYWORDS system variable controls whether translations of command option keywords are loaded or not. If disabled, the local keyword will be a copy of the global (English) keyword. As a result global shortcuts can be used without an underscore.

	0 to 4
	0
	0: Show description, with shortcut in upper-case 1: Show keyword only 2: Show description and keyword in brackets 3: Show description and shortcut in brackets 4: Show local keyword and global keyword in brackets (non-English versions only)

Example for the CIRCLE command:

Show description only (0)

Select center of circle or [2 Point/3 Point/Tangent-Tangent-Radius/turn Arc into circle/Multiple circles]:

Note: This is the default prompt option format in the English version. In other versions the default prompt option format depends on local standards.



Show keyword only (1)

Select center of circle or [2Point/3Point/TanTanRad/Arc/Multiple]:

Show description and keyword in brackets (2)

Select center of circle or [2 Point(2Point)/3 Point(3Point)/Tangent-Tangent-Radius(TanTanRad)/Turn arc into circle(Arc)/Multiple circles(M)]:

Show description and shortcut in brackets (3)

Select center of circle or [2 Point(2P)/3 Point(3P)/Tangent-Tangent-Radius(TTR)/Turn arc into circle(A)/Multiple circles(M)]:

Show local keyword and global keyword in brackets (relevant in localized versions only) (4)

Select center of circle or [2Point/3Point/TanTanRad/Arc/Multiple]:

18.125 PROMPTOPTIONTRANSLATEKEYWORDS system variable

18.125.1 Prompt option translate keywords

Loads translated command option keywords.

If disabled, English keywords are used and global shortcuts can be used without an underscore.

	Off (0): Don't load translations of keywords On (1): Load translations of keywords

18.126 PROPAGATESEARCHSPACE system variable

18.126.1 Search space

Asks for a search space during the BIMPROPAGATE command. Limits the locations and entity can be propagated to.



18.127 PROPAGATETOLERANCE system variable

18.127.1 Position tolerance

The position tolerance used for the BIMPROPAGATE command, in drawing units.

	0.00001

18.128 PROPERTYPREVIEW system variable

18.128.1 Property Preview

Shows property changes, on hover of combo box list values, in **Properties** panel, for selected entities.

	Off (0): Do not show property changes, on hover of combo box list values, in Properties panel, for selected entities On (1): Show property changes, on hover of combo box list values, in Properties panel, for selected entities

18.129 PROPERTYPREVIEWDELAY system variable

18.129.1 Property Preview Delay

Controls the delay before property changes show, on hover of combo box list values in **Properties** panel, in milliseconds. Applies if the PROPERTYPREVIEW system variable is on (1).

Values between 100 and 10000 are accepted.

	100 to 10000
	500



18.130 PROPERTYPREVIEWOBJLIMIT system variable

18.130.1 Property Preview Object Limit

Controls the maximum number of entities that can support hover properties. Values between 1 and 30,000 are accepted.

	1 to 30000
	500

18.131 PROPOBJLIMIT system variable

18.131.1 Properties objects limit

Controls the limit of entities displayed in the **Properties** panel to improve performance. Values between 0 and 100000 are accepted. A value of 0 turns off the limitation.

	1000
	0 to 100000

18.132 PROPPREVTIMEOUT system variable

18.132.1 Property Preview Timeout

Controls the delay before hover properties display, in seconds. Values between 1 and 5 are accepted.

	1 to 5
	1



18.133 PROPUNITS system variable

18.133.1 Property units

Automatically formats length, area, volume, dimension and mass units, in panels and input boxes. For example, 2000mm will be displayed as 2m.

Applies if the INSUNITS system variable is active.

	0 to 255
	47
	1: Format length properties 2: Format area properties 4: Format volume properties 8: (Reserved) 16: Format dynamic dimensions 32: Format mass properties

18.134 PROXYGRAPHICS system variable

18.134.1 Proxy graphics

Saves images of proxy entities to the drawing. If switched off, a bounding box displays instead.

	Off (0): Don't save images with the drawing On (1): Save images with the drawing

18.135 PROXYNOTICE system variable

18.135.1 Proxy notice

Displays a notice when you open a drawing containing custom entities created by an application that is not present.



	Off (0): Don't display proxy warning On (1): Display proxy warning

18.136 PROXYSERVERENABLED system variable

18.136.1 Proxy server

	0
	Off (0): Don't use proxy server On (1): Use proxy server

18.137 PROXYSERVERHTTP system variable

18.137.1 HTTP server

The address of proxy server for HTTP protocol.

18.138 PROXYSERVERHTTPPORT system variable

18.138.1 HTTP server port

The port number of proxy server for HTTP protocol.



18.139 PROXYSERVERHTTPS system variable

18.139.1 HTTPS server

The address of proxy server for HTTPS protocol.

18.140 PROXYSERVERHTTPSPORT system variable

18.140.1 HTTPS server port

The port number of proxy server for HTTPS protocol.

18.141 PROXYSERVERPASSWORD system variable

18.141.1 User password

The user password to log in to proxy server.

18.142 PROXYSERVERUSER system variable

18.142.1 User name

The user name to log in to proxy server.

18.143 PROXYSHOW system variable

18.143.1 Proxy show

Controls how proxy entities display in a drawing.



	0 to 2
	1
	0: Proxy entities are not displayed 1: Graphic images are displayed for all proxy entities 2: Only the bounding box is displayed for all proxy entities

18.144 PROXYWEBSEARCH system variable

18.144.1 Proxy web search

Toggles the check for entity enablers.

	0 to 1
	1
	0: Does not check for entity enablers 1: Check for entity enablers if connected to the internet

18.145 PSLTSCALE system variable

18.145.1 Paper space linetype scale

Controls the linetype scaling in paper space. If **Viewport scaling governs linetype scaling** is active, the length of the dashes is based on paper space drawing units - linetypes display identically, in all viewports, even if scaled differently.

A REGEN is required.

	0 to 1



	1
	0: No special linetype scaling 1: Viewport scaling governs linetype scaling

18.146 PSOLHEIGHT system variable

18.146.1 Polysolid height

Controls the default height, in drawing units, for the POLYSOLID command.

	80.0

18.147 PSOLWIDTH system variable

18.147.1 Polysolid width

Controls the default width, in drawing units, for the POLYSOLID command.

	5.0

18.148 PSTYLEMODE system variable

18.148.1 Plot style mode (Read Only)

The plot style mode of the current drawing.

To convert the current drawing to use named or color-dependent plot styles, use CONVERTPSTYLES.

	0 to 1
	1



	0: Named plot style tables 1: Color-dependent plot style tables
--	--

18.149 PSTYLEPOLICY system variable

18.149.1 Plot style policy

Controls if the color of an entity is associated with its plot style.

Note: If PSTYLEPOLICY is 0, the plot style for new entities is set to the default defined in DEFPLSTYLE and the plot style for new layers is set to the default defined in DEFLPLSTYLE.

	0 to 1
	1
	0: No association between color and plot style 1: Associate an entity's plot style with its color

18.150 PSVPSCALE system variable

18.150.1 Paper space viewport scale

Controls the scale multiplier for new viewports created with the VPORTS command.

Note: The view scale multiplier is defined by comparing the ratio of units in paper space to the units in newly created model space viewports.

The view scale multiplier you set is used with the VPORTS command. A value of 0 means the scale multiplier is Scaled to Fit.

	0.0

18.151 PUBLISHALLSHEETS system variable

18.151.1 Publish all sheets

Controls how layouts are loaded to the **Publish** dialog box.



If on, loads all layouts from all active drawings. If off, loads only the layouts from the current drawing.

	Off (0): Only the contents of the current document automatically load On (1): The contents of all open documents automatically load

18.152 PUBLISHCOLLATE system variable

18.152.1 Collate published sheets

Combines published sheets with equal output configurations into single multi-page plot job.

	Off (0): Process the sheet set in multiple steps (one sheet at a time) to generate a PLT file for each sheet. When plotting, the sheet plotting sequence can be interrupted by other plot jobs. On (1): Process the sheet set in one step to generate one multi-sheet PLT file. When plotting, the sheet plotting sequence cannot be interrupted by other plot jobs.

Note: A plot driver that supports the multi-sheet plotting or printing option is needed for publishing sheets in a single step.

18.153 PUCSBASE system variable

18.153.1 Paper space UCS base (Read Only)

The name of the UCS that controls the orthographic UCS in paper space.



19. Q

19.1 QAFLAGS system variable

19.1.1 Quality Assurance flags

Internal system variable with flags for Quality Assurance and testing.

Note: This is subject to change, and not intended for regular use. Some of these options could have unpredictable or unwanted side-effects.

	0 to 32767
	0
	0: Red device: no low quality draw 2: No pause during text screen listings 4: No 'alert' dialogs (text display instead) 8: Have Warnings act as Errors and stop scripts 16: Minimal audit report 32: Disable window recreation on switch between 2d and rendered visual styles. 64: Enable various performance measurements printed as info prompts 128: Parallel vectorization: EnableSchedulerLogOutput 256: Cmd message enable 512: Dcl take screenshot 1024: Print time on statusbar 2048: No crash dump file 4096: Create assert log file 8192: Create RED files during rendering 16384: Parallel vectorization performance measurement

Note: When bit 4096 is checked, it enables assertion logging in the Command line.

19.2 QSELECTAUTOCLOSE system variable

19.2.1 Quick Select auto close

Controls whether there's an automatic switch from Quick Select to properties panel after a selection set is updated.



	0
	Off (0): Remain in Quick Select mode after selection set update On (1): Automatically switch to properties panel after selection set update

19.3 QSELECTINIT system variable

19.3.1 Quick Select initial

Controls whether the Quick Select panel preselects only the selected entities or all entities.

	0 to 1
	1
	0: Preselect all entities 1: Preselect only selected entities

19.4 QSELECTLIST system variable

19.4.1 Quick Select List

Controls what appears in the entity types dropdown in Quick Select panel.

	0 to 2
	0



	0: Show break down of all and selected entity types in drawing 1: Show break down of all entity types in drawing 2: Show break down of selected entity types in drawing
--	---

19.5 QTEXTMODE system variable

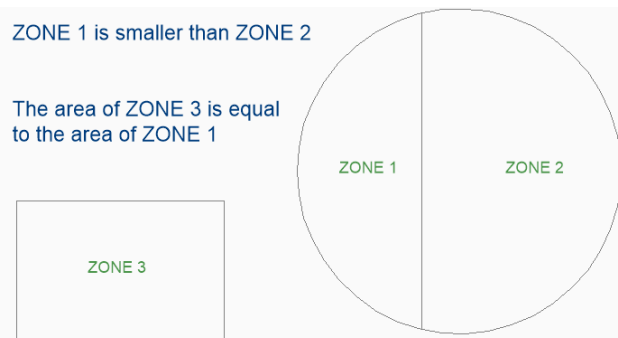
19.5.1 Quick text mode

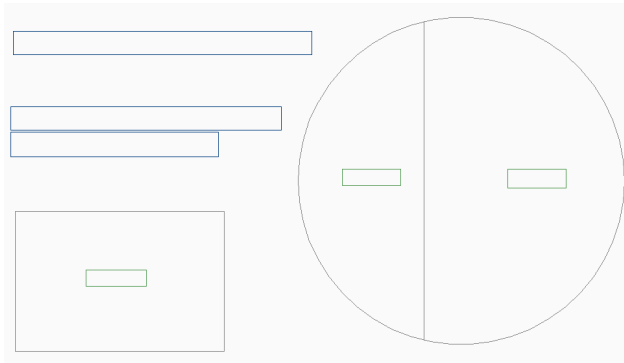
Controls how text entities are displayed.

- When On: this turns on quick text mode, rendering all text – text, mtext, attributes, dimension text, and so on—as rectangles.
- When Off (0): this turns off quick text mode, returning text to its normal display.
- This is useful when drawings contain much text, thereby slowing down the display of the drawing, but you still need to see the location of the text. The rectangles display the color of the text as well.

Note: To view changes on existing entities, perform a REGEN.

	Off (0): Don't display box in place of text On (1): Display box in place of text





19.6 QUADCOMMANDLAUNCH system variable

19.6.1 Quad default command launch

Controls how the first Quad command is activated.

The default quad command depends on which command from the quad is used last.

- When 0: hover over an entity to see the quad and click on the command button to launch the command.
- When 1: hover over an entity to see the quad and right-click on the entity to launch the command, instead of clicking on the command button first.

	0 to 1
	0
	0: Do not launch the first Quad command on right-click 1: Launch the first Quad command on right-click when the Quad is displayed

19.7 QUADDISPLAY system variable

19.7.1 Quad display

Determines when to display the Quad.

Note: When the SELECTIONPREVIEW system variable is Off, the **Display the Quad when the cursor hovers over an entity** option of the QUADDISPLAY system variable is ignored, and the Quad is not displayed.

--	--



	-15 to 15
	3
	negative: Switch off Quad 0: Do not display the Quad 1: Display the Quad when the cursor hovers over an entity 2: Display the Quad when entities are selected 4: Display the Quad on right click 8: Suppress the Quad on hover, when entities are selected

19.8 QUADEXPANDDELAY system variable

19.8.1 Quad expand delay

Controls the delay for the Quad to expand, after the cursor moves over the Quad, in milliseconds.

	160

19.9 QUADEXPANDTABDELAY system variable

19.9.1 Quad expand tab delay

Controls the delay for a Quad tab to expand, after the cursor moves over the Quad, in milliseconds.

	50

19.10 QUADGOTRSPARENT system variable

19.10.1 Quad go transparent

Controls if the Quad goes transparent when the mouse moves away from it.



	Off (0): Don't go transparent On (1): Go transparent

19.11 QUADHIDEDELAY system variable

19.11.1 Quad hide delay

Controls the delay before the Quad hides, when the mouse is inactive, in milliseconds.

Applies to the zone set in the QUADHIDEMARGIN system variable.

	350

19.12 QUADHIDEMARGIN system variable

19.12.1 Quad hide margin

Controls the width of the active margin area around the Quad.

As long as the mouse keeps moving inside this margin, the Quad will stay visible. The Quad will still gradually go transparent if QUADGOTRANSSPARENT system variable is on.

As soon as the mouse movement stops, or when the mouse is moved beyond the margin, the quad will disappear.

	50

19.13 QUADICONSIZE system variable

19.13.1 Quad icon size

Controls the Quad icon size.



	1
	0: Small icons 1: Large icons 2: Extra-large icons

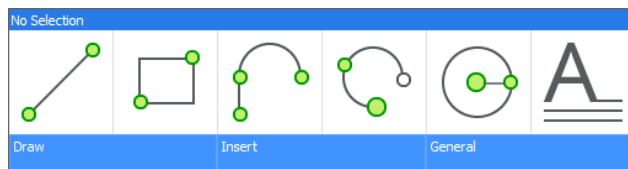
Small Icons:



Large Icons:



Extra Large Icons:



19.14 QUADICONSPACE system variable

19.14.1 Quad icon space

Controls the spacing between icons.

	0 to 2
	1



	0: Narrow 1: Normal 2: Wide
--	-----------------------------------

Narrow:



Normal:



Wide:



19.15 QUADMOSTRECENTITEMS system variable

19.15.1 Quad most recent items

Controls how many most recent items are displayed in the top bar of the Quad, remaining slots are filled by AI.

Values between 0 and 16 are accepted.

	0 to 16
	4

19.16 QUADPOPUPCORNER system variable

19.16.1 Quad popup corner

Controls where the Quad will popup relative to the current cursor position.



	0 to 2
	1
	0: Upper right 1: Middle right 2: Lower right

19.17 QUADSHOWDELAY system variable

19.17.1 Quad show delay

Controls the delay before the Quad shows, on hover, in milliseconds.

	150

19.18 QUADWIDTH system variable

19.18.1 Quad width

Controls the number of columns in the Quad.

Values between 4 and 16 are accepted.

	4 to 16
	6



20. R

20.1 R12SAVEACCURACY system variable

20.1.1 R12 Save accuracy

Controls the number of segments between spline control segments or on 90 degrees elliptical arcs when saved to R12.

	8

20.2 R12SAVEDEVIATION system variable

20.2.1 R12 Save deviation

Controls the deviation for ellipses and splines when saved to R12.

	0.0

20.3 RASTERPREVIEW system variable

20.3.1 Raster preview

Controls if preview image is saved with the drawing.

This image is displayed by file managers and other programs.

	Off (0): Don't create preview image On (1): Create preview image



20.4 RE_INIT system variable

20.4.1 Reinitialize Aliases (Read Only)

Reinitializes the digitizer, digitizer port and/or reloads PGP file (command aliases).

	0 to 21
	0
	1: Digitizer input/output port reinitialization 4: Digitizer reinitialization 16: PGP file reinitialization (reload)

20.5 REALTIMESPEEDUP system variable

20.5.1 Realtime speedup

Controls the number of mouse messages that are skipped during Pan operations.

Values between 0 and 10 are accepted.

	0 to 10
	5

20.6 REALWORLDSCALE system variable

20.6.1 Real world scale

Renders materials with units set to real-world scale.



	Off (0): Don't render real-world scale materials On (1): Render real-world scale materials
--	---

20.7 RECENTFILES system variable

20.7.1 Recent file list max count

Controls the maximum number of files shown in the **Recent Files** section in the File menu (MRU's) and the Start page.

Values between 0 and 60 are accepted.

	0 to 60
	30

20.8 RECENTPATH system variable

20.8.1 Recent path

Most recently used file path.

20.9 REDHILITE_DUCSLOCKED_FACE_ALPHA system variable

20.9.1 Face opacity

Controls the transparency of a selected face.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.



