

# CADPower Tools List

(for BricsCAD or AutoCAD)

“Super-charging BricsCAD and AutoCAD with productivity boosting tools since 1999”

## Polyline Tools

### Join

CP_3DJ	Join 3D Polylines
CP_PLJOIN	Automated Join - 2D polylines

### Change 2d -> 3d -> 2d

CP_CH2D3D	2D-to-3D
CP_CH3D2D	3D-to-2D

### Vertex Management

CP_DELVX	Delete Vertex
CP_INSVX	Insert Vertex
CP_DENSIFY	Densify vertices
CP_REM_LINVERTS	Weed (remove) collinear vertices from polyline
CP_PL_PLACE	Place Points/Blocks along vertices
CP_FIXCLOSED	Add / Remove redundant closing vertex in polylines
CP_DELSVP	Delete single vertex polylines
CP_MVEDIT	Multiple Vertex Editor
CP_NEWSTART	Specify a new start point for closed polylines
CP_TWEAKPOLY	Tweak polyline vertex

### Part Editing

CP_PARTEXTTRACT	Extract part of a polyline
CP_PARTCOPY	Copy(and move) part of a polyline
CP_PARTOFFSET	Offset part of a polyline
CP_PARTSTRETCH	Stretch part of a polyline
CP_PARTMIRROR	Mirror part of a polyline
CP_PARTROTATE	Rotate part of a polyline
CP_PARTRESHAPE	Reshape part of a polyline

### Inquiry & Statistics

CP_PL_STAT	Compute detailed polyline statistics
CP_LAYERAREA	Compute summed polyline areas from selected layers
CP_LENGTH	Compute lengths
CP_CALCAREA	Compute summed areas of closed polylines
CP_BULGE	Display info. about polyline bulge (arc segments)

CP_FINDHND	Search entities via handles
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## More editing

CP_XV	Express Pedit
CP_CP_MPEDIT	Multiple Pedit
CP_CHW	Change Widths
CP_XP_WPL	Explode Polylines with width
CP_SEGLENSET	Specify segment lengths in polylines
CP_SEGDEL	Delete a single segment from polyline

## Flip

CP_FLIP	Flip (Reverse) direction
CP_PLARCMIRROR	Flip (mirror) arc segments of polylines

## Fillet

CP_FILLETPOLY	Enhanced fillet command
CP_MFILLET	Fillet multiple polylines

## Others

CP_CP_INOUTOFFSET	Offset closed polylines INwards/OUTwards
CP_XPSPL	Explode Splined
CP_POLYGETZ	Acquire Neighboring polyline elevations
CP_FLOW_LT	Control polyline linetypes
CP_ZPOLY	Zoom to Polyline
CP_FIXUCS	Fix line/polylines with different UCS
CP_LINPOLY	Draw linear polylines from arced polylines

## Conversion

### Line/Polyline/Arc/Spline

CP_PLARC2PL	Convert Arc Polylines to linear segment polyline
CP_PLINE2ARC	Convert linear polylines to arcs/arced polylines
CP_LINE2PL	Convert lines and arcs to polylines
CP_SPL2PL	Convert Splines to polylines
CP_PL2SPL	Convert polylines to SPLINE
CP_UNITCONV	Units change
CP_LINE2XLIN	Line 2 XLIN

### Polyline/3DFace/Mesh

CP_PL23DFACE	Convert polylines to 3dface
CP_PL2PFACE	Convert polylines to PFACE
CP_3DF2PL	3DFaces to polylines
CP_3DF2PFACE	3DFaces to polyface mesh
CP_PFACE2PL	Polyface mesh to polylines

### More conversion

CP_BLKSH2P	Convert Blocks/Shapes/Text/Circle to Points
CP_P2BLKSH	Convert Points/Text/Circles to Blocks/Shapes
CP_0LEN2PNT	Convert 0 Lengths to POINTs
CP_ATT2XD	Attributes to Xdata

### Polyline Types

CP_CH_H2L	Heavy-Weight to Light-Weight
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CP_CH_L2H	Light-Weight to Heavy-Weight
CP_SCALE_Z	Scale Z values
CP_BL2BE	Change Properties ByLayer-to-ByEntity
CP_FLATTEN	Flatten - Convert to 0.0 elevation

## Export

CP_IMPEX	Import/Export points and lines
CP_MULTEXPORT	Multiple drawing export in various formats
CP_3DF2DM	Export 3dface objects into SMS 2DM file format
CP_IMPORT2DM	Import 2DM files as 3dface objects
CP_CSVEXPOR	Export CSV file

