Sma	artDraft 25 Commands b	y Produ	ct		
				Produc	ts
SmartDraft Tools	Description	Alias	Suite	Survey	Construction Notes
Setup Panel					
Drawing Setup	Setup a drawing for use with SmartDraft tools. Horizontal scale, decimal precision values, text styles, dimensional styles, etc	DDS	х	x	x
Layer Database	SmartDraft's automatic layer making feature can increase drafting productivity by reducing the time it takes to learn and remember your company's layering standard. It can automatically create a layer before inserting a block, or drawing an object. It assists in creating multiple drawings with consistent layer names, colors and linetypes. If you work with multiple agencies or consultants, which require their own layering standards, Customization Templates are used to accommodate this need.		X	x	X
User Options	The User Options control SmartDraft settings such as enabling command aliases, enabling the autoload pull-down feature, and user customization template type. These settings apply to the current user only and are stored in the AutoCAD Profile.	SmartUsers	x	x	x
Program Options	The Program Options control program- wide and network-wide options such as path locations, default user customization template, and default user options.	SmartOptions	x	x	x
Customization Template Manager	Create and maintain Customization Templates and their data files.	SmartCTM	х	х	х
Open Sample Files Folder	Open the Sample Files folders	SM_OSFF	Х	Х	Х
Open Customization Template Folder	Open the Customization Template folders	SM_OCTF	Х	х	х
SmartDrarft Information	Display Information about SmartDraft, necessary for support.	SmartInfo	х	х	х
SmartDraft About	Display version, license, and authorization information.	SmartAbout	x	х	x
Purge All	Purge all items, including Regapps without the dialog box	PAA	х	х	x
Update Labels	Update the data values of all the dynamic SmartDraft labels.	SDU	х	x	х

Toggle Update Labels On / Off	Toggle Update Labels for the dynamic SmartDraft labels.	SDUT	х	x	х
Toggle Label Masking On / Off	Toggle automatic masking for the text, mtext, and blocks with attributes for SmartDraft commands.	AMA	x	x	Х
Grading Panel					
Elevation Label	Create a dynamic elevation label from 3D Polylines, AutoCAD civil product Surfaces, Profiles or Feature Lines.	EF	x		
Elevation Label Lot Line	Create an elevation label along a lot line from AutoCAD civil product Alignment and Profile.	EFF	x		
Elevation Manual	Create manual elevation label by entering or selecting elevation values.	EFM	x		
Slope Label One Point	Create a dynamic slope label.	LSC	Х		
Slope Label Two Points	Create a dynamic slope label selecting two points.	LSC2	х		
Slope Label Manual	Create a manual slope label.	LSCM	Х		
Spot Elevation	Create spot elevation.	ES	Х		
Label Contours	Label an object's elevation.	AC	Х	Х	
Interpolate Contours	Interpolate spot elevations between two polylines.	ICO	x		
Interpolate Interval	Interpolate spot elevations between two points.		x		
Calculate Slope	Calculate slope from two selected objects with elevation.	CS	x		
Adjust Elevations	Adjust selected elevations by both an adjustment value and source elevation.	EAD	x		
Calculate Elecation	Calculate elevation from a selected object with elevation and a selected point (distance).	CE	x		
Edit Objects Elevation	Edit the elevation (z) value of an object.	EC	х		
Slope Symbols	Create slope symbols.	SSL	Х		
Toe / Top of Slope	Create toe or top of slope.	GTS	Х		
Flowline arrow	Insert a flowline arrow.		Х		
Daylight symbol	Insert a daylight symbol along an object or change object to the daylight linetype.		x		
Cut/Fill Symbol	Insert a cut / fill symbol along an object or change object to the cut / fill linetype.		x		
Brow Ditch Symbol	Insert a brow ditch symbol along an object or change object to the brow ditch linetype.		x		
Polylines Edit Elevation	Edit the elevation of Polyline, increment the elevations.		х		
Edit Polyline Datum Elevation	Edit polyline datum elevation.		Х		

Assign Polyline Elevation	Assign polyline elevation.	Х	
Modify Elevations of Feature Lines or 3D Polylines: Absolute Hinge	Use a hinge line to edit the elevations of selected feature lines and 3D polylines. The hinge line is defined by two points. The absolute slope can be a slope (%) or a slope (X:1).	х	
Modify Elevations of Feature Lines or 3D Polylines: Relative Hinge	Use a hinge line to edit the elevations of selected feature lines and 3D polylines. The hinge line is defined by two points. The relative slope can be a slope (%) or a slope (X:1).	х	