	25 to 100
	25

20.10 REDHILITE_DUCSLOCKED_FACE_COLOR system variable

20.10.1 Face color

Controls the highlight color of a Dynamic UCS locked face.

	#007AFF

20.11 REDHILITE_HIDDENEDGE_ALPHA system variable

20.11.1 Edge opacity

Controls the transparency hidden edges, when a whole entity is selected, if the REDHILITEFULL_EDGE_SHOWHIDDEN system variable is on (1).

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

	0 to 100
	50

20.12 REDHILITE_HIDDENEDGE_COLOR system variable

20.12.1 Hidden edge color

Controls the color of hidden edges, when a whole entity is selected, if the REDHILITEFULL_EDGE_SHOWHIDDEN system variable is on (1).

--	--



	White (Settings dialog) #FFFFFF (Command line)

20.13 REDHILITEFULL_EDGE_ALPHA system variable

20.13.1 Edge opacity

Controls the transparency of an edge, when a whole entity is selected.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

	0 to 100
	100

20.14 REDHILITEFULL_EDGE_COLOR system variable

20.14.1 Edge color

Controls the color of an edge, when a whole entity is selected.

	0, 122, 255 (Settings dialog) #007AFF (Command line)

20.15 REDHILITEFULL_EDGE_SHOWHIDDEN system variable

20.15.1 Hidden edges

Displays hidden edges, when a whole entity is selected.

--	--



	Off (0): Don't show hidden edges On (1): Show hidden edges

20.16 REDHILITEFULL_EDGE_SMOOTHING system variable

20.16.1 Edge smoothing

Controls if smooth (anti-aliased) lines are shown, when a whole entity is selected.

	Off (0): Smooth edges off On (1): Smooth edges on

20.17 REDHILITEFULL_EDGE_THICKNESS system variable

20.17.1 Edge thickness

Controls the thickness of an edge, when a whole entity is selected.

Values between 0.0 and 20.0 are accepted.

	0.0 to 20.0
	2.0

20.18 REDHILITEFULL_FACE_ALPHA system variable

20.18.1 Face transparency

Controls the transparency of a face when selected.



Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 means fully opaque.

	0 to 100
	10

20.19 REDHILITEFULL_FACE_COLOR system variable

20.19.1 Face color

Controls the color of a face, when a whole entity is selected.

	0, 122, 255 (Settings dialog) #007AFF (Command line)

20.20 REDHILITEPARTIAL_SELECTEDEDGE_ALPHA system variable

20.20.1 Edge opacity

Controls the transparency of an edge, when selected.

Values between 0 and 100 are accepted.

- 0 is fully transparent.
- 100 is fully opaque.

	0 to 100
	100



20.21 REDHILITEPARTIAL_SELECTEDEDGE_COLOR system variable

20.21.1 Edge color

Controls the color of an edge, when selected.

	255, 128, 0 (Settings dialog) #FF8000 (Command line)

20.22 REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable

20.22.1 Glow

Toggles a glow effect on an edge, when selected.

	Off (0): Don't show glow On (1): Show glow

20.23 REDHILITEPARTIAL_SELECTEDEDGE_SMOOTHING system variable

20.23.1 Edge smoothing

Displays smooth (anti-aliased) lines when, when selected.

	Off (0): Smooth edges off On (1): Smooth edges on



20.24 REDHILITEPARTIAL_SELECTEDEDGE_THICKNESS system variable

20.24.1 Edge thickness

Controls the thickness of an edge, when selected, in pixels.

Values between 0.0 and 20.0 are accepted.

	0.0 to 20.0
	2.0

20.25 REDHILITEPARTIAL_SELECTEDEDGE_GLOW_ALPHA system variable

20.25.1 Glow transparency

Controls the transparency of the glow. See also the REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

	0 to 100
	75

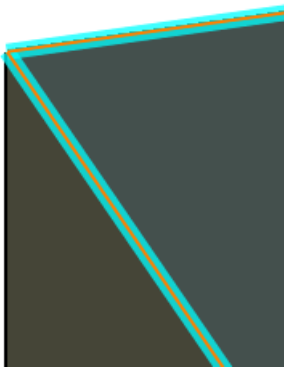
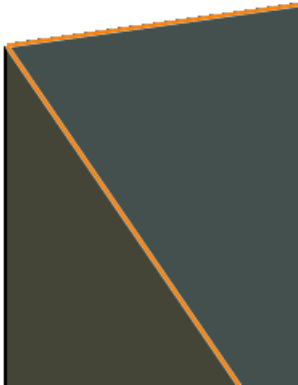
20.26 REDHILITEPARTIAL_SELECTEDEDGE_GLOW_COLOR system variable

20.26.1 Glow color

Controls the color of the glow effect on an edge, when selected. See also the REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable.



	White (Settings dialog) #FFFFFF (Command line)
--	---



20.27 REDHILITEPARTIAL_SELECTEDEDGEGLow_SMOOTHING system variable

20.27.1 Glow smoothing

Displays smooth (anti-aliased) lines for the glow effect on an edge, when selected. See also the REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable.

	Off (0): Smooth glow lines off On (1): Smooth glow lines on



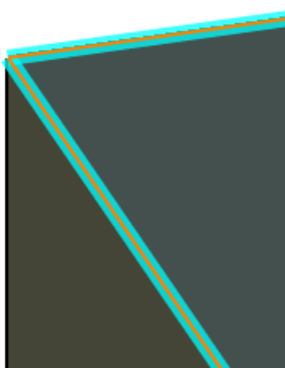
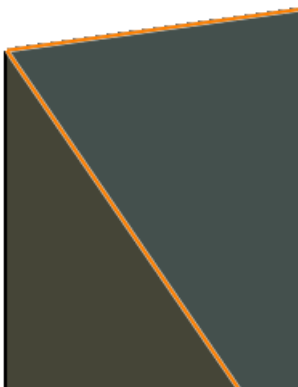
20.28 REDHILITEPARTIAL_SELECTEDEDGE_GLOW_THICKNESS system variable

20.28.1 Glow thickness

Controls the thickness of the glow effect on an edge, when selected, in pixels. See also the REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable.

Values between 0.0 and 20.0 are accepted.

	0.0 to 20.0
	3.0





20.29 REDHILITEPARTIAL_SELECTEDFACE_ALPHA system variable

20.29.1 Face opacity

Controls the transparency of a face, when selected.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

	0 to 100
	10

20.30 REDHILITEPARTIAL_SELECTEDFACE_COLOR system variable

20.30.1 Face color

Controls the color of a face, when selected.

	#007AFF

20.31 REDHILITEPARTIAL_UNSELECTEDEGE_SHOWHIDDEN system variable

20.31.1 Hidden edges

Controls if hidden edges are be displayed on selection.

	Off (0): Don't show hidden edges On (1): Show hidden edges



20.32 REDSDKLINESMOOTHING system variable

20.32.1 Line smoothing

Enables line smoothing for 3D rendering modes.

Note: It has no effect if anti-aliasing is on.

	Off (0): Line smoothing off On (1): Line smoothing on

20.33 REDUCELENGTHTYPE system variable

20.33.1 Reduce Length Type

Sets default flow fitting reduce length type.

	0
	(0): Profile Width Ratio (1): Absolute Value

20.34 REDUCELENGTHVALUE system variable

20.34.1 Reduce Length Value

Sets default flow fitting reduce length value.

	0.0 to 1e6
	0.5



20.35 REFEDITLOCKNOTINWORKSET system variable

20.35.1 Refedit lock

Locks entities that are not in the XRef, when in Reference Edit mode (REFEDIT).

	Off (0): Do not lock entities not in the chosen XRef On (1): Lock entities not in the chosen XRef

20.36 REFEDITNAME system variable

20.36.1 Refedit name (Read Only)

The name of the XRef currently being edited.

20.37 REFPATHTYPE system variable

20.37.1 Default path type of reference files

Controls if reference files are attached using full, relative or no paths, when they are attached for the first time.

	1
	0: No path 1: Relative path 2: Full path

Note: Reference files that are already attached are not affected.



20.38 REGENMODE system variable

20.38.1 Regeneration mode

Toggles automatic regeneration on/off. See also the REGENAUTO command.

BricsCAD will regenerate the display automatically when REGENMODE is On, but in a few cases a forced regeneration of the drawing might be necessary. This is done by the REGEN command.

	Off (0): Turn off REGENAUTO command On (1): Turn on REGENAUTO command

20.39 REGEXPAND system variable

20.39.1 Registry paths expanding type

Controls the types of paths stored to a registry (absolute or expandable).

Note: A re-start is required.

	Off (0): Don't store paths in a portable format using environment variables On (1): Store paths in a portable format using environment variables

20.40 REMEMBERFOLDERS system variable

20.40.1 Remember folders

The file path used for the standard file selection dialog boxes.

- When 0: When you start the program by double-clicking a shortcut icon, if a Start In path is specified for the icon, that path is used as the default for all standard file selection dialog boxes.
- When 1: The default path in each standard file selection dialog box is the last path used in that dialog box. The Start In folder specified for the shortcut icon is not used.



	0 to 1
	1
	0: Start in path - see the DRAWINGPATH and BLOCKSPATH system variables 1: Use most recent path

20.41 RENDERCOMPOSITIONMATERIAL system variable

20.41.1 Render Composition Material

Renders the materials of compositions and their plies.

	0-1 (On-Off)
	0
	0: Do not render the materials of compositions and their plies 1: Render the materials of compositions and their plies

Note: The RENDERCOMPOSITIONMATERIAL system variable is only available for **BIM** and **Ultimate** license levels.

20.42 RENDERMATERIALDOWNLOAD system variable

20.42.1 Download missing resources for render materials

Automatically downloads missing render materials resources.



	Off (0): Don't download missing resources for render materials On (1): Download missing resources for render materials
--	---

20.43 RENDERMATERIALSPATH system variable

20.43.1 Render materials directory path

The file path(s) for user created render material files.

Separate file paths with semicolons (;).

20.44 RENDERUSINGHARDWARE system variable

20.44.1 Render using hardware

Controls if hardware is used to render. Switch this off if there are problems caused by the graphics card or driver.

A restart may be required.

	0 to 3
	1
	0: Use software only (slower) 1: Prefer hardware (faster) 2: Prefer software (only for testing purposes) 3: Use hardware only (only for testing purposes)

20.45 REPORTPANELMODE system variable

20.45.1 Report panel mode

Controls the look of the **Report** panel.

--	--



	0 to 2
	2
	0: Classic - Report Panel has a classic appearance as a dockable window 1: Modern - Report Panel is a transparent window 2: Hidden - Report panel is a transparent window hidden in the Status bar

20.46 RESTORECONNECTIONS system variable

20.46.1 Restore Connections

Restores structural connections after commands.

	1
	Off (0): Don't Restore Connections On (1): Restore Connections

20.47 RESTORELOSTFOCUS system variable

20.47.1 Restore lost focus (Linux)

Controls lost focus recovery. Dependent on the window manager, focus may be lost by when short-lived windows like Quad and rollover tips are used.

	Off (0): Do not try to recover from focus loss On (1): Attempt automatic recovery from focus loss

20.48 RETAINEDGRAPHICS system variable

20.48.1 Retained Graphics

Toggles the use of retained graphics.



Retained graphics can improve the performance of certain operations, for example, rotating and panning the camera.

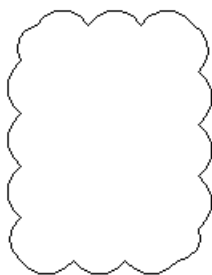
	1
	Off (0): Don't use retained graphics On (1): Use retained graphics

20.49 REVCLLOUDARCSTYLE system variable

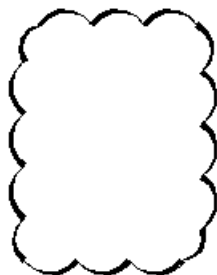
20.49.1 Revision cloud default arc style

Controls the default arc style for revision clouds.

	0
	0: Normal 1: Calligraphy



Normal



Calligraphy

20.50 REVCLLOUDCREATEMODE system variable

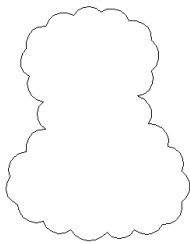
20.50.1 Revision cloud creation mode

Controls the default revision cloud creation mode.

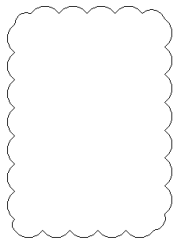
--	--



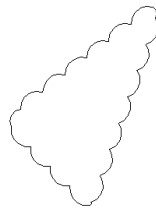
	0 to 2
	1
	0: Freehand 1: Rectangular 2: Polygonal



Freehand



Rectangular



Polygonal

20.51 REVCLLOUDGRIPS system variable

20.51.1 Revision cloud grips

Uses custom grips for revision clouds.

	Off (0): Displays grips on every arc segment On (1): Displays only the most relevant grips

20.52 REVCLLOUDMAXARCLENGTH system variable

20.52.1 Revision cloud default maximum arc length

Controls the default maximum arc length for revision clouds. The maximum arc length is multiplied by the value of the DIMSCALE system variable.



	0.375
--	-------

20.53 REVCLLOUDMINARCLENGTH system variable

20.53.1 Revision cloud default minimum arc length

Controls the default minimum arc length for revision clouds. The minimum arc length is multiplied by the value of the DIMSCALE system variable.

	0.375

20.54 RHINOVERSION system variable

20.54.1 Rhino Export version

The 3DM version used to export to Rhino.

	0 to 60
	0
	0: Last available 2: Rhino 2 3: Rhino 3 4: Rhino 4 50: Rhino 5 60: Rhino 6

20.55 RIBBONDOCKEDHEIGHT system variable

20.55.1 Ribbon docked height

Controls the height of the Ribbon.

Values between 0 and 500 are accepted. Values lower than the current Ribbon content will be disregarded.

A value of 0 means Automatic height.



Note: Values below 124 are effective only in certain circumstances.

	0 to 500
	0

20.56 RIBBONPANELMARGIN system variable

20.56.1 Panel margin

The size, in pixels, of the blank space at the Ribbon panel edges.

	0 to 50
	8

20.57 RIBBONSETTINGSENABLED system variable

20.57.1 Ribbon interface settings control on/off

Toggles the display of the Interface Settings control in the ribbon on/off.

Note: A restart may be required.

	1
	0: Do not display the Interface Settings control in the ribbon 1: Display the Interface Settings control in the ribbon



20.58 RIBBONSTATE system variable

20.58.1 Ribbon state (Read Only)

Indicates if the Ribbon is on.

The ribbon can be closed with the RIBBONCLOSE command and can be displayed with the RIBBON command.

	Off (0): Don't show ribbon bar On (1): Show ribbon bar

20.59 ROAMABLEROOTPREFIX system variable

20.59.1 Roamable root prefix (Read Only)

The path of the root folder where roamable files for the current user such as menus and plotstyles, were installed.

20.60 ROLLOVEROPACITY system variable

20.60.1 Rollover opacity

Controls the opacity of the Quad.

Values between 10 and 100 are accepted.

- A value of 10 means maximum transparency.
- A value of 100 means full opacity.

	10 to 100



	100
--	-----

20.61 ROLLOVERPARAMS system variable

20.61.1 Rollover parameters

Show block parameters in the rollover tips.

	Off (0): Don't show block parameters On (1): Show block parameters

20.62 ROLLOVERSELECTIONSET system variable

20.62.1 Rollover selection set

Controls the behavior of properties in the rollover tips, when mixed entities are selected. Setting the value to **Properties shared by all selected entities** decreases performance on large selections.

	0 to 2
	2
	0: No properties 1: General properties 2: Properties shared by all selected entities

20.63 ROLLOVERTIPS system variable

20.63.1 Rollover tips

Toggles the display of entity properties in the Quad, on hover.

Note: When the SELECTIONPREVIEW system variable is Off, the ROLLOVERTIPS system variable is ignored, and entity properties are not displayed when you hover the cursor over entities.



	Off (0): Don't show properties on hover On (1): Show properties on hover

20.64 RTDISPLAY system variable

20.64.1 Realtime display

Controls how raster images and OLE entities display during ZOOM or PAN action.

	0 to 1
	0
	0: Display raster images and OLE content 1: Display outlines only

20.65 RTISOLATESELECTION system variable

20.65.1 Realtime selection isolation

Controls if the active selection is automatically isolated during realtime rotation.

	Off (0): Disable automatic isolation of active selection during realtime rotation On (1): Enable automatic isolation of active selection during realtime rotation



20.66 RTROTATIONSPEEDFACTOR system variable

20.66.1 Realtime Rotation Speed Factor

Controls the rotation speed for the Look and Walk tools (RTLOOK and RTWALK commands).

Values between 0.01 and 100.00 are accepted.

	0.01 to 100.
	1

20.67 RUBBERBANDCOLOR system variable

20.67.1 Rubber band color

Controls the color of the rubber band line, used for temporary snap tracking.

	1 to 255
	40

20.68 RUBBERBANDSTYLE system variable

20.68.1 Rubber band dashed style

Enables a dashed linestyle for the rubber band line, used for temporary snap tracking.

	Off (0): Dashed style off On (1): Dashed style on



20.69 RUBBERSHEET (for OS X) system variable

20.69.1 Rubbersheet Touchpad

Enable simultaneous zoom/rotate/pan with dual finger movements on the touchpad.

	Off (0): Dual finger touch simultaneously zooms/rotates/pans off On (1): Dual finger touch simultaneously zooms/rotates/pans on

20.70 RUBBERSHEETSENSIBILITY (FOR OS X) system variable

20.70.1 Rubbersheet gesture activation sensibility

Controls the sensitivity of gestures.

Values of 0 to 10 are accepted.