## Draw

### Geometry

CP_CREATETAPER	Tapered lines
CP_SLOT	Slot
CP_HELIX	Helix
CP_PARABOLA	Parabola
CP_INVOLUTE	Involute
CP_TUBE	Tube
CP_TRUNCCONE	Truncated Cone
CP_PERP	Perpendicular lines
CP_DBOX	Draw Rectangle with diagonals
CP_XLINES	Projected(construction) lines
CP_TANCURVE	Tangents to Curves
CP_LINEEQ	Equation of a Line
CP_CGRID	Construction Grid
CP_RECTLB	Draw Rectangle with dimensions

### CAD Objects

CP_EASY3DPOINT	Easy 3dpoint
CP_EASY3DPOLY	Easy 3dpolyline
CP_EASY3DFACE	Easy 3dface

### Symbology

CP_ROUGHEN	Roughen a Line
CP_PATTERNPLACER	Place a pattern at regular spacing

### Rule-based

CP_DRAWPOLYINCDEC	Draw 3d polylines with auto.Elev increment/decrement
CP_BOXSCREEN	Draw a rectangle box at the current screen extents
CP_BOUNDENT	Draw bounding box around selected object(s)
CP_SORTEDPOLY	Draw a polyline by joining points in sorted order
CP_SHOWPLARCS	Draw arc-ends to arc-center connections in arcs & poly-arcs
CP_POLYAREACREATE	Draw closed polylines to an exact area
CP_HOLETABLE	Rule-Based -> Hole table

CP\_POLYAREACREATE Draw closed polylines to an exact area

## Build

### Offset

CP\_MOFFSETR Multiple Offset - Relative  
CP\_MOFFSETA Multiple Offset - Absolute  
CP\_CP\_OFFSET Offset and delete original  
CP\_3DOFFSET Offset 3d polylines  
CP\_SEGOFFSET Offset single segment from polyline  
CP\_MVOFFSET Multiple Variable polyline segment offset

CP\_CREATECENT Create centroid marks inside closed polygons  
CP\_MEASUREMANY Measure multiple objects  
CP\_EXTRUDER Easy Solids Extruder  
CP\_JNE Join nearest ends of lines, polylines

CP\_CPROT Copy and then Rotate  
CP\_MVROT Move and then Rotate  
CP\_DATAMAN Data Manager

## Annotation

CP\_IDXYZ Label points  
CP\_VXLABEL Label polyline vertices  
CP\_SEGLABEL Label polyline segments  
CP\_ANGLABEL Label polyline Angles  
CP\_ANNOTATEENDS Annotate ends of lines/polylines with symbols  
CP\_ANNOTPOINT S Annotate points, based on layer names  
CP\_LENTEXT Create/update length annotation  
CP\_HNDLABEL Display object handles as text labels  
CP\_MARKLEVELS Mark levels above-or-below a selected datum

## Blocks

### Block-related

CP\_MOD\_SHBL Globally Modify Block Properties  
CP\_BLKMAN Block Names Editor  
CP\_REPBLK Replace Block  
CP\_XP\_ATT (BURST) Explode Block- Retain attributes as Text  
CP\_COMPAREBLKATTS Compare Block attributes and create report  
CP\_CONNECTBLOCKS Connect blocks based on attribute values  
CP\_MREDEFINE Multiple Redefine Blocks-Lyr/Clr  
CP\_EXPLODENESTED Explode only nested blocks  
CP\_EXPLODE2LAYER Explode blocks to a specified layer  
CP\_DRAWSEGBLOCKS Place a block along each segment of the polyline  
CP\_MBLKTRIM Trim lines/polylines along intersecting blocks  
CP\_BLOCKINS Express Block Insert  
  
CP\_REPEATBLK Repeat Last Block Insert  
CP\_BLKSLIDE Slide (move) block relative to its rotation angle

CP\_SCLEDIT Interactive XY scale editor

### Attribute-related

CP\_CP\_ATTEDIT Global Attribute Editor  
CP\_CP\_EASYATT Multiple-Choice attribute editor  
CP\_CP\_EASYATT\_SETUP Multiple-Choice attribute editor Setup  
CP\_CP\_EASYATTCLASS Change block layers/color based on attribute values  
CP\_CP\_ATTTEXT Extract Block attributes to file  
CP\_PROP2ATT Transfer AutoCAD properties to Blocks Attributes  
CP\_TAGEXT Export Block Attribute Tags to ASCII file  
CP\_TAGREN Rename block attribute tags, prompts and defaults  
CP\_TAGDEL Delete block attribute tags from block definition  
CP\_ATTMOVE Move attribute  
CP\_ATTROTATE Rotate attribute  
CP\_ATTUPRIGHT Make attribute readable  
CP\_ATTXFER Transfer Attributes between blocks  
CP\_TXT2ATT Transfer Text strings to Block attributes