Check for 0 Elevation Polylines	Check for 0 elevation polylines.	Х	
Change Polyline Layer at Elevation	Change polyline layer at elevation.	Х	
Offset Polyline by Rise/Run	Offset polyline by rise / run.	Х	
Offset Polyline by Slope (%)	Offset polyline by slope(%).	X	
Offset Polyline by Slople (%) and Distance	Offset polyline by slope(%) and distance.	x	
Offset Polyline by Slope (%) and	Offset polyline by slope(%) and elevation		
Elevation Limit	limit	Х	
Daylight to Surface	Daylight to a surface from a line, arc, polyline, 3D polyline or feature line.	х	
Daylight to Surface - Segment	Daylight to a surface from a segment of a polyline, 3D polyline or feature line.	х	
Daylight to Surface - Point	Daylight to a surface from a point	Х	
Volume from Polylines (Contours)	Calculate a pond/basin or stockpile volume from polylines (contours).	х	
Extract Contour(s) from a Surface	Extract a single or all contours from a surface.	х	
Create BricsCAD Surface from Points	Create a BricsCAD surface from SmartDraft points in the drawing.	BricsCAD Only	
Add SmartDraft points to a BricsCAD	Add SmartDraft points to a BricsCAD	BricsCAD	
surface.	surface.	Only	
HEC-RAS Panel			
Sample Lines (Polylines) from File	Create Sample Lines or Polyline Cross Sections at specified stations along an alignment.	х	
Sample Lines Tool	Rename or Renumber Sample Lines and add polylines to a Sample Lines Group.	х	
Create HEC-RAS Project	Create a HEC-RAS project files or geometry file from Sample Lines or Polylines, an alignment, and a surface.	х	
Added to HEC-RAS Project	Add new Cross Sections to an existing HEC-RAS Project from Sample Lines or Polylines along an alignment.	х	

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Label HEC-RAS Cross-Sections lines	Create Section Lines and labels on HEC- RAS cross section lines in the plan view of the drawing.		х		
Create HEC-RAS Floodplain Lines	Create floodplain limit utilizing the results of the HEC-RAS Floodplain analysis from a HEC-RAS Output File.		х		
Draw HEC-RAS Cross-Sections	Create HEC-RAS Cross Sections for each section in the HEC-RAS Project, from a HEC-RAS Output FIle (sdf).		х		
Create HEC-RAS Water Surface Profile	Create a HEC-RAS Water Surface Profile in the CADD Project, from a HEC-RAS Output File.		х		
Label HEC-RAS Water Surfure (Profile)	Label a water surface's stations and elevations, in profile, from a HEC-RAS Output File.		х		
Inquiry Panel					
Distance	Measure the distance and angle between two points or three points when a curve.	D	х	x	
Measure Angle	Measure the angle between two lines or a line and an arc.	AN	х	х	
ID Point	Display the coordinate values of a location.	IDP	х	х	
Inverse Points	Inverse between point objects, point numbers, or Civil 3D Survey database points.	PTI	х	х	
ID Elevation	Display the elevation (z) value of an object.	Z?	х	х	
Length (Add)	Add the lengths of selected arcs, ellipses, circles, lines, polylines, and splines.	ADD	х	х	
List (List Survey Data)	Display the survey information for lines, arcs, polylines.	LSD	х	х	
Area	Calculate the area of selected objects and points.	ASD	х	х	
Area by Point	Calculate the area and perimeter of an enclosed area by selecting a point.	ARP	х	х	
List Objects	Display the information for selected objects.	ELS	х	х	
Tangency Report	Create a tangency report from selected objects.		х	х	
Labeling Panel					
Labeling	Create labels, leaders, and/or tags using the current Labeling Options and Labeling Style.	LB	х	х	
Labeling Style Manager	Create and modify label styles to be used with the Label command.	LBS	Х	х	
Labeling Tags Tool	Renumber, consolidate, or zoom to labeling tags.	LTT	х	х	

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Labeling Table	Create labeling table using the available options and table style.	LBTS	х	х	
Labeling Table Style Manager	Create and modify labeling table styles to be used with the Create Labeling Table command.	LBTS	х	х	
ALTA Label	ALTA label. Label a distance, direction and description label.	ALT	х	х	
Radial Bearing Label	Label a radial bearing.	RBR	Х	Х	
Crow's Feet - Automatic	Create crow's feet by selecting labels in the drawing.	CFA	х	х	
Crow's Feet - Erase	Erase crow's feet by selecting label test or crow's feet in the drawing.		х	х	
Crow's Feet - Manual	Create crow's feet in a specified direction and size.	CFM	х	х	
Labeling Arrow	Insert an arrow with or without a break symbol.		х	х	
Rotate Along Arc or Circle	Rotate text and blocks along a selected arc or circle.	RAA	х	х	