	0 to 10
	5

20.71 RULERDISPLAY system variable

20.71.1 Ruler display

Shows a ruler during Manipulator operations.

	Off (0): Do not display ruler On (1): Display ruler



20.72 RULERTEXTCOLOR system variable

20.72.1 Ruler Text Color

Controls the text color of the Manipulator ruler.

Applies only if the RULERDISPLAY system variable is on (1).

	#c8c8c8
	RGB color code Hex color code Index color code

A new value for the variable can be entered in the Command line.

20.73 RUNASLEVEL system variable

20.73.1 Run as license level

Runs the program in a different (lower) level than the licensed level. If the licensed level is lower than RUNASLEVEL, RUNASLEVEL is ignored.

Note: A restart is required.

	0 to 5
	5
	0: Lite 1: Pro 2: (Obsolete) 3: BIM 4: Mechanical 5: Ultimate



20.74 RVTRFALEVELOFDETAIL system variable

20.74.1 Level of detail

Controls the level of detail (LOD) for RVT and RFA import.

	1 to 3
	3
	1: Coarse 2: Medium 3: Fine

20.75 RVTVALIDATEBREP system variable

20.75.1 Validate BREP geometry

Validate BREP geometry during an RVT import.

Warning: Disabling this may import more geometry without no check on integrity.

	1
	0: Off (Disable) 1: ON (Enable)



21. S

21.1 SAFEMODE system variable

21.1.1 Safe mode (Read Only)

Indicates if executable code can be loaded and executed in the current session. Starting in a clean environment can help to eliminate potential causes of a crash.

	Off (0): Allows executable code run On (1): Does not allow executable code to run

21.2 SAVECHANGETOLAYOUT system variable

21.2.1 Save changes to layout

Saves changes to a layout from the **Print** dialog box.

	0 to 1
	Off (0): Don't save changes to layout On (1): Save changes to layout

21.3 SAVEFIDELITY system variable

21.3.1 Save fidelity

Controls if this drawing is saved with visual fidelity.



	0 to 1
	Off (0): Don't save with visual fidelity On (1): Save with visual fidelity

21.4 SAVEFILE system variable

21.4.1 Save file name (Read Only)

The current automatic save file name.

21.5 SAVEFILEPATH system variable

21.5.1 Save file path

The file path where automatic saves and temporary files are stored.

21.6 SAVEFORMAT system variable

21.6.1 Save format

Controls the default save format.

	1 to 39
	1



	1: DWG 2018 2: DXF 2018 3: Binary DXF 2018 4: DWG 2013 5: DXF 2013 6: Binary DXF 2013 7: DWG 2010 8: DXF 2010 9: Binary DXF 2010 10: DWG 2007 11: DXF 2007 12: Binary DXF 2007 13: DWG 2004 14: DXF 2004 15: Binary DXF 2004 16: DWG 2000 17: DXF 2000 18: Binary DXF 2000 19: DWG R14 20: DXF R14 21: Binary DXF R14 22: DWG R13 23: DXF R13 24: Binary DXF R13 25: DWG R11/R12 26: DXF R11/R12 27: Binary DXF R11/R12 28: DXF R10 29: Binary DXF R10 30: DXF R9
--	--

21.7 SAVELAYERSNAPSHOT system variable

21.7.1 Save Layer Snapshot with view

Saves the current layer settings and uses them for new views.



21.8 SAVENAME system variable

21.8.1 Saved drawing name (Read Only)

The file name and folder path of the current drawing.

21.9 SAVEONDOCSWITCH system variable

21.9.1 Save on document switch

Saves the drawing automatically when another drawing tab is activated.

	Off (0): Don't save on doc switch On (1): Save on doc switch

21.10 SAVEROUNDTRIP system variable

21.10.1 Save roundtrip

Allows information, in a database file, not supported in the drawing to be saved.

21.11 SAVETIME system variable

21.11.1 Save time interval

Controls the interval for automatic saves, in minutes.

Values between 0 and 240 are accepted. If set to zero, automatic saves are turned off.



	0 to 240
	20
	0: Turn off automatic saving 1 - 240: Saves the drawing at intervals specified (in minutes)

21.12 SCREENBOXES system variable

21.12.1 Screen menu boxes (Read Only)

Contains the number of boxes displayed in the screen menu. If the screen menu is turned off, the value is zero.

21.13 SCREENMODE system variable

21.13.1 Screen mode (Read Only)

Stores the graphic/text state of the program display.

	0 to 3
	0: Text screen is displayed 1: Drawing area is displayed 2: Dual-screen display is configured

21.14 SCREENSIZE system variable

21.14.1 Screen size (Read Only)

The size of the current viewport, in pixels (width x height).



21.15 SCRLHIST system variable

21.15.1 Scroll history

Controls the number of lines stored in the history of the Command line.

Values between 0 and 256 are accepted.

	0 or greater
	256

21.16 SDI system variable

21.16.1 Single-document interface (Windows)

Controls if a drawing is opened in a new application instance or an existing instance. Partially implemented: SDI variable controls double-click behavior for drawings, but it is still possible to open multiple documents in each application instance.

Note: SDI setting 2 and 3 are not saved. If SDI is set to 3, the program switches it back to 1 when the application that doesn't support multiple drawings is unloaded.

	0 to 3
	0



	0: Multiple-drawing interface 1: Single-drawing interface 2: (Read-only) Multiple-drawing interface is disabled because an application has been loaded that does not support multiple drawings 3: (Read-only) Multiple-drawing interface is disabled because the user has set SDI to 1 and the program has loaded an application that does not support multiple drawings. (SDI was set to 1 before the application was loaded)
--	---

21.17 SECTIONOFFSETSTEP system variable

21.17.1 Section plane offset step

Step size used for increments of the section plane offset property.

When set to a negative value, determines the step size automatically based on the section plane properties.

	-1

21.18 SECTIONPLANEVISIBILITY system variable

21.18.1 Section plane visibility

Controls the visibility of section planes.

When set to 0, section planes are displayed as lines. When set to 1, they are displayed according to their type.

	1
	0: Show section planes as lines 1: Show section planes according to their type



21.19 SECTIONRESULTINTERVAL system variable

21.19.1 Section result interval

The distance between generated section blocks in model space.

	400.0

Note:

- If INSUNITS=inches (1), the default value of SECTIONRESULTINTERVAL is 400.0.
- If INSUNITS=millimeters (4), the default value of SECTIONRESULTINTERVAL is 10000.0.
- If INSUNITS=centimeters (5), the default value of SECTIONRESULTINTERVAL is 1000.0.
- If INSUNITS=meters (6), the default value of SECTIONRESULTINTERVAL is 10.0.

21.20 SECTIONSCALE system variable

21.20.1 Section scale

The default scale used to generate sections.

Values between 0.000001 and 1000000.0 are accepted.

	0.02

21.21 SECTIONSETTINGSSEARCHPATH system variable

21.21.1 Section settings search path

The file path for BIM section styles, BIM tag styles and drawing customizations.

Separate paths with semicolons (;).



21.22 SECTIONSHEETSETTEMPLATEIMPERIAL system variable

21.22.1 Section sheet set template imperial

The file path for the Sheet Set file (DST) used as template for a new section. Applies only when MEASUREMENT system variable is 0 (imperial).

The default file is BIM-section-imperial.dst, which can be found in the {SheetSetTemplatePath} folder.

	BIM-section-imperial.dst

Note: The SECTIONSHEETSETTEMPLATEIMPERIAL system variable is only available for **BIM** and **Ultimate** license levels.

21.23 SECTIONSHEETSETTEMPLATEMETRIC system variable

21.23.1 Section sheet set template metric

The file path for Sheet Set file (dst), used as template for a new section. Applies only when the MEASUREMENT system variable is 1 (metric).

The default file is BIM-section-metric.dst, which can be found in the {SheetSetTemplatePath} folder.

	BIM-section-metric.dst

Note: The SECTIONSHEETSETTEMPLATEMETRIC system variable is only available for **BIM** and **Ultimate** license levels.

21.24 SECURELOAD system variable

21.24.1 Executable file security policy (Read Only)

The security policy used to load executable files.



	0 to 2
	0
	0: No security policy 1: Warn if loading from untrusted location 2: Load only from trusted locations

21.25 SELECTIONANNODISPLAY system variable

21.25.1 Show all annotation scales on selection

Displays an annotated entity, in all scales, on selection.

	Off (0): Disable annotation scales display On (1): Enable annotation scales display

21.26 SELECTIONAREA system variable

21.26.1 Selection area

Controls the display of selection area effects.

	Off (0): Don't show selection area effects On (1): Show selection area effects

21.27 SELECTIONAREAOPACITY system variable

21.27.1 Selection area opacity

Controls the transparency of the selection area. Applies only when SELECTIONAREA setting is on.



Values between 0 and 100 are accepted.

- A value of zero means Fully Transparent.
- A value of 100 means fully opaque.

	0 to 100
	25

21.28 SELECTIONCYCLING system variable

21.28.1 Selection cycling

Controls the display options associated with overlapping objects and selection cycling.

Note: When the SELECTIONPREVIEW system variable is Off, the SELECTIONCYCLING system variable is ignored, and no badge or selection dialog box is displayed when you hover the cursor over entities.

	-2 to 2
	2
	-2: Selection cycling is turned off, but the setting is stored (toggled value 2) -1: Selection cycling is turned off, but the setting is stored (toggled value 1) 0: The display options are turned off 1: A badge displays when you hover over objects that overlap 2: Both a badge and the Selection dialog box displays

Note:

- Use the keyboard shortcut **Ctrl + W** to toggle on/off the current setting of the SELECTIONCYCLING system variable.
- The QUADHIDEDELAY system variable controls the hide delay time of the selection dialog box.



21.29 SELECTIONMODES system variable

21.29.1 Selection modes

Controls what is selected by default: whole entities, subentities or boundaries.

Use the TAB key, on hover, to cycle through the options.

	0 to 15
	0
	1: Select edges 2: Select faces 4: Select detected boundaries 8: Select vertices

21.30 SELECTIONPREVIEW system variable

21.30.1 Selection preview display

Controls the rules used to highlight entities when the pickbox cursor hovers over an entity.

Note: When the SELECTIONPREVIEW system variable is Off:

- The **Display the Quad when the cursor hovers on an entity** option of the QUADDISPLAY system variable is ignored and the Quad is not displayed.
- The ROLLOVERTIPS system variable is ignored and entity properties are not displayed (the Quad is not displayed).
- The SELECTIONCYCLING system variable is ignored and no badge or selection dialog box is displayed (the Quad is not displayed).

	0 to 3
	3



	0: Do not display selection preview. 1: When no commands are active 2: When a command prompts for entity selection
--	--

21.31 SELECTSIMILARMODE system variable

21.31.1 Match options for SELECTSIMILAR

Controls which properties must match for the SELECTSIMILAR command. For this command to operate as intended, at least one property must be turned on. When all properties are turned off, this command selects only the entity(ies) you pick at the **Select entities** prompt.

	0 to 255
	130
	0: Entity type 1: Color 2: Layer 4: Linetype 8: Linetype scale 16: Lineweight 32: Plot style 64: Entity style 128: Name

21.32 SETBYLAYERMODE system variable

21.32.1 Set by layer mode

Controls which layer properties are applied with the SETBYLAYER command.

	0 to 255
	255



	0: None 1: Color 2: Linetype 4: Lineweight 8: Material 16: Plot style 32: ByBlock 64: Blocks 128: Transparency
--	--

21.33 SHADEGE system variable

21.33.1 Shading edges

Controls how faces and edges display in rendered views.

	0 to 3
	3
	0: Faces shaded, edges not highlighted 1: Faces shaded, edges drawn in background color 2: Faces not filled, edges in entity color 3: Faces in entity color, edges in background color

21.34 SHADEDIF system variable

21.34.1 Shading diffusion

Controls the ratio of diffuse reflective light to ambient light as a percentage of diffuse reflective light when the SHADEGE system variable is set to 0 or 1.

	0 to 100
	70



21.35 SHEETNUMBERLEADINGZEROES system variable

21.35.1 Sheet number leading zeroes

Controls the number of zeros that prefix new sheet 'Number' values.

	1 to 8
	1
	1: 1 (1, 2, 3, ...) 2: 2 (01, 02, 03, ...) 3: 3 (001, 002, 003, ...) 4: 4 (0001, 0002, 0003, ...) 5: 5 (00001, 00002, 00003, ...) 6: 6 (000001, 000002, 000003, ...) 7: 7 (0000001, 0000002, 0000003, ...) 8: 8 (00000001, 00000002, 00000003, ...)

21.36 SHEETSETAUTOBACKUP system variable

21.36.1 Sheet set automatic backup

Creates a backup file when a Sheet Set file is opened.

The backup files must have the same name as the Sheet Set file but with a 'ds\$' extension.

	Off (0): Don't create backup files On (1): Create backup files

21.37 SHEETSETTEMPLATEPATH system variable

21.37.1 Sheet Set template path

The file path for the Sheet Set Templates folder.

The default path is: \Users\%username%\AppData\Local\Bricsys\BricsCAD\x64\en_US\Templates.



21.38 SHORTCUTMENU system variable

21.38.1 Shortcut menus

Controls the status of the DEFAULT, EDIT and COMMAND (right-click) context menus.

	0 to 63
	3
	0: Disable all Default, Edit, and Command mode shortcut menus 1: Enable Default mode shortcut menus 2: Enable Edit mode shortcut menus 4: Enable Command mode shortcut menus (available whenever a command is active) 8: Enable Command mode shortcut menus only when command options are currently available from the Command line 16: Enable a shortcut menu when the right mouse is held down 32: Repeat command with short right click when entities are selected and Quad is not shown

21.39 SHORTCUTMENUDURATION system variable

21.39.1 Shortcut menu duration

Controls the delay between right-click and the appearance of the (right-click) context menu, in milliseconds.

Values between 100 and 10,000 are accepted.

	100 to 10000



	250
--	-----

21.40 SHOWBMINSERTWARNINGDIALOG system variable

21.40.1 BMINSERT warning

Controls if a warning dialog box is shown when using the BMINSERT or -BMINSERT commands.

	Off (0): Do not show warning dialog On (1): Show warning dialog

21.41 SHOWDOCTABS system variable

21.41.1 Tabs visibility

Toggles tabs on/off, in the documents tab.

You can make the drawing area larger by hiding the document tabs from the user interface.

	Off (0): Don't make tabs visible On (1): Make tabs visible

21.42 SHOWFULLPATHINTITLE system variable

21.42.1 Display full path in title

Displays the full path of a drawing in the title bar. If off, displays only the file name.



--	--

21.43 SHOWIDSPROPERTIESONLY system variable

21.43.1 Show IDS Properties Only

When an IDS-XML file has been imported, this setting controls whether only the properties required by the IDS should be shown in the **Properties** panel, or all properties should be shown.

	Off (0): Show all properties On (1): Show only the properties required by the IDS

21.44 SHOWLAYERUSAGE system variable

21.44.1 Layer Usage

Shows information about layer usage in the **Layers** panel.

In the column **Current**, the **Layer Usage** icons indicate when viewport settings for the current layout and paper space viewport are different from model space settings:

 Current layer with viewport overrides.

 Layer with viewport overrides.

 Empty layer with viewport overrides.

	Off (0): Do not display Layer Usage On (1): Display Layer Usage



21.45 SHOWSCROLLBUTTONS system variable

21.45.1 Scroll buttons (Mac & Linux)

Displays left and right scroll buttons.

	Off (0): Don't show scroll buttons On (1): Show scroll buttons

21.46 SHOWTABCLOSEBUTTON system variable

21.46.1 Close button on tabs (Mac & Linux)

Toggles the close button on the tab bars on/off, in the documents tab.

	Off (0): Don't show close button on tabs On (1): Show close button on tabs

21.47 SHOWTABCLOSEBUTTONACTIVE system variable

21.47.1 Close button on active tab (Mac & Linux)

Toggles the close button on the active tab only on/off, in the documents tab.

	Off (0): Don't show close button on the active tab only On (1): Show close button on the active tab only



21.48 SHOWTABCLOSEBUTTONALL system variable

21.48.1 Close button on all tabs (Mac & Linux)

Toggles the close button on all tabs on/off, in the documents tab.

	Off (0): Don't show close button on all tabs On (1): Show close button on all tabs

21.49 SHOWWINDOWLISTBUTTON system variable

21.49.1 Window list button (Mac & Linux)

Shows a drop-down list of windows.

	Off (0): Don't show window list button On (1): Show window list button

21.50 SHPNAME system variable

21.50.1 Shape name

The default shape name according to naming conventions.

'.' means no default.

Note: Shapes are an early version of blocks that were efficient, but difficult to code. Shapes are rarely used anymore.



21.51 SIGWARN system variable

21.51.1 Signature warning

Controls the Signature dialog behavior, when a drawing with a signature is opened.

	Off (0): Displayed only if the drawing has an invalid signature On (1): Displayed if a drawing has a signature

21.52 SINGLETONMODE system variable

21.52.1 Singleton mode

Switch to control whether one or more instances of can run simultaneously.

- When set to Off, you can launch two or more copies of at the same time.
- When set to On, only a single instance of runs if the profile name and current workspace name are the same, and the background instance is responsive, with no command or modal dialog active.

	Off (0): Singleton mode off On (1): Singleton mode on

21.53 SITELOCATIONVISIBILITY system variable

21.53.1 Site location marker visibility

Controls the visibility of the Site location marker.

	1



	OFF (0): Does not display the Site location marker in the drawing ON (1): Displays the Site location marker in the drawing
--	---

21.54 SKETCHFEATURECOPYMODE system variable

21.54.1 Sketch feature copy mode

Controls how sketch features will be copied.