CP\_ZOOMTXT Search and replace text/attributes  
CP\_BLKEDIT Edit blocks graphics and attribute properties independently  
CP\_DYNATTPLACE Place Block - position attributes interactively  
CP\_SRCHBLK4TXT Search Blocks for text strings

## Text

### Creation

CP\_TC Draw Quick Text (running numbers)  
CP\_CURVETEXT Create text along a curve  
CP\_EASYTEXT Create text aligned to a curve  
CP\_DATESTAMP Create Date/Drawing Stamp  
CP\_MT Draw Multiple Text

### Editing

CP\_MODTXT Globally modify TEXT/MTEXT  
CP\_TXTFILTER Text Filter  
CP\_TXTROUND Round Off Numeric text  
CP\_ENCLOSE Enclose Text in Box  
CP\_CONS\_TXT Consolidate Text into MText  
CP\_SPLITTEXT Split long text strings into individual strings  
CP\_UNCLUTTER Unclutter text objects  
CP\_TXTSLIDE Slide (move) text relative to its rotation angle  
CP\_TXT2FILE Write Text to File  
CP\_TXTEDIT Global Multiple Text Editor  
CP\_TXT2MTXT Consolidate Text into MText (quick version)

### Conversion

CP\_TXT2ATTDEF Convert text strings to attribute definitions  
CP\_ATTDEF2TXT Convert attribute definitions to text objects  
CP\_CHCASE Change Case  
CP\_CHCASEQUICK Change Case – shortened quick version

### Display

CP\_ALIGNTEXT Align Text Objects  
CP\_ALIGNTEXT2LINE Align Text Objects to a line  
CP\_TORIENT Text Orient: Make Text,MText readable

CP_TXTSPACING	Adjust the spacing between text objects
CP_TXTCHANGE	Exchange one text with another
CP_UND_LINE	Underline Text
CP_TXTEVAL	Apply arithmetic/statistical operations on text objects
CP_DWGFONTS	List Drawing Fonts
CP_TEXTMASK	Create TEXTMASK
CP_TCOUNT	Count occurrence of text objects

## Extended Entity Data

CP_REMXD	Remove Xdata
CP_XD_SEARCH	Search and replace extended entity data
CP_SHOWXD	Display extended entity data from picked object
CP_XD_EXTRACT	Extract extended entity data to ASCII files
CP_OD_XD_LABEL	Create text labels from Object data / extended entity data
CP_NODATA	Check for no Xdata / Object Data
CP_EASYEED	Edit XDATA in a dialog box

## BOM/BOQ Tools

### Generic

CP_BOM	BOM/BOQ Generator
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### Panels, Sizes & Area computation

CP_TILEPLACE	Place tiles / XY panels (for space planning)
CP_TILEOFFSET	Offset tiles / XY panels
CP_TILECOUNT	Count tiles / XY panels
CP_TILEEDIT	Edit tiles / XY panels
CP_FLEXITILE	Place flexi-tiles

### Doors, windows & fixtures schedules

CP_BUILDWALLS	Build Walls from plan footprint
CP_SEGLENGTHSET	Set Height/Length of wall segments
CP_PLACEFIXTURES	Place openings/fixtures on walls/floors
CP_COMPUTEWALLAREAS	Compute Wall/Opening areas

### Linear Quantities

CP_LINEQTY	Compute linear quantities
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## Modeler

CP_CONVERTTO3DFORMS	Convert 2d objects to 3d forms
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## Miscellaneous

### File Management

CP_FILEMAN	File Manager
CP_DWGBROWSER	DWG browser, with thumbnail previews
CP_BINDXREF	Detaches all un-referenced XREFs and binds all others into current DWG
CP_BATCHPROCESS	Batch process multiple drawings with scripts
CP_MULTINS	Multiple DWG Inserts
CP_MXREF	Multiple drawings XREF
CP_READEXIF	Display EXIF data from images & other files (photo-forensics)

CP\_INIEDITOR Edit CADPower INI files

### Export

CP\_LYRS2DWG Layers to DWG  
CP\_DWGSPLIT Split a drawing into smaller parts  
CP\_FILEESORT Sort ASCII files