Slide Along a Line Segment	Slide objects along a selected a line segment.	SAL	х	х	
Change Bearing Direction	Change the bearing direction of text.	CBL	х	х	
Change Label Direction	Change the text or arc text direction.	CLD	х	х	
Reposition Labels and Arc Text	Change the position of existing labels.	RPT	х	х	
Change Label Precision	Change existing label's precision.	CLP	Х	Х	
Scale Label	Scale existing labels or arc text.	SLB	Х	Х	
Layout Panel - Dimension Tools					
Dimension	Label the distance between two points.	DSD	х	х	
Dimension Truncate	Label the truncated distance between two selected points and add dimension suffix.	DRT	х	х	
Dimension with Prompt	Label the distance between two points with a prompt for the label.	DSP	х	х	
Dimension without Leader	Label the distance between two points without a leader line.	DSN	х	х	
Dimension Outside	Label the distance between two points with the leader line and annotation on the outside.	DSO	х	х	
Dimension Arc	Label the distance of a selected arc.	DSC	Х	Х	
Labeling Panel - Monuments					
Circles (Various styles)	Insert symbol		Х	Х	
Squares (Various styles)	Insert symbol		Х	Х	
Triangles (Various styles)	Insert symbol		Х	Х	
Labeling Panel - Arrow Tools					
Arc Leader	Create an arced leader with an arrowhead.	ALR	х	х	x
Straight Leader	Create a straight leader with an arrowhead.	SLT	Х	х	Х

				-	
Arc Leader Variable	Create an arced leader with a variable arrowhead and ending width.	ALV	х	х	
Continuation Symbol	Insert a continuation symbol.		Х	Х	
Add Arrowhead	Insert an arrowhead at the end of selected objects.	ARR	х	х	
Break Symbol	Insert a break symbol along a line or arc.	IB	х	х	
Pipe Crossing Symbol	Insert a pipe crossing symbol along a line or arc.	РХ	х	х	
Labeling Panel - Reference Symbols	Tag Symbols for Labeling and Construction Notes				
Symbol Types	Circle, Diamond, Keyhole, Hexagon, Oval, Pentagon, Rectangle, Star, Square, Text, and Triangle	ALR	х	х	х
Reference Symbol Attach	Attach a reference symbol to a SmartDraft label.		х	Х	
Labeling Panel - Construction Notes					
Construction Notes	Add a construction note or a construction notes list.	CN	х	х	х
Construction Notes List: Update	Update the construction notes lists within the current drawing, using the associated construction notes file.	CNU	х	х	х
Construction Notes List: Change Width	Change the width of a Construction Notes List (created by the Construction Notes command) and maintain the correct width for the tag column and the correct height of each row.	CNCW	x	x	x
Construction Notes Manager	Create and modify construction notes files (.cnm).	CNM	Х	х	х
Construction Notes File Information	Get the construction notes files (.cnm) information for a drawing and optionally open the folder of the file.	CNF	х	х	х
Detail Notes	Create a detail type symbol with optional leader and notes.	DN	х	х	
Labeling by Points	Create from / to point tags for create a Labeling by Points - Table	LBPT	х	х	
Labeling by Points - Table	Create a labeling by Points - table using the table options and table style, and tags created by the Labeling by Points command.	LBPTTB	х	х	
Layer Panel					
Make Layer	Create new layer from the layer database.	LMK	Х	х	
Change Layer Type	Change the layer type. Cycle layer type between Proposed, Existing, and Demolition.	LTY	x	х	
Layer Thaw	haw layers currently frozen from a dialog box.	LTH	х	х	

Freeze Object or Block Layer	Freeze an object, block, or Xref layer by selecting it.	LFR	х	х	
Freeze VP Layer	Freeze a layer in a viewport.		Х	Х	
Freeze VP Block Layer	Freeze block layers independently in a viewport.		х	х	
Change Layer in Viewports	Modify the layer name of objects in a viewport.		х	х	
Thaw VP Layer	Thaw layers in a viewport.		Х	Х	
Change Layer	Modify the layer property of object(s) to the layer property of another object.	LC	х	х	
Copy to Layer	Copy and Move selected objects to a layer.	CLY	х	х	
Points: Move Object to Current Point	Move object to the current SmartDraft		v	v	
Layer	point layer.		X	X	
Isolate Layer	Isolate object's layer.	LYI	Х	Х	
Isolate Restore Layer	Restore layers after Isolate Layer.	LYR	Х	Х	
Layer Export	Export layer setting to a comma delimited file.	LEXP	х	х	
Layer Control	Manage layer settings. Save and restore layer configuration settings.		х	х	
Rename Layer	Rename a layer.	LRN	Х	Х	
Erase Objects on Layer	Delete all the objects on selected layers.	LER	х	х	
ID Layer	List the layer names of objects at the command prompt.	LWT	х	х	
ID Block Layer	Inquire layer name within blocks or external references.	LWB	х	х	