If ON, copies of sketch features will be independent of their source (new blocks of the sketches/paths/guide curves/etc. will be created).

	0 to 1
	1
	0: Copies of sketch features share their sketches (paths, guide curves, etc.)with their source. 1: Copies of sketch features have new sketches (paths, guide curves, etc.). The copies do not have a link to their source.

21.55 SKETCHINC system variable

21.55.1 Sketch increment

The length of segments created with the SKETCH command, in drawings units.

	1.0

21.56 SKPOLY system variable

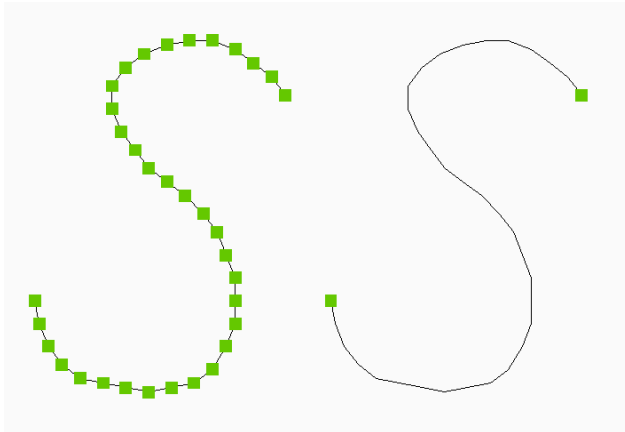
21.56.1 Sketch poly

Controls the entity type created with the SKETCH command.

--	--



	0
	Off (0): Generate lines On (1): Generate polylines



21.57 SKYSTATUS system variable

21.57.1 Sky status

Controls if sky illumination is computed at render time (Not yet supported).

	0 to 2
	0
	0: No sky 1: Sky background 2: Sky background and illumination

21.58 SLICETHICKNESSSTEP system variable

21.58.1 Section plane slice thickness step

Step size used for increments of the section plane slice thickness property.



When set to a negative value, determines the step size automatically based on the section plane properties.

	-1

21.59 SMASSEMBLYEXPORTMODE system variable

21.59.1 SmAssemblyExport mode

Controls how data is exported by the SMASSEMBLYEXPORT command.

	0: Do not change external components 1: Keep recognized features on sheet metal/poor sheet metal parts

21.60 SMASSEMBLYEXPORTREPORTPATHTYPE system variable

21.60.1 Report file path type

Controls whether absolute or relative file paths are used in the reports generated by the SMASSEMBLYEXPORT command.

	0 to 1
	0
	0: Relative paths 1: Absolute paths



21.61 SMASSEMBLYEXPORTSOLIDTYPESINREPORTS system variable

21.61.1 Solid types in reports

Controls the types of solids present in command reports for the SMASSEMBLYEXPORT command. Sheet metal and poor sheet metal solids are always present in reports.

	0 to 15
	1
	1: Non sheet metal solids 2: Standard part component solids 4: Recognize hollow linear extruded solids and treat them as non-sheet metal 8: Recognize circular tube linear extruded solids and treat them as non-sheet metal

21.62 SMATTRIBUTESLAYERCOLOR system variable

21.62.1 Color of the attributes layer

Controls the color of the 'Attributes' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	7

21.63 SMATTRIBUTESLAYERTEXTHEIGHT system variable

21.63.1 Height of the text

Controls the text height of the 'Attributes' layer, created by the SMUNFOLD and SMEXPORT2D commands.



	0.01
--	------

21.64 SMATTRIBUTESLAYERTEXTHEIGHTTYPE system variable

21.64.1 Type of the text height

Controls the text height type for the 'Attributes' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	0 to 1
	0
	0: Bounding box ratio 1: Absolute value

21.65 SMBENDANNOTATIONSLAYERCOLOR system variable

21.65.1 Color of the bend annotations text layer

Controls the color of the 'Bend Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	5

21.66 SMBENDANNOTATIONSLAYERTEXTHEIGHT system variable

21.66.1 Height of the text

Controls the text height of the 'Bend Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.

--	--



	0.01

21.67 SMBENDANNOTATIONSLAYERTEXTHEIGHTTYPE system variable

21.67.1 Type of the text height

Controls the text height type for the 'Bend Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	0 to 1
	0
	0: Bounding box ratio 1: Absolute value

21.68 SMBENDLINESDOWNLAYERCOLOR system variable

21.68.1 Color of the bend down lines layer

Controls the color of the 'Bends Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	1

21.69 SMBENDLINESDOWNLAYERLINETYPE system variable

21.69.1 Linetype of the bend down lines layer

Controls the linetype of the 'Bends Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

--	--



	CONTINUOUS

21.70 SMBENDLINESDOWNLAYERLINEWEIGHT system variable

21.70.1 Lineweight of the bend down layer

Controls the lineweight of the 'Bends Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

	-3 to 211
	-3

21.71 SMBENDLINESUPLAYERCOLOR system variable

21.71.1 Color of the bend up lines layer

Controls the line color of the 'Bends Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	1

21.72 SMBENDLINESUPLAYERLINETYPE system variable

21.72.1 Linetype of the bend up lines layer

Controls the linetype of the 'Bends Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.



	CONTINUOUS

21.73 SMBENDLINESUPLAYERLINEWEIGHT system variable

21.73.1 Lineweight of the bend up layer

Controls the lineweight of the 'Bends Up' layer, created by the SMUNFOLD and SMEXPORT2D commands. Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

	-3 to 211
	-3

21.74 SMBEVELFEATURECOLOR system variable

21.74.1 Color of the bevel features layer

Controls the color of the 'Bevel Features' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	6

21.75 SMCOLORBEND system variable

21.75.1 Bend feature color

Controls the display color of sheet metal bends.



	#FFDC50

21.76 SMCOLORBENDRELIEF system variable

21.76.1 Bend relief feature color

Controls the display color of sheet metal reliefs.

	#64D296

21.77 SMCOLORBEVEL system variable

21.77.1 Bevel feature color

Controls the display color of sheet metal bevels.

	#C0CE93

21.78 SMCOLORCORNERRELIEF system variable

21.78.1 Corner relief feature color

Controls the display color of sheet metal corner reliefs.

	#64D296



21.79 SMCOLORFLANGE system variable

21.79.1 Flange feature color

Controls the display color of sheet metal flanges.

	#90A4AE

21.80 SMCOLORFLANGEREFERENCESIDE system variable

21.80.1 Flange feature reference side color

Controls the display color of sheet metal faces on the reference side of a flange.

	#68A4AE

21.81 SMCOLORFORM system variable

21.81.1 Form feature color

Controls the display color of sheet metal forms.

	#8791E1

21.82 SMCOLORHEM system variable

21.82.1 Hem feature color

Controls the display color of sheet metal hems.

--	--



	#FCAED6

21.83 SMCOLORJOG system variable

21.83.1 Jog feature color

Controls the display color of sheet metal jogs.

	#CC7722

21.84 SMCOLORJUNCTION system variable

21.84.1 Junction feature color

Controls the display color of sheet metal junctions.

	#FF6E40

21.85 SMCOLORLOFTEDBEND system variable

21.85.1 Lofted bend feature color

Controls the display color of sheet metal lofted bends.

	#A0DCFA



21.86 SMCOLORMITER system variable

21.86.1 Miter feature color

Controls the display color of sheet metal miters.

	#AF46D8

21.87 SMCOLORROLLEDEGE system variable

21.87.1 Rolled edge feature color

Controls the display color of sheet metal rolled edges.

	#8791E1

21.88 SMCOLORTAB system variable

21.88.1 Tab feature color

Controls the display color of sheet metal tabs.

	#FDA542

21.89 SMCOLORWRONGBEND system variable

21.89.1 Wrong bend feature color

Controls the display color of sheet metal wrong bends.

--	--



	#FF3300

21.90 SMCOLORWRONGFLANGE system variable

21.90.1 Wrong flange feature color

Controls the display color of sheet metal wrong flanges.

	#A82000

21.91 SMCONTOURSLAYERCOLOR system variable

21.91.1 Color of the contour layer

Controls the color of the '2D dxf layer', contains unfolded geometry created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	7

21.92 SMCONTOURSLAYERLINETYPE system variable

21.92.1 Linetype of the contour layer

Controls the linetype of the 'Contour' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	CONTINUOUS



21.93 SMCONTOURLAYERLINEWEIGHT system variable

21.93.1 Lineweight of the contour layer

Controls the line weight of the 'Contour' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

	-3 to 211
	30

21.94 SMCONVERTMAXIMALBEVELANGLE system variable

21.94.1 Maximal angle of bevel

Controls the maximal angle of bevel during the SMCONVERT command.

Values between 0.0 and 90.0 are accepted.

	0 to 90
	80

21.95 SMCONVERTMAXIMALEXTRUSIONDEPTHNEARBORDER system variable

21.95.1 Maximal depth of extrusions at a flanges border, unit is 1 flange thickness.

Controls the maximal extrusion depth during the SMCONVERT command.

Values between 0.0 and 1.0 are accepted.



	0.0 to 1.0
	0.5

21.96 SMCONVERTMINIMALBEVELANGLE system variable

21.96.1 Minimal angle of bevel

Controls the minimal angle of a bevel during the SMCONVERT command.

Values between 0.0 and 90.0 are accepted.

	0 to 90
	10

21.97 SMCONVERTPREFERFORMFEATURES system variable

21.97.1 Prefer form features to flanges and bends

Controls how features are recognized on solid faces, for the SMCONVERT command, single form features or bends and flanges.

	0: Off 1: On

21.98 SMCONVERTPREFERHEMFEATURES system variable

21.98.1 Prefer hem features to flanges and bends

Controls how features are recognized on solid faces, for the SMCONVERT command, single hem features or bends and flanges.

--	--



	0: Off 1: On

21.99 SMCONVERTPREFERJOGFEATURES system variable

21.99.1 Prefer jog features to flanges and bends

Controls how features are recognized on solid faces, during the SMCONVERT command, single jog features or bends and flanges.

21.100 SMCONVERTPREFERZEROBENDFEATURES system variable

21.100.1 Prefer zero bend features to wrong bends

Controls how features are recognized on solid faces, during the SMCONVERT command, zero bend features or wrong bend features.

	0: Off 1: On

21.101 SMCONVERTRECOGNIZEBEVELS system variable

21.101.1 Recognize bevel features

Recognizes bevel features during the SMCONVERT command.

--	--



21.102 SMCONVERTRECOGNIZEHOLES system variable

21.102.1 Recognize holes

Recognizes holes on flanges as features during the SMCONVERT command.

	0: Off 1: On

21.103 SMCONVERTRECOGNIZERIBCONTROLCURVES system variable

21.103.1 Recognize bead control curves

Recognizes 2D control curves for bead features, during the SMCONVERT command.

	0: Off 1: On

21.104 SMCONVERTWRONGFEATURETHICKNESSDEVIATIONTYPE system variable

21.104.1 Type of deviation of wrong feature thickness

Controls if the deviation value is treated as ratio to model thickness or an absolute value. See the SMCONVERTWRONGFEATURETHICKNESSDEVIATIONVALUE command.

--	--



	0
	0: Thickness ratio 1: Absolute value

21.105 SMCONVERTWRONGFEATURETHICKNESSDEVIATIONVALUE system variable

21.105.1 Deviation value of wrong feature thickness

Sets the allowed deviation between model thickness and the thickness of a given wrong feature.

Values between 0 and 1,000,000 are accepted.

	0 to 1e6
	0.2

21.106 SMDEFAULTBENDLINEEXTENTTYPE system variable

21.106.1 Bend line extent type

Controls if the SMDEFAULTBENDLINEEXTENTVALUE system variable is a ratio to the thickness or an absolute value.

The value will be used to initialize sheet metal settings in the document.

	0
	1: Thickness ratio 2: Absolute value



21.107 SMDEFAULTBENDLINEEXTENTVALUE system variable

21.107.1 Bend line extent value

Controls sheet metal bend lines.

Values between -1,000,000 and 1,000,000.0 are accepted.

- Positive value = Stretches past a contour
- Negative value = Does not reach it
- Zero = Just touches

	-1000000 to 1000000
	0.25

21.108 SMDEFAULTBENDRADIUSTYPE system variable

21.108.1 Bend radius type

Controls the default sheet metal bend radius.

Absolute value toggles the Thickness ratio. **Override bend radius in SMCONVERT** controls if the bend radius is taken from SMDEFAULTBENDRADIUSVALUE or from the model.

	0 to 3
	2
	1: Absolute value 2: Override bend radius in SMCONVERT

21.109 SMDEFAULTBENDRADIUSVALUE system variable

21.109.1 Bend radius value

Controls the default sheet metal bend radius, in drawing units. See also the SMDEFAULTBENDRADIUSTYPE system variable.



Values between 0.0001 and 1,000,000 are accepted.

	1

21.110 SMDEFAULTBENDRELIEFWIDTHTYPE system variable

21.110.1 Bend relief type

Controls if the SMDEFAULTBENDRELIEFWIDTHVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.111 SMDEFAULTBENDRELIEFWIDTHVALUE system variable

21.111.1 Bend relief width value

Controls the default value for a sheet metal bend relief width.

Values between 0.0 and 1,000,000.0 are accepted.

	0.5

21.112 SMDEFAULTBEVELFEATUREUNFOLDMODE system variable

21.112.1 Bevel unfolding mode

Controls the appearance of bevels in an unfolded part.



	2
	0: Keep 1: Remove 2: Annotate

21.113 SMDEFAULTCORNERRELIEFDIAMETERVALUE system variable

21.113.1 Corner relief diameter value

Controls the default diameter for a sheet metal corner relief.

Values between -1.0 and 1,000,000.0 are accepted. Set to -1.0 for automatic determination of least feasible for given corner relief.

	-1.0

21.114 SMDEFAULTFLANGESPLITEXTENSIONTYPE system variable

21.114.1 Miter extension type

Controls if the SMDEFAULTFLANGESPLITEXTENSIONVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value



21.115 SMDEFAULTFLANGESPLITEXTENSIONVALUE system variable

21.115.1 Miter extension value

Controls the default value for a sheet metal miter extension.

Values between 0.0 and 1,000,000.0 are accepted.

	0.1

21.116 SMDEFAULTFLANGESPLITGAPTYPE system variable

21.116.1 Miter gap type

Controls if the SMDEFAULTFLANGESPLITGAPVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.117 SMDEFAULTFLANGESPLITGAPVALUE system variable

21.117.1 Miter gap value

Controls the default value for sheet metal miter gap size.

Values between 0.0001 and 1,000,000.0 are accepted.

	0.1



21.118 SMDEFAULTFORMFEATUREUNFOLDMODE system variable

21.118.1 Form feature unfolding mode

Controls the appearance of form features in an unfolded part.

	4
	0: Keep 1: Remove 2: Project 3: Contour 4: Symbol 5: Project without center mark 6: Contour without center mark

21.119 SMDEFAULTGUSSETDEPTHTYPE system variable

21.119.1 Gusset depth type

Controls if the SMDEFAULTGUSSETDEPTHVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.120 SMDEFAULTGUSSETDEPTHVALUE system variable

21.120.1 Gusset height value

Controls the default sheet metal gusset height.

Values between 0.0001 and 1,000,000.0 are accepted.



	8

21.121 SMDEFAULTGUSSETFILLETRADIUSTYPE system variable

21.121.1 Gusset fillet radius type

Controls if the SMDEFAULTGUSSETFILLETRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.122 SMDEFAULTGUSSETFILLETRADIUSVALUE system variable

21.122.1 Gusset fillet radius value

Controls the default sheet metal gusset radius.

Values between 0.0001 and 1,000,000.0 are accepted.

	1

21.123 SMDEFAULTGUSSETTYPE system variable

21.123.1 Gusset type

Toggles between a round or flat sheet metal gusset type.



	1 to 2
	1
	1: Round 2: Flat

21.124 SMDEFAULTGUSSETWIDTHTYPE system variable

21.124.1 Gusset width type

Controls if the SMDEFAULTGUSSETWIDTHVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.125 SMDEFAULTGUSSETWIDTHVALUE system variable

21.125.1 Gusset width value

Controls the default sheet metal gusset width.

Values between 0.0001 and 1,000,000.0 are accepted.

	6



21.126 SMDEFAULTHEMGAPTYPE system variable

21.126.1 Open Hem gap type

Controls if the SMDEFAULTHEMGAPVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.127 SMDEFAULTHEMGAPVALUE system variable

21.127.1 Open Hem gap value (in addition to the thickness)

Controls the default sheet metal open hem gap size.

Values between 0.001 and 100.0 are accepted.

	0.1

21.128 SMDEFAULTHEMRELATIVEBENDDEDUCTION system variable

21.128.1 Hem relative bend deduction value

Sets a bend deduction value, relative to the thickness, used for closed hem unfolding.

Values between 0.0 (hem lengthen) and 10.0 (shorten bend zone by a value equal to 8 times the thickness) are accepted.

	0 to 10



	2.4
--	-----

21.129 SMDEFAULTJOGANGLEVALUE system variable

21.129.1 Jog angle value

Controls the default sheet metal jog angle.

Values between 0.0 and 180.0 are accepted.

	0 to 180
	45
	0: Bounding box ratio 1: Absolute value

21.130 SMDEFAULTJOGHEIGHTTYPE system variable

21.130.1 Jog height type

Controls if the SMDEFAULTJOGHEIGHTVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.131 SMDEFAULTJOGHEIGHTVALUE system variable

21.131.1 Jog height value

Controls the default sheet metal jog height.



Values between 0.0001 and 1,000,000.0 are accepted.