### CAD Procedures

CP\_MATCH Match Properties  
CP\_OBJALIGN Align Objects  
CP\_XYZSCL Scale objects (unequally) in X, Y and Z directions  
CP\_MEANPOINT Create a mean (averaged) point from a cluster of points  
CP\_FLIPZ Flip (reverse) elevations(Z) from selected objects  
CP\_ROUNDOFF Round Off Values from points/lines  
CP\_HATCHBOUND Re-Create Hatch boundaries from HATCH object  
CP\_XTRACT Extract from XREF  
CP\_XP\_RETDAT Explode objects - Retain Object Table and extended entity data  
CP\_HATCHAREA Report on areas covered by HATCH objects  
CP\_FLIPARCS Flip ECS of arcs with negative normals  
CP\_CHOP Object Chopper  
CP\_AUTODIM Automatic Dimensioning  
CP\_FACENORMAL Control 3dface Face Normals  
CP\_CONTBREAK Break(Split) objects along a polyline  
CP\_ZOOMENT Zoom to extent of selected object(s) (with 5% margin)  
CP\_DELETELAYOUTS Delete paper-space layouts  
CP\_NULLTEXT Delete Null TEXT  
CP\_PURGEALL Purge All Unused Symbols  
CP\_SCALECLEAN Remove all unreferenced scales  
CP\_VISIBLE Change object visibility  
CP\_REPURL Search / Replace attached URL  
CP\_DIMPREC Change Dimension Precision  
CP\_POLYCLIP Clip an image along a boundary polygon  
CP\_IMAGETRIM Trim an image along a boundary line  
CP\_SHAPEMANAGER Analyze and manage geometric shapes  
CP\_LINEPLANEINT Determine the intersection of line and plane  
CP\_DIVPOLY Divide a 3/4 sided polygon  
CP\_JOINCOLLINEAR Join collinear lines & polylines  
CP\_DWGAUDIT Perform drawing audit and clean-up  
CP\_WIPEOUT Create a WIPEOUT buffer around closed polygons  
CP\_HATCHINSVX Insert vertex in hatch boundary  
CP\_HATCHDELVX Delete vertex from hatch boundary  
CP\_GRIPHATCH Display grips in hatches  
CP\_MOVEBAK Move the backup .BAK files to a specified folder  
CP\_HATCHORIGIN Change hatch origin

### Viewports

CP\_VPEXTRACT Extract clipping boundary  
CP\_VPBNDRYUPDATE Update clipping boundary  
CP\_LOCKVPCURLAYOUT Lock All Viewports in current layout  
CP\_UNLOCKVPCURLAYOUT UnLock All Viewports in current layout

CP_LOCKVPORTS	Lock Viewports
CPVPMAX (also as VPMAX)	Maximize a paper-space viewport
CP_VPMAXRESTORE	Restore original view setup after running VPMAX

## Selection

CP_PLFILTER	Polylines based on properties
CP_FINDENCLOSED	Find points enclosed within 3dface space
CP_3DFFILTER	3DFaces based on properties
CP_ESELECT	Enhanced Entity Selector
CP_MAKESEL	Build Selection Set
CP_FINDZRNNG	Find objects in selected Z range
CP_SL	Select Current Layer
CP_SS	Select Current Style
CP_LASTSEL	Put last CADPower selection in 'previous' sel.set

## Inquiry

CP_SURFAREA	Compute Surface Area of 3DFACES
CP_ANGLE	Display angle between two lines
CP_CGRAV	Compute Center of Gravity
CP_DWG_STAT	Display Drawing Statistics
CP_PERIMTR	Compute running distance/perimeter
CP_VISIT	Object Selection Browser
CP_Q	Quick elevation Info
CP_DXY	Enhanced DIST command

## Layer

CP_LAYERMAN	Layer Names Editor
CP_ISOD	Isolate layer(s)
CP_RESTORE	Restore Isolated layer(s)
CP_SL_1	Save Layer State - 1
CP_SL_2	Save Layer State - 2
CP_SL_3	Save Layer State - 3
CP_RL_1	Restore Layer State - 1
CP_RL_2	Restore Layer State - 2
CP_RL_3	Restore Layer State - 3
CP_CCL	Change to current layer
CP_CPCL	Copy to current layer
CP_COPYLYR	Copy layer contents to another layer

## More Options

CP_CHECKUPDATES	Check for CADPower updates
CP_DEBUGINFO	Display debug info about the computer and licensing
CP_SHOWPATHS	Show & browse important system & DWG paths
CP_CMDLIST	List GeoTools/CADPower commands
CP_CMDSEARCH	Search GeoTools/CADPower commands
CP_CCMDHELP	Display Specific Command Help



CP\_LASTCMDHELP      Display help for last command

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CP\_DIMTXEXTRACT      Extract text from dimensions