Layer change adding Prefix/Suffix	Modify the layer property of an object adding a prefix or suffix.	LYPS	х	х	
Layout Panel - Block Tools					
Block and Detail Manager	Organize, share, and insert blocks and details in an efficient method.	ВК	х	х	
Block Scale	Enlarge, reduce or rotate selected blocks.	BSC	х	х	
Block (Text) Rotate	Rotate selected blocks and text using insertion point as base point.	BRT	х	х	
Block Count	Count all the blocks within the drawing.	BCT	х	х	
Block Update	Update the definition of blocks in the current drawing.	BUP	х	х	
Block to Bylayer and Layer to 0	Change objects inside selected blocks to color bylayer.	BBL	х	х	
Block Mirror and Rotate	Mirror and rotate a block with attributes.	BMR	х	x	
Block Replace / Substitute	Replace one block with another block	BRE	х	х	х
Block Create Unnamed	Create an unnamed block.	BKU	X	X	
Block Explode Attributes to Text	Explode block and convert attribute values within the block to text.	BX	х	х	
Redefine Blocks	Redefine SmartDraft blocks with masking with User Defined Blocks.	RB	х	х	х

Layout Panel - Change Tools					
Change Length	Change the length of an arc, line, or polyline.	CL	х	х	
Change Angle	Change the angle (bearing) of a line.	CA	х	х	
Break At	Break the select object at a specified point.	ВА	х	х	
Break at Distance	Break the select object at an entered distance from the end point.	BAD	х	х	
Break First	Break the select object at a specified point.	BF	х	х	
Erase Outside	Erase outside - select objects to remain	EO	х	х	
Layout Panel - Draw Tools					
Line Tangent to Arc	Create a line tangent to an arc.		Х	Х	
Line Tangent to Two Arcs	Create a line tangent to two arcs.		Х	Х	
Line Perpendicualr to Line	Create a line perpendicular to a line or radial to an arc or circle.		х	х	
Line Bisert	Create a line at the bisection angle of two selected lines.		х	х	
Line by Turned or Deflection Angle	Create a line at a turned or deflection angle.	DTA	х	х	
Arc Tangent to Line	Create an arc tangent to an existing line.		х	х	
Arc by Length	Create an arc by center point, start point, and length.	ABL	х	х	
Radial Lines	Create radial lines from selected arcs.		х	х	
Layout Panel - Design Tools					
Reverse Curve	Create a reverse curve between two lines.		х	х	
Fillet 3 Limits	Create a fillet arc tangent to three objects.	F2	х	х	
Traverse	Create linework and/or points using bearing, turned angle, length, delta, and coordinates. Option to create Cogo points along with linework.	TRA	х	х	
Lot Lines	Create lot lines along a line or arc.		Х	Х	
Cul-De-Sac	Create a Cul-de-sac.		Х	Х	
Knuckle	Create a Knuckle from two intersecting lines.		х	х	
Pedestrian Ramp	Create a pedestrian ramp.		X	X	
Driveway Wings	Create driveway wings.		Х	Х	
Rectangle	Create a rectangular polyline.	RECT	Х	X	
Shadow Rectangle / Box	Create a shadow rectangular / box.	RTS	Х	Х	
Layout Panel - Align Tools					
Rotate ?d and Move	Move objects about a base point at a desired angle, and displace the orientation.	RTV	х	х	

Rotate selected objects, and align them to an object, horizontal or vertical.	RTA	х	х	
Create multiple concentric circles, parallel lines and parallel curves.	ОМ	Х	х	
Creates concentric circles, parallel lines and parallel curves and places the new objects on the current layer.	OC	х	Х	
Creates concentric circles, parallel lines and parallel curves, from objects that are within a block or external reference, a given distance and places the new objects on the current layer.	ОВ	х	х	
Create a new object at a specified distance from an existing object within a block or Xref, and place the new object on the same layer as the original object. If the original object was on an Xref layer, create a non-Xref layer if one does not exist.	OBX	х	х	
Create multiple offset objects on both sides and to specified layers.	OSTR	Х	х	
Create parallel lines from 3D polylines.	03	х	х	
Change the attribute text insertion point.	AT	х	х	
Change the attribute text rotation angle.	ATR	Х	х	
Change the attribute text insertion point and rotation angle.	ATM	х	х	
Change properties of selected attributes.	CAT	х	х	
Edit the Color/Style/Layer of selected attributes.	EAT	х	х	
Replace the value of the attribute text.	ATV	Х	х	
Create chainlink fence linetype.		X	X	
Create linetype with circle symbol.		X	X	
Create retaining wall linetype type 1.		х	х	
Create retaining wall linetype type 2.		х	х	
Create linetype with hash marks.		X	X	
Create abutment symbol along selected object.		х	х	