	0.0001 to 1,000,000.0
	1.001

21.132 SMDEFAULTJOGRADIUSTYPE system variable

21.132.1 Jog radius type

Controls if the SMDEFAULTJOGRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.133 SMDEFAULTJOGRADIUSVALUE system variable

21.133.1 Jog radius value

Controls the default sheet metal jog radius.

Values between 1.0 and 1,000,000.0 are accepted.

	1.0 to 1,000,000.0
	1.0



21.134 SMDEFAULTJUNCTIONALIGNMENTTORELIEF system variable

21.134.1 Junction alignment to relief

Forces sheet metal junction faces to align to adjacent relief faces.

	0 to 1
	0
	0: Disabled 1: Enabled

21.135 SMDEFAULTJUNCTIONGAPTYPE system variable

21.135.1 Junction gap type

Controls if the SMDEFAULTJUNCTIONGAPVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.136 SMDEFAULTJUNCTIONGAPVALUE system variable

21.136.1 Junction gap value

Controls the default sheet metal for the open junction gap size.

Values between 0.0001 and 1,000,000.0 are accepted.

--	--



	0.001

21.137 SMDEFAULTKFACTOR system variable

21.137.1 K-Factor value

Sets the location ratio of the neutral surface (the surface not stretched or squeezed when the sheet is bent) to the material thickness.

Values between 0.00000 (internal bend radius) and 1.00000 (external bend radius) are accepted.

	0 to 1
	0.27324

21.138 SMDEFAULTLOFTEDBENDNUMBERSAMPLES system variable

21.138.1 Lofted bend subdivisions

Controls the default value for sheet metal lofted bend subdivisions.

	10

21.139 SMDEFAULTRELIEFEXTENSIONTYPE system variable

21.139.1 Relief extension type

Controls if the SMDEFAULTRELIEFEXTENSIONTYPE system variable is a ratio to the thickness or an absolute value.



	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.140 SMDEFAULTRELIEFEXTENSIONVALUE system variable

21.140.1 Relief extension value

Controls the default value for a sheet metal relief extension.

Values between 0.0 and 1,000,000.0 are accepted.

	0.1

21.141 SMDEFAULTRIBFILLETTRADIUSTYPE system variable

21.141.1 Bead fillet radius type

Controls if the SMDEFAULTRIBFILLETTRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

	0
	0: Profile radius ratio 1: Absolute value

21.142 SMDEFAULTRIBFILLETTRADIUSVALUE system variable

21.142.1 Bead fillet radius value

Controls the default radius for a sheet metal bead fillet.

Values between 0.0001 and 1,000,000.0 are accepted.



	5

21.143 SMDEFAULTTRIBPROFILERADIUSTYPE system variable

21.143.1 Bead profile radius type

Controls if the SMDEFAULTTRIBPROFILERADIUSVALUE system variable is a ratio to the thickness or an absolute value.

	0
	0: Thickness ratio 1: Absolute value

21.144 SMDEFAULTTRIBPROFILERADIUSVALUE system variable

21.144.1 Bead profile radius value

Controls the default radius for a sheet metal bead profile.

Values between -1.0 and 1,000,000.0 are accepted.

	2

21.145 SMDEFAULTTRIBROUNDRADIUSTYPE system variable

21.145.1 Bead round radius type

Controls if the SMDEFAULTTRIBROUNDRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

--	--



	0
	0: Thickness ratio 1: Absolute value

21.146 SMDEFAULTTRIBROUNDRAIUSVALUE system variable

21.146.1 Bead round radius value

Controls the default radius for a sheet metal bead, round.

Values between 0.0001 and 1,000,000.0 are accepted.

	1

21.147 SMDEFAULTSHARPBENDRADIUSLIMITRATIO system variable

21.147.1 Sharp bend radius limit ratio

Controls the default sheet metal sharp bend radius limit, as a ratio to the thickness.

Values between 0.0 and 1,000,000.0 are accepted

	5

21.148 SMDEFAULTTABCHAMFERDISTANCETYPE system variable

21.148.1 Tab chamfer distance type

Controls if the SMDEFAULTTABCHAMFERDISTANCEVALUE system variable is a ratio to the thickness or an absolute value.



	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.149 SMDEFAULTTABCHAMFERDISTANCEVALUE system variable

21.149.1 Tab chamfer distance value

Controls the default chamfer distance of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

	0.1

21.150 SMDEFAULTTABCLEARANCETYPE system variable

21.150.1 Tab clearance type

Controls if the SMDEFAULTTABCLEARANCEVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.151 SMDEFAULTTABCLEARANCEVALUE system variable

21.151.1 Tab clearance value

Controls the default clearance of sheet metal tabs.



Values between 0.0001 and 1,000,000.0 are accepted.

	0.1

21.152 SMDEFAULTTABDISTANCETYPE system variable

21.152.1 Tab distance type

Controls if the SMDEFAULTTABDISTANCEVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.153 SMDEFAULTTABDISTANCEVALUE system variable

21.153.1 Tab distance value

Controls the default distance of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

	20

21.154 SMDEFAULTTABEDGETYPE system variable

21.154.1 Tab edge type

Controls if sheet metal tabs have sharp, round or chamfered edges.



	0 to 2
	0
	0: Sharp edges 1: Fillet edges 2: Chamfer edges

21.155 SMDEFAULTTABFILLETTRADIUSTYPE system variable

21.155.1 Tab fillet radius type

Controls if the SMDEFAULTTABFILLETTRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.156 SMDEFAULTTABFILLETTRADIUSVALUE system variable

21.156.1 Tab fillet radius value

Controls the default fillet radius of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

	0.1



21.157 SMDEFAULTTABHEIGHTTYPE system variable

21.157.1 Tab height type

Controls if the SMDEFAULTTABHEIGHTVALUE system variable is a ratio to the thickness or an absolute value.

	0 to 1
	0
	0: Thickness ratio 1: Absolute value

21.158 SMDEFAULTTABHEIGHTVALUE system variable

21.158.1 Tab height value

Controls the default height of sheet metal tab slots.

Values between 0.0001 and 1,000,000.0 are accepted.

	1

21.159 SMDEFAULTTABLENGTHTYPE system variable

21.159.1 Tab length type

Controls if the SMDEFAULTTABLENGTHTYPE system variable is a ratio to the thickness or an absolute value.

	0 to 1



	0
	0: Thickness ratio 1: Absolute value

21.160 SMDEFAULTTABLENGTHVALUE system variable

21.160.1 Tab length value

Controls the default length of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

	4

21.161 SMDEFAULTTABSLOTNUMBER system variable

21.161.1 Tab slot number

Controls the default number of sheet metal tab slots.

	2

21.162 SMDEFAULTTHICKNESS system variable

21.162.1 Thickness value

Controls the default sheet metal thickness, in drawing units.

	2.0 for INSUNITS=4 0.07874 for INSUNITS=1



21.163 SMEXPORTOSMAPPROXIMATIONACCURACY system variable

21.163.1 Accuracy of the approximation

Controls absolute deviation between the smooth edge geometry of 3D part and its .osm representation with lines and arcs, during the SMEXPORTOSM command, in drawing units. The lower the value, the better the precision.

	0.01 - If MEASUREMENT=1 and INSUNITS=4 0.000393701 - If MEASUREMENT=0 and INSUNITS=1

21.164 SMEXPORTOSMMINIMALEDGELENGTH system variable

21.164.1 Minimal edge length

Controls the minimal edge length for the SMEXPORTOSM command, in drawing units.

	0.05 - If MEASUREMENT=1 and INSUNITS=4 0.001968505 - If MEASUREMENT=0 and INSUNITS=1

21.165 SMFORMFEATURESDOWNCOLOR system variable

21.165.1 Color of the form features down layer

Controls the color of the 'Form Features Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	6



21.166 SMFORMFEATURESDOWNLAYERLINETYPE system variable

21.166.1 Linetype of the form features down layer

Controls the linetype of the 'Form Features Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	CONTINUOUS

21.167 SMFORMFEATURESDOWNLAYERLINEWEIGHT system variable

21.167.1 Lineweight of the form features down layer

Controls the lineweight of the 'Form Features Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

	-3 to 211
	-3

21.168 SMFORMFEATURESUPCOLOR system variable

21.168.1 Color of the form features up layer

Controls the color of the 'Form Features Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.



	1 to 255
	6

21.169 SMFORMFEATURESUPPLAYERLINETYPE system variable

21.169.1 Linetype of the form features up layer

Controls the linetype of the 'Form Features Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	CONTINUOUS

21.170 SMFORMFEATURESUPPLAYERLINEWEIGHT system variable

21.170.1 Lineweight of the form features up layer

Controls the lineweight of the 'Form Features Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

	-3 to 211
	-3

21.171 SMHEMCREATECLOSEDHEMGAP system variable

21.171.1 Closed Hem, Teardrop, and Round gap value

Controls the bend radius of a Closed hem and the gap between the base Flange and a Teardrop or Round hem, for the SMHEM command.



	0.02

21.172 SMJUNCTIONCREATEHEALCOINCIDENT system variable

21.172.1 Heal coincident junction faces

Controls how junctions with coincident faces are recognized and converted to regular junctions, during the SMJUNCTIONCREATE command.

21.173 SMOOTHMESHCONVERT system variable

21.173.1 Mesh conversion mode

Controls the conversion mode of meshes to 3D solids or surfaces, with the CONVTOSOLID or CONVTOSURFACE commands.

	1 to 3
	2
	1: Conversion result is smooth and not optimized 2: Conversion result is faceted and optimized 3: Conversion result is faceted and not optimized



21.174 SMOVERALLANNOTATIONSLAYERCOLOR system variable

21.174.1 Color of the overall dimensions annotations layer

Controls the color of the 'Overall Dimensions' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	3

21.175 SMOVERALLANNOTATIONSLAYERLINETYPE system variable

21.175.1 Linetype of the overall annotation layer

Controls the linetype of the 'Overall Dimensions' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	CONTINUOUS

21.176 SMOVERALLANNOTATIONSLAYERLINEWEIGHT system variable

21.176.1 Lineweight of the overall annotation layer

Controls the lineweight of the 'Overall Dimensions' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default



	-3 to 211
	-3

21.177 SMPARAMETRIZEHOLESPARAMETRIZATION system variable

21.177.1 Hole parametrization

Controls how straight holes are converted, during the SMPARAMETRIZE command.

If **Convert holes to array** is on, holes on flanges are converted into parametric, rectangular arrays. If

Parametrize holes is on, holes, not already included in arrays, are constrained.

	0 to 3
	3
	0: Does not parametrize holes 1: Parametrize holes 2: Convert holes to array

21.178 SMREPAIRLOFTEDBENDMERGE system variable

21.178.1 Merge lofted bends

Merges lofted bends that touch into a single lofted bend, during the SMREPAIR command.

21.179 SMROLLEDEGEANNOTATIONSLAYERCOLOR system variable

21.179.1 Color of the rolled edge annotations text layer

Controls the color of the 'Rolled Edge Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.



	1 to 255
	5

21.180 SMROLLEDEGEANNOTATIONSLAYERTEXTHEIGHT system variable

21.180.1 Height of the text

Controls the text height of the 'Rolled Edge Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	0 or greater
	0.01

21.181 SMROLLEDEGEANNOTATIONSLAYERTEXTHEIGHTTYPE system variable

21.181.1 Type of the text height

Controls the text height type for the 'Rolled Edge Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	0 to 1
	0
	0: Bounding box ratio 1: Absolute value



21.182 SMROLLEDEDEGLINESDOWNLAYERCOLOR system variable

21.182.1 Color of the rolled edge down lines layer

Controls the color of the 'Rolled Edge Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	1

21.183 SMROLLEDEDEGLINESDOWNLAYERLINETYPE system variable

21.183.1 Linetype of the rolled edge down lines layer

Controls the linetype of the 'Rolled Edge Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	Continuous

21.184 SMROLLEDEDEGLINESDOWNLAYERLINEWEIGHT system variable

21.184.1 Lineweight of the rolled edge down layer

Controls the lineweight of the 'Rolled Edge Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	-3 to 211
	-3



21.185 SMROLLEDEDGELINESUPLAYERCOLOR system variable

21.185.1 Color of the rolled edge up lines layer

Controls the color of the 'Rolled Edge Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	1 to 255
	1

21.186 SMROLLEDEDGELINESUPLAYERLINETYPE system variable

21.186.1 Linetype of the rolled edge up lines layer

Controls the linetype of the 'Rolled Edge Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	Continuous

21.187 SMROLLEDEDGELINESUPLAYERLINEWEIGHT system variable

21.187.1 Lineweight of the rolled edge up layer

Controls the lineweight of the 'Rolled Edge Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

	-3 to 211
	-3



21.188 SMSMARTFEATURES system variable

21.188.1 Automatic update features after sheet metal commands

Controls how sheet metal features are rebuilt after sheet metal commands.

	0 to 7
	3
	1: Allow the rebuild of sheet metal features 2: Allow automatic edges to imprint after rebuild 4: Allow the automatic creation of junctions after bends are created

21.189 SMSPLITAMBIGUOUSINPUT system variable

21.189.1 Ambiguous input behavior

Controls how the SMSPLIT command resolves issues when it can not detect a face, entity, point or 2D curve that it relates to.

	0 to 1
	0
	0: Prompt user 1: Command fail

21.190 SMSPLITCONVERTBENDTOJUNCTION system variable

21.190.1 Convert bend to junction

Controls how a split that passes through a bend is solved with the SMSPLIT command.

If on, the shortest side of the bend is automatically converted to a junction. If off, a split through a bend will retain the bend geometry on both sides of the split.



21.191 SMSPLITHEALCOINCIDENT system variable

21.191.1 Heal coincident miter faces

Enables the **Heal coincident miter faces** option for the SMSPLIT command.

21.192 SMSPLITORTHOGONALBENDSPLIT system variable

21.192.1 Orthogonal bend split

Controls how a split that touches a bend is solved with the SMSPLIT command.

If on, the split direction for a bend is orthogonal to the bend axis (changes to a 90° angle as it passes through the bend). If off, the split direction is tangential to the split curve (does not change direction as it passes through the bend).

21.193 SMTARGETCAM system variable

21.193.1 Target CAM

Controls the target CAM system, for sheet metal parts unfolded with SMUNFOLD command.



21.194 SMUNFOLDAPPEARANCE system variable

21.194.1 Unfold appearance

Controls the text height for the SMUNFOLD command.

	1: Text height for annotations is managed by current text, dimension and mleader styles

21.195 SNAPANG system variable

21.195.1 Snap angle

Controls the rotation of snap, the grid, and the crosshair, for the current viewport, relative to the current UCS.

	0.0

21.196 SNAPBASE system variable

21.196.1 Snap base

Controls the origin point of snap and the grid, in the current viewport, relative to the current UCS.

	0,0

21.197 SNAPISOPAIR system variable

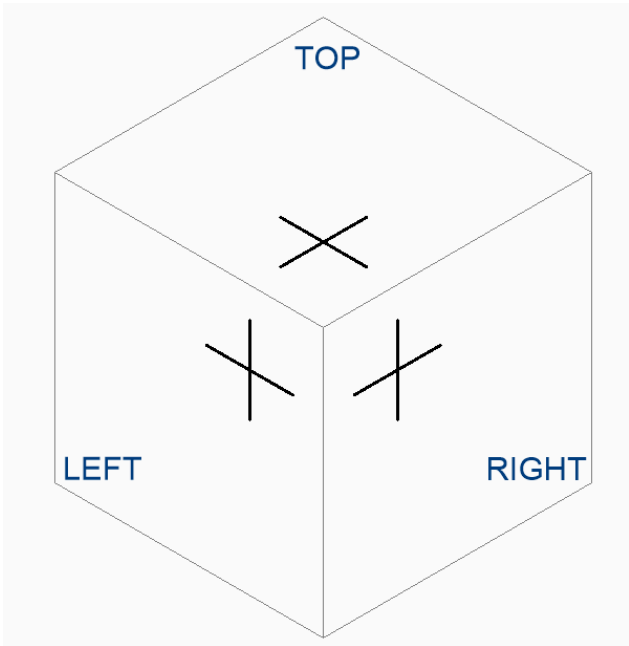
21.197.1 Snap isometric pair

Controls the current viewport's isometric plane (left, top or right), if the SNAPSTYL system variable is set to **isometric**.

Press **F5** function key to set the appropriate drawing plane: **Left**, **Top** or **Right**.



	0 to 2
	0
	0: Left 1: Top 2: Right



21.198 SNAPMARKERCOLOR system variable

21.198.1 Snap marker color

Controls the color of snap markers.

	1 to 255
	122



21.199 SNAPMARKERSIZE system variable

21.199.1 Snap marker size

Controls the size of snap markers.

	8

21.200 SNAPMARKERTHICKNESS system variable

21.200.1 Snap marker thickness

Controls the thickness of the snap marker.

	2

21.201 SNAPMODE system variable

21.201.1 Snap mode

Toggles snap On or Off for the current viewport.

	Off (0): Snap off (for current viewport) On (1): Snap on (for current viewport)

21.202 SNAPSTYL system variable

21.202.1 Snap style

Controls the snap style for the current viewport - rectangular or isometric.



	0 to 1
	0
	0: Rectangular snap 1: Isometric snap

21.203 SNAPTYPE system variable

21.203.1 Snap type

Controls the snap type for the current viewport.

For **Adaptive Grid Snap**, see also the ADAPTIVEGRIDSTEPSIZE system variable.

	0 to 2
	2
	0: Grid snap 1: Polar snap 2: Adaptive Grid Snap

21.204 SNAPUNIT system variable

21.204.1 Snap unit

Controls the current viewport's snap spacing. Adjusts itself automatically to reflect the isometric snap, if SNAPSTYL is set to **Isometric snap** (1).

Note: There is no snap in the Z direction.



	0.5,0.5 - If MEASUREMENT=0 and INSUNITS=inches 10.0,10.0 - If MEASUREMENT=1 and INSUNITS=millimeters
--	---

21.205 SOLIDCHECK system variable

21.205.1 Solid check

Toggles the 3D solid validation for the current application session.

	Off (0): Solid validation off On (1): Solid validation on

21.206 SORTENTS system variable

21.206.1 Sort entities

Controls the entity display sort order.

	0 to 127
	127
	0: Off 1: Entity selection 2: Entity snap 4: Redraws 8: Mslide slide creation 16: Regens 32: Plotting 64: PostScript output



21.207 SPAADJUSTMODE system variable

21.207.1 Adjust mode

Controls the adjustment mode used for triangle smoothing. Ignored if FACETRES is used.

Adjust mode identifies which facet nodes are to be adjusted (smoothed) to other than their initial grid positions.

Note: Spa is short for Spatial, the maker of ACIS.

	0 to 2
	0
	0: None - No changes 1: Non-grid - Move nodes in the center of surrounding nodes to adjust points surrounded by triangles 2: All - Also adjust grid nodes

21.208 SPACHECKLEVEL system variable

21.208.1 Check level

Check level used in AUDIT and SOLIDEDIT for checking ACIS entities.

Audit is used to repair drawings that are open. The SOLIDEDIT command edits the faces, edges and bodies of 3D solids and 2D regions.

Value 10 is the lowest, used for fast checking. Value 70 is the maximum, used for comprehensive time consuming check.

Note: Spa is short for Spatial, the maker of ACIS.

	0 to 70
	10



	0: Basic transformation consistency - basic pointer and fatal topology check 10: Basic geometry check - cellular topology check 20: Data sharing check, face area and loop orientation check, medium check of curved geometry 30: General surface check - check for sliver faces 40: Degenerate spline surface check, compatibility check between surface and pcurve surface, and check that a COEDGE has a partner on a single-sided face 50: Body containment check - compatibility check between pcurve location and (non-tolerant) coedge location 60: Convexity points check 70: Lump and shell containment check - face-face intersection check, and curve parametrization check
--	--

21.209 SPAGRIDASPECTRATIO system variable

21.209.1 Grid aspect ratio

Controls the aspect ratio of each cell in a grid. Ignored if the FACETRES system variable is in use.

A value of 1 is square.

This does not guarantee the aspect ratio of the facet, which may consist of only a part of a cell.

Note: Spa is short for Spatial, the maker of ACIS.

	0.0

21.210 SPAGRIDMODE system variable

21.210.1 Grid mode

Controls how grids are used in the mesh process. This variable is ignored if FACETRES is used.

The grid mode specifies whether a grid is used and whether the points where the grid cuts the edges should be inserted into the edge discretization.

Note: Spa is short for Spatial, the maker of ACIS.



	0 to 3
	1
	0: Do not subdivide faces with a grid 1: Use a grid but do not add model edge intersection points 2: Allow grid to divide model edges 3: Grid only in one direction, u or v

21.211 SPAMAXFACETEDGELENGTH system variable

21.211.1 Maximum facet edge length

Controls the maximum length of a facet side. Ignored if the FACETRES system variable is used.

A value of zero means uses defaults (recommend).

CAUTION: Lengths that are too small cause high memory consumption and poor performance.

	0.0

21.212 SPAMAXNUMGRIDLINES system variable

21.212.1 Maximum number of grid lines

Controls the maximum number of grid subdivisions, this limits the face facet data size. Does not apply if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

	3000



21.213 SPAMINUGRIDLINES system variable

21.213.1 Minimum number of U grid lines

controls the minimum number of U grid lines - the minimum number of grid lines generated in the U direction. Ignored if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

	0

21.214 SPAMINVGRIDLINES system variable

21.214.1 Minimum number of V grid lines

Controls the minimum number of V grid lines - the minimum number of grid lines generated in the V direction. Ignored if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

	0

21.215 SPANORMALTOL system variable

21.215.1 Normal tolerance

Controls the maximum deviation allowed between two normals on two adjacent facet nodes, in degrees. This value is independent of the model size. This variable is ignored if the FACETRES system variable is on (1).

Note: Spa is short for Spatial, the maker of ACIS.

	15.0



21.216 SPASURFACETOL system variable

21.216.1 Surface tolerance

Controls the maximum distance between a facet edge and the true surface. The value is dependent on the model size.

This variable is ignored for output to STL and PDF if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

	-1.0

21.217 SPATRIANGMODE system variable

21.217.1 Triangulation mode

Identifies what portion of a mesh is triangulated. Ignored if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

	0 to 5
	1
	0: No triangulation 1: Triangulate everywhere 2: Triangulate against the boundary 3: Also triangulate first grid level 4: Triangulate to 3 levels of fringe 5: Triangulate to 4 levels of fringe

21.218 SPAUSEFACETRES system variable

21.218.1 Use FACETRES system variable

Use the FACETRES system variable in place of normal tolerances.

Note: Spa is short for Spatial, the maker of ACIS.



21.219 SPLFRAME system variable

21.219.1 Spline frame

Displays control polygons for splines and spline-fit polylines.

	Off (0): Don't display control polygon for splines and spline-fit polylines On (1): Display control polygon for splines and spline-fit polylines

21.220 SPLINESEGS system variable

21.220.1 Spline segments

Controls how many line segments are generated when a spline is converted to a polyline with the PEDIT command.

Values between -32768 and 32767 are accepted.

For negative values, a fit-type curve is applied, composed of arc-segments, yields a smoother curve, but it takes longer to generate.

	-32768 to 32767
	8

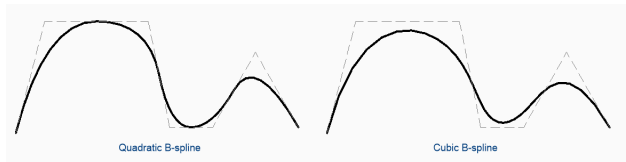


21.221 SPLINETYPE system variable

21.221.1 Spline type

Controls the curve type generated by the **Spline** option of the PEDIT command: Quadratic B-spline or Cubic B-spline.

	5 to 6
	6
	5: Quadratic B-spline 6: Cubic B-spline



21.222 SRCHPATH system variable

21.222.1 Support file search path

The file path for text fonts, customization files, plugins, drawings to insert, linetypes, and hatch patterns, not in the current folder.

Separate file paths with semicolons (;).

21.223 SSFOUND system variable

21.223.1 Sheet Set found (Read Only)

Displays the sheet set file name and path that is associated with the current drawing file.



21.224 SSLOCATE system variable

21.224.1 Sheet Set locate

Opens any associated sheets sets when a drawing is opened.

	Off (0): Don't open a drawing's Sheet Set with the drawing On (1): Open a drawing's Sheet Set with the drawing

21.225 SSMAUTOOPEN system variable

21.225.1 Sheet Set manager auto open

Opens **Sheet Set** panel automatically when a drawing is opened that is associated with a Sheet Set. The SSMAUTOOPEN and SSLOCATE system variables must both be switched on to display the Sheet Set automatically.

	Off (0): Don't open Sheet Set panel automatically On (1): Open Sheet Set panel automatically

21.226 SSMPOLLTIME system variable

21.226.1 Sheet Set manager poll time

Controls the time interval between automatic refreshes of the status data in a Sheet Set. The SSMSHEETSTATUS system variable must be set to 2 for the timer to operate.

Values between 10 and 600 are accepted.



	10 to 600
	15

21.227 SSMSHEETSTATUS system variable

21.227.1 Sheet Set manager status

Controls how the status data in a Sheet Set is refreshed.

	0 to 2
	2
	0: Don't automatically refresh status 1: Refresh status when Sheet Set is loaded or updated 2: Refresh status when Sheet Set is loaded or updated, and at time interval by SSMPOLLTIME

21.228 SSMSTATE system variable

21.228.1 Sheet Set manager state (Read Only)

Controls if the Sheet Set Manager is active or not.

	0 to 1
	0
	0: Sheet Set Manager is not active 1: Sheet Set Manager is active



21.229 STACKPANELTYPE system variable

21.229.1 Stack panel type

The style of stacked docking panel containers.

	0 to 2
	2
	0: Tabbed - horizontal textual tabs, resizes drawing space 1: Flyout - vertical icon tab buttons, does not resize drawing space 2: Collapsible - vertical icon tab buttons, resizes drawing space

Note: To turn off (then back on) the auto-collapsing behavior for STACKPANELTYPE = 1, click the icon of the expanded panel.

21.230 STAMPFONTSIZE system variable

21.230.1 Font Size

Controls the font size for the plot stamp. See also the INCLUDEPLOTSTAMP system variable.

	0.2

21.231 STAMPFONTSTYLE system variable

21.231.1 Font Style

Controls the font style for the plot stamp. See also the INCLUDEPLOTSTAMP system variable.

	Arial



21.232 STAMPFOOTER system variable

21.232.1 Footer

Controls the footer for the plot stamp.

21.233 STAMPFOOTEROFFSETX system variable

21.233.1 Stamp footer X offset

Controls the offset of the plot stamp footer from the bottom of the printable area. See also the INCLUDEPLOTSTAMP system variable.

	0.0

21.234 STAMPFOOTEROFFSETY system variable

21.234.1 Stamp footer Y offset

Controls the offset of the plot stamp footer from the bottom of the printable area. See also the INCLUDEPLOTSTAMP system variable.

	0.0

21.235 STAMPHEADER system variable

21.235.1 Header

Controls the header for the plot stamp.

--	--



--	--

21.236 STAMPHEADEROFFSETX system variable

21.236.1 Stamp header X offset

Controls the offset of the plot stamp header from the top of the printable area. See also the INCLUDEPLOTSTAMP system variable.

	0.0

21.237 STAMPHEADEROFFSETY system variable

21.237.1 Stamp header Y offset

Controls the offset of the plot stamp header from the top of the printable area. See also the INCLUDEPLOTSTAMP system variable.

	0.0

21.238 STAMPUNITS system variable

21.238.1 Units

Controls the units for the font size of the plot stamp.
See the INCLUDEPLOTSTAMP system variable.

	0 to 1
	0



	0: Inches 1: Millimeters
--	-----------------------------

21.239 STANDARDSOPTIONS system variable

21.239.1 Standards validation options

Options to control the standards check procedure.

	0 to 3
	0
	1: Fix non-standard entity properties automatically 2: Show ignored problems

21.240 STANDARDSVIOLATION system variable

21.240.1 Standards Violation Notification

Controls how a user is notified of standards violations.

	2
	0: Notification is off 1: An alert dialog is displayed 2: An icon is displayed in the Status bar

21.241 STARTUP system variable

21.241.1 Startup

Controls the display of the **Create New Drawing** and **Startup** dialog boxes.

--	--



	0 to 4
	3
	0: Display the Select Template dialog box, or use a default drawing template file. See also the BASEFILE system variable 1: Display the Startup and the Create New Drawing dialog boxes 2: Display the Start page 3: Display the Start page (with the Ribbon preloaded but not displayed) 4: Display the Start page (with the Ribbon preloaded but not displayed) except if a file is passed on command line

21.242 STATUSBAR system variable

21.242.1 Window Status bar

Controls the display of the Status bar.

Note: The only reason to turn off the status bar is to gain a bit more drawing area. It is far more useful to leave it on

	Off (0): Don't show Status bar On (1): Show Status bar

21.243 STEPSIZE system variable

21.243.1 Step size

Controls the size of each step, in drawing units, when in walk or fly mode.

	1e-6 to 1e+6



	2.0
--	-----

21.244 STEPSPERSEC system variable

21.244.1 Steps per second

Controls the number of steps per second, when in walk or fly mode.

Values between 1.0 and 30.0 are accepted.

	1.0 to 30.0
	24.0

21.245 STLPOSITIVEQUADRANT system variable

21.245.1 STL export coordinates adjustment

Moves coordinates to all-positive values during an STL export.

	1
	0: Off 1: On

21.246 STORYBAR system variable

21.246.1 Display Story Bar

Controls the visibility and position of the **Story Bar**.



	0: Off - turns off the Story bar 1: Right - turns the story bar visible on the right side of the model space 2: Left - turns the story bar visible on the left side of the model space
--	--

21.247 STRUCTURETREECONFIG system variable

21.247.1 Structure Tree Configuration

Displays the name of the active **Structure Tree Configuration** file used by the **Structure** panel. Type SRCHPATH in the Command line to find the file.

Loading a different CST file than the default file changes the way that the STRUCTUREPANEL command presents drawing data.

	default.cst

21.248 SURFTAB1 system variable

21.248.1 Surface tabulation 1

Controls the number of tabulations to be created for RULESURF and TABSURF commands. Also controls the mesh density in the M direction for REVSURF and EDGESURF commands.

When extruding entities with arc segments: the SURFTAB1 system variable divides them in a number of equal length intervals.

When revolving entities: the SURFTAB1 variable controls the number of segments of the revolution surface.

	6

21.249 SURFTAB2 system variable

21.249.1 Surface tabulation 2

Controls the mesh density in the N direction for REVSURF and EDGESURF commands.

The SURFTAB2 variable controls the number of segments of each arc segment in the revolved entity.



	6

21.250 SURFTYPE system variable

21.250.1 Surface-fitting type

Controls the surface-fitting type used with the **Desmooth** option of the PEDIT command.

	5 to 8
	6
	5: Quadratic B-spline surface 6: Cubic B-spline surface 8: Bezier surface

21.251 SURFU system variable

21.251.1 Surface U

Controls the surface density in the M direction and the U isolines density on surface entities for the **Smooth** option of the PEDIT command.

	6

21.252 SURFV system variable

21.252.1 Surface V

Controls the surface density in the N direction and the V isolines density on surface entities for the **Smooth** option of the PEDIT command.



	6

21.253 SVGBLENDEDGRADIENTS system variable

21.253.1 SVG Blended Gradients

Toggles the use of blended gradients for complex gradient fills for SVG export.

The use of complex gradient fills makes the file size larger.

	0
	0: Yes 1: No

21.254 SVGCOLORPOLICY system variable

21.254.1 SVG Color Policy

Color policy for an SVG export.

	1
	0: Colorful 1: Monochrome 2: Grayscale

21.255 SVGDEFAULTIMAGEEXTENSION system variable

21.255.1 SVG Default Image Extension

Controls the default image extension type.



	.png

21.256 SVGGENERICFONTFAMILY system variable

21.256.1 SVG Generic Font Family

Substitute font to use if the font is missing for SVG export.

The following generic font families are supported in SVG: **serif**, **sans-serif**, **cursive**, **fantasy**, **monospace**.

- Sans-serif - fonts without serifs, like Arial
- Serif - fonts with serifs, like Times Roman
- Cursive - fonts that look handwritten
- Fantasy - unusual fonts
- Monospace - fonts where each character takes up the same space (non-proportional spacing), such as Courier

	0
	0: Sans-serif 1: Serif 2: Cursive 3: Fantasy 4: Monospace

21.257 SVGIMAGEBASE system variable

21.257.1 SVG Image base path

The image file path for SVG export.

If not set, absolute file paths are written to the SVG.



21.258 SVGIMAGEURL system variable

21.258.1 SVG Image Url

The file path for images for SVG export.

21.259 SVGLINEWEIGHTSCALE system variable

21.259.1 SVG Line Weight Scale

Scales lineweights for an SVG export.

	1.0

21.260 SVGOUTPUTHEIGHT system variable

21.260.1 SVG Output Height

Page height, in pixels, for SVG export.

Valid only if SVGSCALEFACTOR system variable is set to zero.

	768

21.261 SVGOUTPUTWIDTH system variable

21.261.1 SVG Output Width

Page width, in pixels, for SVG export.

Valid only if SVGSCALEFACTOR system variable is set to zero.

--	--



	1024

21.262 SVGPRECISION system variable

21.262.1 SVG Floating Point Precision

Number of decimal digits (as in `printf("%.9g",...)` - 9 digits) for an SVG export.

	6

21.263 SVGSCALEFACTOR system variable

21.263.1 SVG Scale Factor

Scales the SVG during an export. Dependent files need to be converted separately.

1 Drawing unit = X SVG pixel.

- If set to zero, scales the current view to fit within the page size set with the SVGOUTPUTWIDTH and SVGOUTPUTHEIGHT variables.
- If set to a positive value, SVG page size is calculated automatically to correspond to required scale.

For example, $96\text{dpi} / 25.4 = 3.7795$ - the corresponding scale factor for the conversion of 1 DWG unit into 1 mm SVG.

	0.0

21.264 SYSCODEPAGE system variable

21.264.1 System code page (Read Only)

Displays the system code page, determined by the operating system.

--	--



--	--



22. T

22.1 TABCONTROLHEIGHT system variable

22.1.1 Tab control height in pixels (Mac & Linux)

Controls the height of the document control tab, in pixels.

	0 or greater
	25

22.2 TABMODE system variable

22.2.1 Tablet mode

Allows the use of a tablet. Use the TABLET command to configure the tablet.

	0
	0: Command selection mode 1: Digitize mode

22.3 TABSFIXEDWIDTH system variable

22.3.1 Tabs fixed width (Mac & Linux)

Applies the same width to all tabs, in the documents tab.



	Off (0): All tabs have fixed width off On (1): All tabs have fixed width on
--	--

22.4 TANGENTLENGHTYPE system variable

22.4.1 Tangent Length Type

Sets default flow fitting tangent length type.

	0
	(0): Profile Width Ratio (1): Absolute Value

22.5 TANGENTLENGTHVALUE system variable

22.5.1 Tangent Length Value

Sets default flow fitting tangent length value.

	0

22.6 TARGET system variable

22.6.1 Target (Read Only)

The coordinates for perspective projection of the current viewport.



22.7 TDCREATE system variable

22.7.1 Time/Date create (Read only)

The time and date the drawing was created, in Julian Day format.

22.8 TDINDWG system variable

22.8.1 Time/Date in drawing (Read Only)

The total current drawing edit time, in days.

Format: >number of days<.>decimal fraction of a day<

22.9 TDUCREATE system variable

22.9.1 Time/Date universal create (Read Only)

The universal time and date the drawing was created, Julian Day format.

22.10 TDUPDATE system variable

22.10.1 Time/Date update (Read Only)

The local time and date, the drawing was last saved or updated, in Julian Day format.



22.11 TDUSRTIMER system variable

22.11.1 Time/Date user timer (Read Only)

The user-elapsed timer value.

Start, stop and reset the timer with the TIME command.

22.12 TDUUPDATE system variable

22.12.1 Time/Date universal update (Read Only)

The universal time and date the drawing was last saved or updated - in Julian Day format.

22.13 TEETANGENTLENGTHTYPE system variable

22.13.1 Tee Length Type

Sets default tee tangent length type.

	0
	(0): Profile Width Ratio (1): Absolute Value

22.14 TEETANGENTLENGTHVALUE system variable

22.14.1 Tee Length Value

Sets default tee tangent length value.

--	--



	0.5

22.15 TEMPLATEPATH system variable

22.15.1 Template path

Specifies the file path used for the Templates folder.

22.16 TEMPPREFIX system variable

22.16.1 Temporary prefix

The folder name for temporary files.

22.17 TEXTANGLE system variable

22.17.1 Text angle

The angle of the last added text entity.

22.18 TEXTED system variable

22.18.1 Text editor for single line text entities

Controls the editor type used for single line text entities.



	0 to 2
	2
	0: Edit in-place editor 1: Edit in pop up dialog 2: Edit in-place editor with repeated input

22.19 TEXTEDITMODE system variable

22.19.1 Text edit mode

Controls if DDEDIT command automatically repeats entity selections or not.

	0 to 2
	0
	0: Multiple edit mode (command repeats until canceled) 1: Single edit mode (command ends after editing a text entity) 2: Automatic edit mode (single if to edit preselected text, otherwise multiple)

22.20 TEXTEVAL system variable

22.20.1 Text evaluation

Controls the interpretation of Command line text strings.

When the TEXTEVAL system variable is set to 1, this command evaluates LISP expressions:

Text: (* pi 2)

The result of the equation ($\pi \times 2$) is placed as text: 6.283185

	0 to 1



	0
	0: All responses to prompts for text strings and attribute values are taken literally 1: Text starting with '(' or '!' is evaluated as an LISP expression, as for non-textual input

22.21 TEXTFILL system variable

22.21.1 Text fill

Controls if TrueType fonts are filled or outlined for renders and the PSOUT command.

	0 to 1
	1
	0: Display text as outlines 1: Display text as filled images

Filled Text Outlined Text Filled text
Outlined text

22.22 TEXTQLTY system variable

22.22.1 Text quality (Mac & Linux)

Controls the smoothness of TrueType fonts for plot and render.

Values between 0 and 100 are accepted.

- A value of zero means no smoothing.
- A value of 100 is maximum smoothing.



	0 to 100
	50
	0: No smoothing 100: Maximum smoothing

22.23 TEXTSIZE system variable

22.23.1 Text size

The default height for new text entities, has no effect if the current text style has a fixed height.

	2.5

22.24 TEXTSTYLE system variable

22.24.1 Text style

The current text style.

22.25 TEXTUREMAPPATH system variable

22.25.1 Texture map path

The file paths for texture maps.



22.26 THICKNESS system variable

22.26.1 Thickness

The default thickness for 2D entities.

	0.0

22.27 THREADDISPLAY system variable

22.27.1 Thread representation

Controls the thread display for part created, during the -BMHARDWARE command.

	Off (0): Turn off Thread Display On (1): Thread Display

22.28 THUMBSIZE system variable

22.28.1 Thumbnail preview image size

Controls the maximum generated size for thumbnail previews, in pixels.

	0 to 8
	3



	0: 64x64 1: 128x128 2: 256x256 3: 512x512 4: 1024x1024 5: 1440x1440 6: 1600x1600 7: 1920x1920 8: 2560x2560
--	--

22.29 TILEMODE system variable

22.29.1 Tile mode

Switches the active tab, model or paper space.

	1
	0: Last active layout tab (paper space) 1: Model tab

22.30 TILEMODELIGHTSYNCH system variable

22.30.1 Tile mode light synch

Synchronizes lighting in all model space viewports (Internal use only).

	Off (0): Don't synchronize lighting On (1): Synchronize lighting



22.31 TIMEZONE system variable

22.31.1 Timezone

Controls the time zone for the sun.

Note: Setting a geographic location also controls the time zone.

	-12000 to 13000
	-8000



-12000: (GMT-12:00) International Date Line West
-11000: (GMT-11:00) Midway Island, Samoa
-10000: (GMT-10:00) Hawaii
-9000: (GMT-09:00) Alaska
-8000: (GMT-08:00) Pacific Time (US & Canada); Tijuana
-7000: (GMT-07:00) Mountain Time (US & Canada)
-7001: (GMT-07:00) Arizona
-7002: (GMT-07:00) Chihuahua, La Paz, Mazatlan
-6000: (GMT-06:00) Central Time (US & Canada)
-6001: (GMT-06:00) Central America
-6002: (GMT-06:00) Guadalajara, Mexico City, Monterrey
-6003: (GMT-06:00) Saskatchewan
-5000: (GMT-05:00) Eastern Time (US & Canada)
-5001: (GMT-05:00) Indiana (East)
-5002: (GMT-05:00) Bogota, Lima, Quito
-4000: (GMT-04:00) Atlantic Time (Canada)
-4001: (GMT-04:00) Caracas, La Paz
-4002: (GMT-04:00) Santiago
-3300: (GMT-03:30) Newfoundland
-3000: (GMT-03:00) Brasilia
-3001: (GMT-03:00) Buenos Aires, Georgetown
-3002: (GMT-03:00) Greenland
-2000: (GMT-02:00) Mid-Atlantic
-1000: (GMT-01:00) Azores
-1001: (GMT-01:00) Cape Verde Is.
0: (UTC) Universal Coordinated Time
1: (GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London
2: (GMT) Casablanca, Monrovia
1000: (GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
1001: (GMT+01:00) Brussels, Copenhagen, Madrid, Paris
1002: (GMT+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague
1003: (GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb
1004: (GMT+01:00) West Central Africa
2000: (GMT+02:00) Athens, Beirut, Istanbul, Minsk
2001: (GMT+02:00) Bucharest
2002: (GMT+02:00) Cairo
2003: (GMT+02:00) Harare, Pretoria
2004: (GMT+02:00) Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius
2005: (GMT+02:00) Jerusalem
3000: (GMT+03:00) Moscow, St. Petersburg, Volgograd
3001: (GMT+03:00) Kuwait, Riyadh
3002: (GMT+03:00) Baghdad
3003: (GMT+03:00) Nairobi
3300: (GMT+03:30) Tehran
4000: (GMT+04:00) Abu Dhabi, Muscat
4001: (GMT+04:00) Baku, Tbilisi, Yerevan
4300: (GMT+04:30) Kabul
5000: (GMT+05:00) Ekaterinburg
5001: (GMT+05:00) Islamabad, Karachi, Tashkent
5300: (GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi
5450: (GMT+05:45) Kathmandu
6000: (GMT+06:00) Almaty, Novosibirsk
6001: (GMT+06:00) Astana, Dhaka
6002: (GMT+06:00) Sri Jayawardenepura
6300: (GMT+06:30) Rangoon



22.32 TOOLBARMARGIN system variable

22.32.1 Toolbar margin

Controls the toolbar row margin size, in pixels.

Values between 0 and 63 are accepted.

	0 to 63
	0

22.33 TOOLBUTTONSIZE system variable

22.33.1 Tool button size

Controls size of Toolbar buttons and icons.

	0 to 2
	0
	0: Small buttons 1: Large buttons 2: Extra-large buttons

Small:



Large:



Extra Large:





22.34 TOOLICONPADDING system variable

22.34.1 Tool icon padding

Controls the size of toolbar buttons. Changes the spacing, in pixels, does not change the size of the icons. Values between 0 and 15 are accepted.

	0 to 15
	4

22.35 TOOLPALETTEPATH system variable

22.35.1 Tool palettes path

Specify the path(s) to the Tool Palettes.

22.36 TOOLTIPDELAY system variable

22.36.1 Tooltip delay

Controls the delay for tooltips (hover tips) to appear, in milliseconds. Applies only if tooltips are enabled in the TOOLTIPS system variable.

Values between 0 and 500 are accepted.

	0 or greater
	500



22.37 TOOLTIPS system variable

22.37.1 Tooltips

Toggles the display of tooltips for toolbars, the Ribbon, the Quad and the Properties.

	Off (0): Don't display tooltips On (1): Display tooltips

22.38 TPSTATE system variable

22.38.1 Tool Palettes Panel state (Read Only)

The status of the Tool Palettes panel.

	0 to 1
	0
	0: Tool Palettes bar is invisible 1: Tool Palettes bar is visible

22.39 TRACEWID system variable

22.39.1 Trace width

Controls the default width for new traces, for the TRACE command.

	1.0



22.40 TRACKPATH system variable

22.40.1 Track path

Controls the display of polar and entity snap tracking paths.

	0 to 3
	0
	0: Display full-screen entity snap tracking path 1: Display entity snap tracking path only between the alignment point and the From point to the cursor location 2: Do not display polar tracking path 3: Do not display polar or entity snap tracking paths

22.41 TRANSPARENCYDISPLAY system variable

22.41.1 Transparency display

Displays transparencies.

22.42 TRAYICONS system variable

22.42.1 Tray icons

Toggles the display of notification icons in the Status bar.



	Off (0): Don't display tray On (1): Display tray
--	---

22.43 TRAYNOTIFY system variable

22.43.1 Tray notify

Toggles the display of notification balloons.

	Off (0): Don't display notifications On (1): Display notifications

22.44 TRAYTIMEOUT system variable

22.44.1 Tray timeout

Controls the display time for service notifications, in seconds. Applies only if the TRAYNOTIFY system variable is on.

Values between 0 and 60 are accepted.

	0 to 60
	0

22.45 TREEDEPTH system variable

22.45.1 Tree depth

Controls the maximum number of times an index can be divided into branches.

A value of zero suppresses the spatial index entirely, entities are always processed in database order.

Positive numbers turn on spatial indexing, an integer, five digits maximum, the first three digits refer to model space, the remaining digits refer to paper space. For negative numbers Z coordinate is ignored in model space, recommended for 2D drawings.



	3020
	0: Suppress spatial indexing >0: Apply spatial indexing <0: Ignore Z coordinates

22.46 TREEMAX system variable

22.46.1 Tree maximum

Limits the use of memory, limits the number of nodes in the spatial index (oct-tree) when a drawing is regenerated.

By imposing a fixed limit with TREEMAX, you can load drawings created on systems with more memory than your system and with a larger TREEDEPTH than your system can handle. These drawings, if left unchecked, have an oct-tree large enough to eventually consume more memory than is available to your computer. TREEMAX also provides a safeguard against experimentation with inappropriately high TREEDEPTH values.

	10000000

22.47 TRIMEDGES system variable

22.47.1 TRIM and EXTEND to hatches

Controls whether hatch patterns are considered when trimming and extending in Quick mode.

	1
	0: Uses hatch patterns as boundaries 1: Uses hatch edges only



22.48 TRIMEXTENDMODE system variable

22.48.1 TRIM and EXTEND mode

Controls how TRIM and EXTEND commands use streamlined inputs.

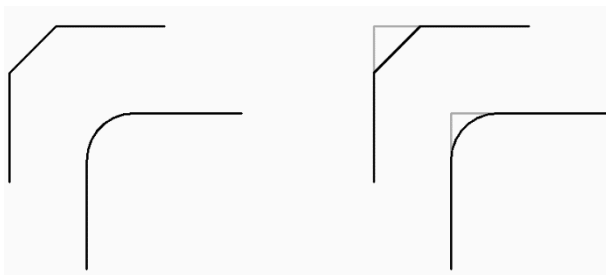
	1
	0: Standard mode, cutting and boundary edges need to be specified firstly 1: Quick mode, all objects in the drawing are automatically specified as cutting and boundary edges

22.49 TRIMMODE system variable

22.49.1 Trim mode

Controls if the length of selected entities or polyline segments for chamfers and fillets are adjusted (trimmed or lengthened).

	Off (0): Don't trim selected edges to the endpoints of chamfer lines and fillet arcs On (1): Trim selected edges to the endpoints of chamfer lines and fillet arcs





22.50 TRUSTEDPATHS system variable

22.50.1 Trusted executable file locations (Read Only)

File path(s) to use to load executable files.

Separate file paths with semicolons (;)

22.51 TSPACEFAC system variable

22.51.1 Text space factor

Controls the line spacing distance of multiline text, measured as a multiplier of text height.

Values between 0.25 and 4.0 are accepted.

	0.25 to 4.0
	1.0

22.52 TSPACETYPE system variable

22.52.1 Text space type

Controls the type of line spacing used for multiline text.

- At least: adjusts line spacing based on the tallest character(s) in a line
- Exactly: uses the specified line spacing, regardless of individual character sizes

Note: The mtexts created with the MLEADER command are also influenced by this system variable's value.

	1 to 2
	1



	1: At least 2: Exactly
--	---------------------------

22.53 TSTACKALIGN system variable

22.53.1 Text stack align

Controls the vertical alignment of stacked text.

	0 to 2
	2
	0: Align bottom 1: Align center 2: Align top

22.54 TSTACKSIZE system variable

22.54.1 Text stack size

Controls the stacked text height, as a percentage, relative to the height of the selected text.

Values between 25 and 125 are accepted.

	25 to 125
	70

22.55 TTFASTTEXT system variable

22.55.1 TrueType Text displaying mode

Controls if TrueType text is drawn as vectorized graphics or as text.

--	--



	Off (0): Displays text as vectorized graphics On (1): Displays text as text

22.56 TUTORIALSONSTARTPAGE system variable

22.56.1 Tutorials on start page

Switch to control whether tutorials can be accessed from the start page.

	Off (0): Does not display the Discover hands-on tutorials button on the start page On (1): Displays the Discover hands-on tutorials button on the start page



23. U

23.1 UCSAXISANG system variable

23.1.1 UCS axis angle

Controls the default rotation angle around the X, Y, or Z axis, for the UCS command.

Values between 5 and 180 are accepted.

	5 to 180
	90

23.2 UCSBASE system variable

23.2.1 UCS base

The name of the UCS that defines the orthographic UCS.

	WORLD

23.3 UCSDETECT system variable

23.3.1 UCS detect

Controls the dynamic UCS behavior. Dynamic UCS is a temporary UCS that activates automatically when the cursor hovers over a face, region or 2D entity.

A negative value is the same as 0, but helps in storing the earlier value.

	-3 to 3



	1
	negative: Disable dynamic UCS 1: Enable for faces of 3D solid and regions 2: Enable for 2D entities

23.4 UCSFOLLOW system variable

23.4.1 UCS follow

Controls if a plan view (a top view zoomed to extents) is generated automatically whenever the UCS changes.

If on, turn off the UCSDETECT system variable.

	Off (0): Don't show plan view when UCS is changed On (1): Show plan view when UCS is changed

23.5 UCSICON system variable

23.5.1 UCS icon

Controls the display and position of the UCS icon for the current viewport.

	3
	0: No icon 1: Show icon 2: At origin

23.6 UCSICONPOS system variable

23.6.1 UCS icon position

Controls the location of the UCS icon when the origin point is not visible.



	0 to 3
	1
	0: Lower right 1: Lower left 2: Upper right 3: Upper left

23.7 UCSNAME system variable

23.7.1 UCS name (Read Only)

The name of the UCS for the current viewport, in the current workspace.

23.8 UCSORG system variable

23.8.1 UCS origin (Read Only)

The current coordinate system's origin point for the current viewport.

	0,0,0

23.9 UCSORTHO system variable

23.9.1 UCS orthographic

Sets the UCS to follow the current view, automatically switches the drawing plane to match the current view plane.

Only works if an orthographic view is selected with the -VIEW command or the LookFrom widget.

Does not work if the NAVVCUBEORIENT system variable is set to UCS.



	Off (0): When an orthographic view is selected, don't automatically activate the related orthographic UCS On (1): When an orthographic view is selected, automatically activate the related orthographic UCS

23.10 UCSVIEW system variable

23.10.1 UCS view

Controls if the current UCS is saved with a named view.

	Off (0): Don't save current UCS with named view On (1): Save current UCS with named view

23.11 UCSVP system variable

23.11.1 UCS viewports

Controls if the UCS in all viewports is fixed, or changes to reflect the currently active viewport's UCS.

	Off (0): Not locked (UCS not stored in viewport) On (1): Locked (UCS stored in viewport)



23.12 UCSXDIR system variable

23.12.1 UCS X direction (Read Only)

The X direction for the current viewport.

	1,0,0

23.13 UCSYDIR system variable

23.13.1 UCS Y direction (Read Only)

The Y direction for the current viewport.

	0,1,0

23.14 UNDOCTL system variable

23.14.1 Undo control (Read Only)

Controls the behavior of the UNDO command.

	5
	0: Undo off 1: Undo on 2: Only one command can be undone 4: Auto is turned on 8: A group is currently active



23.15 UNDOMARKS system variable

23.15.1 Undo marks (Read Only)

Shows the current number of marks placed in the Undo control using the MARK option.

The MARK and BACK options are not available if a group is currently active.

23.16 UNITESURFACES system variable

Unite adjacent surfaces.

23.16.1 Unite adjacent surfaces

Unites extruded/revolved surfaces that touch.

The UNITESURFACES system variable is one of the four system variables found under the **Extrude mode** group.

	0
	Off (0): Unite adjacent surfaces On (1): Do not unite adjacent surfaces

23.17 UNITMODE system variable

23.17.1 Unit mode

Controls how Imperial units are displayed.

	Off (0): Don't remove spaces when distances or angles are converted to text On (1): Remove spaces when distances or angles are converted to text



23.18 USECOMMUNICATOR system variable

23.18.1 Use Communicator

Shows if the is in use. If active, also shows the license type.

- 0: no license, import and export formats are not available.
- 1: trial, runs in trial mode, expiring after 30 days.
- 2: full, runs the full import-export set.

If the license is changed, the new level comes into effect after restarting the program.

	0 to 2
	1
	0: Not using Communicator 1: Communicator in use - on trial 2: Communicator in use - fully licensed

23.19 USENEWLOOKFROM system variable

23.19.1 Use the new LookFrom

Enables the new version of LookFrom.

	Off (0): Turns off the new version of LookFrom On (1): Turns on the new version of LookFrom

23.20 USENEWNOTIFICATIONS system variable

23.20.1 QML Notifications

Determines the type of notifications that are displayed.



	1
	Off (0): Show WX notifications On (1): Show Qt notifications

23.21 USENEWSTATUSBAR system variable

23.21.1 Status Bar Preview

Determines the type of status bar that is displayed.

	0
	Off (0): Show WX status bar On (1): Show Qt status bar

23.22 USERI1 system variable

23.22.1 User integer 1

First of 5 variables that can be used to store integer values.

	0

23.23 USERI2 system variable

23.23.1 User integer 2

Second of 5 variables that can be used to store integer values.

--	--



	0

23.24 USERI3 system variable

23.24.1 User integer 3

Third of 5 variables that can be used to store integer values.

	0

23.25 USERI4 system variable

23.25.1 User integer 4

Fourth of 5 variables that can be used to store integer values.

	0

23.26 USERI5 system variable

23.26.1 User integer 5

Fifth of 5 variables that can be used to store integer values.

	0



23.27 USERR1 system variable

23.27.1 User real 1

First of 5 variables that can be used to store real numerical values.

	0.0

23.28 USERR2 system variable

23.28.1 User real 2

Second of 5 variables that can be used to store real numerical values.

	0.0

23.29 USERR3 system variable

23.29.1 User real 3

Third of 5 variables that can be used to store real numerical values.

	0.0

23.30 USERR4 system variable

23.30.1 User real 4

Fourth of 5 variables that can be used to store real numerical values.

--	--



	0.0

23.31 USERR5 system variable

23.31.1 User real 5

Fifth of 5 variables that can be used to store real numerical values.

	0.0

23.32 USERS1 system variable

23.32.1 User string 1

First of 5 variables that can be used to store string values.

23.33 USERS2 system variable

23.33.1 User string 2

Second of 5 variables that can be used to store string values.

23.34 USERS3 system variable

23.34.1 User string 3

Third of 5 variables that can be used to store string values.

--	--



--	--

23.35 USERS4 system variable

23.35.1 User string 4

Fourth of 5 variables that can be used to store string values.

23.36 USERS5 system variable

23.36.1 User string 5

Fifth of 5 variables that can be used to store string values.

23.37 USESTANDARDOPENFILEDIALOG system variable

23.37.1 Use standard open file dialog (Windows)

Uses a standard (non-customizable) dialog for the OPEN, SAVEAS and INSERT commands (Windows only). See also the DRAWINGPATH, BLOCKSPATH and PLACESBARFOLDER system variables.



24. V

24.1 VBAMACROS system variable

24.1.1 Enable macros

Enables macros when a VBA-project is loaded.

	Off (0): Disable macros on loading VBA-project On (1): Enable macros on loading VBA-project

24.2 VENDORNAME system variable

24.2.1 Vendor name (obsolete)

Shows the vendor name.

Read-only

	Bricsys

24.3 VERBOSEBIMSECTIONUPDATE system variable

24.3.1 Additional diagnostics while section update

Displays additional diagnostics for the BIMSECTIONUPDATE command.



24.4 VERSIONCONTROLCONFIGPATH system variable

24.4.1 Version Control config path

The file path used to store version control settings.

24.5 VERSIONCONTROLDOWNLOADPATH system variable

24.5.1 Version Control download path

The file path used to store version control projects.

24.6 VERSIONCUSTOMIZABLEFILES system variable

24.6.1 Version customizable files (Read Only)

Shows the current version of the CUI and PGP files.

24.7 VIEWCTR system variable

24.7.1 View center (Read Only)

The coordinates for the center point of the current viewport.

24.8 VIEWDIR system variable

24.8.1 View direction (Read Only)

Displays the view direction of the current viewport.



24.9 VIEWMODE system variable

24.9.1 View mode (Read Only)

The current viewport's View mode.

- If off, the front clipping plane passes through the camera point (vectors behind the camera are not displayed) unless front-clipping is off.
- If **Front clip not at eye** is on, the FRONTZ system variable controls the front clipping plane.

	0 to 31
	0: Turned off 1: Perspective view active 2: Front clipping on 4: Back clipping on 8: UCS Follow mode on 16: Front clip not at eye

24.10 VIEWSIZE system variable

24.10.1 View size (Read Only)

The height of the current viewport.

	0.0

24.11 VIEWTWIST system variable

24.11.1 View twist (Read Only)

The view twist angle relative to the WCS for the current viewport.



24.12 VIEWUPDATEAUTO system variable

24.12.1 Automatically update drawing views

Turns on automatic updates to drawing views (in paper space) when the source model changes.

When turned off, the VIEWUPDATE command manually updates the drawing views created by VIEWBASE and VIEWSECTION commands. This only works in paper space.

	Off (0): Don't update drawing views automatically On (1): Update drawing views automatically

24.13 VISRETAIN system variable

24.13.1 Visibility retain

Controls the visibility, color, linetype and lineweight of an XRef, and if path changes to nested XRefs are saved. If the PSTYLEPOLICY system variable is off (0), also controls the plotstyles of XRef-dependent layers.

- If Off (0): Changes made to XRefs-dependent layers in the current drawing are valid in the current session only and are not saved with the drawing. When the current drawing is reopened, the layer table is reloaded from the reference drawing and the current drawing reflects those settings. The layer settings affected are On, Off, Freeze, Thaw, Color, Ltype, LWeight, and PStyle (if PSTYLEPOLICY is set to 0).
- If On (1): Layer settings are saved with the current drawing's layer table and persist from session to session.

	0 to 1



	1
	0: Off, the layer table, as stored in the XRef takes precedence 1: On, XRef-dependent layer changes made in the current drawing take precedence

24.14 VOLUMEPREC system variable

24.14.1 Volume precision

Controls the number of decimal places displayed for volumes, if volume properties are formatted with the PROPUNITS system variable.

If negative, LUPREC (Linear Unit Precision) is used.

	-1 to 8
	-1
	-1: Use the LUPREC system variable 0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000 8: 0.00000000

24.15 VOLUMEUNITS system variable

24.15.1 Volume units

Controls a list of units used to display volume, if volume properties are formatted with the PROPUNITS system variable.

If empty, all volumes match the drawing.

Note: The string contains a space-separated list of unit abbreviations.



	in ft mi μ m mm cm m km

24.16 VPMAXIMIZEDSTATE system variable

24.16.1 Viewport maximized (Read Only)

Displays a value to indicate if the viewport is maximized.

Note: You cannot plot or publish when the viewport is maximized.

This system variable is available only at the Command line.

	Off (0): Viewport is not maximized On (1): Viewport is maximized

24.17 VPROTATEASSOC system variable

24.17.1 Rotate view

Rotates a view with the viewport, in paper space.

	Off (0): Rotate view off On (1): Rotate view on

24.18 VSMAX system variable

24.18.1 Virtual screen maximum (Read Only)

The current viewport's upper-right corner coordinates.



24.19 VSMIN system variable

24.19.1 Virtual screen minimum (Read Only)

The current viewport's lower-left corner coordinates.

24.20 VTDURATION system variable

24.20.1 View transition duration

Controls the duration of animated view transitions in milliseconds.

Values between 0 and 5000 are accepted.

	0 to 5000
	750

24.21 VTENABLE system variable

24.21.1 Enable view transitions

Enables animation transitions during pan, zoom and rotation view actions in model space. See also, the VTFPS system variable.

	0 to 7
	3



	1: For zoom/pan 2: For rotation 4: For unattended mode
--	--

24.22 VTFPS system variable

24.22.1 View transition minimum FPS

Controls the minimum FPS required to enable animated view transitions.

Values between 1 and 30 are accepted.

The default value is 7, which means that the redraw time should take less than 143 ($=1000/7$) milliseconds. If the computer is not capable to redraw the view fast enough, no animation will be available.

	1 to 30
	7



25. W

25.1 WARNINGMESSAGES system variable

25.1.1 Warning messages

Controls which warning messages are displayed.

	1048575
	1: When 3D context with hardware rendering switched off is selected 2: When tool property are modified in the Customize dialog box 4: When sheet custom properties are deleted 8: When entities are moved to frozen or off layer 16: When saving to previous version that does not support certain entities 32: When a drawing is opened and modified attachments are detected 64: When a new layer, that does not match the current layer filter, is created 128: Render: Tile sizes between 4 and 127 are processed as 128 256: When a category mass is expanded in the Properties panel 512: When an item in the Customize dialog box is deleted 1024: On publish: Save sheet list 2048: When layouts in Page Setup Explorer are deleted 4096: When mass property calculations will take a long time 8192: When entering the Array Edit mode 16384: When there are incompatible units 32768: When a block definition modification will cause all related block references to update 65536: When a Data Link has changed - tables that use this link may need to be updated 131072: When VIEWBASE is used for architectural drawings 262144: When a closed category in the Properties panel is expanded 524288: When an empty category in the Properties panel is removed

25.2 WHIPARC system variable

25.2.1 Whip arcs

Controls if circles and circular arcs display as true (smooth) circles or as a series of angular lines.

--	--



	0 to 1
	1
	0: Display circles and arcs as a series of angular lines 1: Display as true circles and arcs

25.3 WHIPTHREAD system variable

25.3.1 Whip thread

Controls if the REGEN and REDRAW commands use multithreading, if the machine has multiple processors (Not yet supported).

When multithreaded processing is used for redraw operations (value 2 or 3), the order of entities specified with the DRAWORDER command is not guaranteed to be preserved for display but is preserved for plotting.

	0 to 3
	0
	0: No multithreading 1: Regenerative multithreading 2: Redraw multithreading

25.4 WINDOWAREACOLOR system variable

25.4.1 Window area color

Controls the color for window selection areas (left-right).

It has effect only when SELECTIONAREA system variable is on.

	1 to 255



	150
--	-----

25.5 WIPEOUTFRAME system variable

25.5.1 Wipeout frame

Controls the display of frames for wipeout entities, if the FRAME system variable is set to **Use individual system variables** (3).

	0 to 2
	1
	0: Hide wipeout frames 1: Display and plot wipeout frames 2: Display but do not plot wipeout frames

25.6 WMFBKGND system variable

25.6.1 Windows Meta File background

Controls how the background of a WMF (Windows Meta File) or Copy Clip is created and displayed in other applications.

	0
	Off (0): Transparent background; foreground set with the WMFFOREGND system variable On (1): Current background color; foreground remains unchanged

25.7 WMFFOREGND system variable

25.7.1 Windows Meta File foreground

Controls how the foreground of a WMF (Windows Meta File) or Copy Clip is created and displayed in other applications.



WMFFOREGND applies only when WMFBKGND is set to 0.

	0
	Off (0): Ensure foreground color is darker than background color On (1): Ensure foreground color is lighter than background color

25.8 WMFTTFASTEXT system variable

25.8.1 TrueType Text mode for Windows Meta File

Controls if TrueType text is exported as vectorized graphics or as text to a WMF (Windows Meta File).

	0
	Off (0): Export TrueType text as vectorized graphics On (1): Export TrueType text as text

25.9 WNDLMAIN system variable

25.9.1 Main window state

The state of the main graphics window.

	0 to 2
	2
	0: Normal 1: Minimized 2: Maximized



25.10 WNDLSCRL system variable

25.10.1 Window scrollbars (Windows)

Controls the display of scrollbars on the main graphics window.

	Off (0): Don't show scrollbars On (1): Show scrollbars

25.11 WNDLTEXT system variable

25.11.1 Text window state

The text window status.

	0: Hidden 1: Normal 2: Minimized 3: Maximized

25.12 WNDPMAIN system variable

25.12.1 Main window top-left

The top-left position of the main graphics window.

25.13 WNDPTEXT system variable

25.13.1 Text window top left

The top-left position of the text window.



25.14 WNDMAIN system variable

25.14.1 Main window size

The size of the main graphics window.

25.15 WNDSTEXT system variable

25.15.1 Text window size

The size of the text window.

25.16 WORLDUCS system variable

25.16.1 World UCS (Read Only)

Displays if the UCS matches the WCS or not.

	Off (0): UCS doesn't match the WCS On (1): UCS matches the WCS

25.17 WORLDVIEW system variable

25.17.1 World view

Controls if the DVIEW or VPOINT commands change the current UCS to the WCS.



	0 to 1
	1
	0: UCS remains unchanged 1: UCS changes to the WCS for the duration of the command; the command input is relative to the current UCS

25.18 WRITESTAT system variable

25.18.1 Write status (Read Only)

The state of the open drawing - read-only or writable.

Used in LISP to determine the write status of drawing.

	Off (0): Can't write to the drawing On (1): Can write to the drawing

25.19 WSAUTOSAVE system variable

25.19.1 Workspace autosave

Automatically saves workspace changes.

	Off (0): Don't save automatically On (1): Save automatically



25.20 WSCURRENT system variable

25.20.1 Current workspace

The name of the current workspace.



26. X

26.1 XCLIPFRAME system variable

26.1.1 Xref clipping frame

Controls the display of XRef and Block Reference clipping boundaries, if the FRAME system variable is set to **Use individual system variables** (3).

	0 to 2
	2
	0: Hide clipping boundaries 1: Display and plot clipping boundaries 2: Display but do not plot clipping boundaries

26.2 XDWGFADECTL system variable

26.2.1 XRef database fade control

Controls the transparency for XRefs.

Values between -90 and 90 are accepted. Negative values disable fading.

	-90 to 90
	70

26.3 XEDIT system variable

26.3.1 XRef editable

Allows in-place editing on the current drawing, if it is referenced in another drawing.

--	--



	Off (0): Can't use in-place reference editing On (1): Can use in-place reference editing

26.4 XFADECTL system variable

26.4.1 Reference editing fade control

Controls the transparency for XRefs during edit mode.

This system variable affects only the entities that are not being edited in the reference.

Values between 0 and 90 are accepted.

- A value of zero means fully opaque.
- A value of 90 means maximum transparency.

	0 to 90
	50

26.5 XLOADCTL system variable

26.5.1 XRef load control

Controls XRef demand loading and if a copy or the original drawing is opened (Not yet supported).

	0 to 2
	1



	0: Turn off demand-loading; the entire drawing is loaded 1: Turn on demand-loading; referenced drawings are kept open and locked 2: Turn on demand-loading; copies of referenced drawings are opened and locked; referenced drawings are not locked
--	---

26.6 XLOADPATH system variable

26.6.1 XRef load path

Controls a path to store temporary copies of demand-loaded XRefs. See also the XREFCTL system variable.

26.7 XNOTIFYTIME system variable

26.7.1 Xnotify time

Controls how often the program checks for modified XRefs, images and PDF documents, in minutes.

This is if XREFNOTIFY, IMAGENOTIFY and/or PDFNOTIFY is ON.

Values between 0 and 10,080 are accepted.

	0 to 10080
	5

26.8 XREFCTL system variable

26.8.1 XRef control

Creates XRef log files (XLG).



	Off (0): Don't write log files On (1): Write log files
--	---

26.9 XREFNOTIFY system variable

26.9.1 XRef notify

Displays a warning, when a drawing is opened, if there are missing XRefs.

	Off (0): Disable Xref notification On (1): Enable Xref notification

26.10 XREFOVERRIDE system variable

26.10.1 XRef override

Controls the display of entity visual properties (such as color, linetype, linewidth, transparency, or plot style) on referenced layers.

- If 0: When the properties of the entities on the XREF drawing are set to ByLayer, any changes to the xref layer properties are displayed in the current drawing.
- If 1: When the properties of the entities on the XREF drawing are not set to ByLayer, entities on xref layers are treated as if their properties are set to ByLayer. And every external reference layer can have its own set of layer overrides.

	0 to 1
	0
	(0): Off, only ByLayer properties of the entities in the XREF drawing can be changed (1): On, all properties of entities in the XREF drawing can be changed by its original layer property



26.11 XREFTYPE system variable

26.11.1 XRef type

Controls the default reference type.

	0 to 1
	0
	0: Attachment 1: Overlay



27. Z

27.1 ZOOMFACTOR system variable

27.1.1 Zoom factor

Controls the incremental zoom change with respect to the mouse-wheel.

When zooming in, the incremental step decreases gradually allowing to focus on a particularly detail easily.

Values between 3 and 100 are accepted.

	3 to 100
	40

27.2 ZOOMWHEEL system variable

27.2.1 Mouse wheel zoom direction

Toggles the mouse wheel zoom direction.

	0
	0: Forward zooms in, backward zooms out 1: Forward zooms out, backward zooms in