	Rotate selected objects, and align them to an object, horizontal or vertical. Create multiple concentric circles, parallel lines and parallel curves. Creates concentric circles, parallel lines and parallel curves and places the new objects on the current layer. Creates concentric circles, parallel lines and parallel curves, from objects that are within a block or external reference, a given distance and places the new objects on the current layer. Create a new object at a specified distance from an existing object within a block or Xref, and place the new object on the same layer as the original object. If the original object was on an Xref layer, create a non-Xref layer if one does not exist. Create multiple offset objects on both sides and to specified layers. Create parallel lines from 3D polylines. Change the attribute text insertion point. Change the attribute text insertion point and rotation angle. Change the attribute text insertion point and rotation angle. Change properties of selected attributes. Edit the Color/Style/Layer of selected attributes. Replace the value of the attribute text. Create linetype with circle symbol. Create retaining wall linetype type 1. Create retaining wall linetype type 2. Create linetype with hash marks. Create abutment symbol along selected object.	Rotate selected objects, and align them to an object, horizontal or vertical.RTACreate multiple concentric circles, parallel lines and parallel curves.OMCreates concentric circles, parallel lines and parallel curves and places the new objects on the current layer.OCCreates concentric circles, parallel lines and parallel curves, from objects that are within a block or external reference, a given distance and places the new objects on the current layer.OBCreate a new object at a specified distance from an existing object within a block or Xref, and place the new object on the same layer as the original object. If the original object was on an Xref layer, create a non-Xref layer if one does not exist.OBXCreate parallel lines from 3D polylines.O3Change the attribute text insertion point.ATChange the attribute text insertion point and rotation angle.ATMChange the attribute text insertion point and rotation angle.ATNChange the value of the attribute text.ATVCreate retaining wall linetype type 1.Create retaining wall linetype type 1.Create retaining wall linetype type 1.Create abutment symbol along selected object.	Rotate selected objects, and align them to an object, horizontal or vertical.RTAXCreate multiple concentric circles, parallel lines and parallel curves.OMXCreates concentric circles, parallel lines and parallel curves and places the new objects on the current layer.OCXCreates concentric circles, parallel lines and parallel curves, from objects that are within a block or external reference, a given distance and places the new objects on the current layer.OBXCreate a new object at a specified distance from an existing object within a block or Xref, and place the new object on the same layer as the original object. If the original object was on an Xref layer, create a non-Xref layer if one does not exist.OBXXCreate parallel lines from 3D polylines.O3XChange the attribute text insertion point.ATRXChange the attribute text insertion point and rotation angle.ATRXChange the attribute text insertion point and rotation angle.ATRXChange the value of the attributes.CATXCreate chainlink fence linetype.XXCreate retaining wall linetype type 1.XXCreate retaining wall linetype type 2.XX	Rotate selected objects, and align them to an object, horizontal or vertical.RTAXXCreate multiple concentric circles, parallel lines and parallel curves.OMXXCreates concentric circles, parallel lines and parallel curves and places the new objects on the current layer.OCXXCreates concentric circles, parallel lines and parallel curves, from objects that are within a block or external reference, a given distance and places the new objects on the current layer.OBXXCreate a new object at a specified distance from an existing object within a block or Xref, and place the new object on the same layer as the original object. If the original object was on an Xref layer, create a non-Xref layer if one does not exist.OBXXXCreate multiple offset objects on both sides and to specified layers.O3XXChange the attribute text insertion point.ATXXChange the attribute text insertion point.ATRXXChange the attribute text insertion point and rotation angle.ATRXXChange the attribute text insertion point.ATWXXChange the attribute text insertion point and rotation angle.ATWXXCreate chainlink fence linetype.XXXCreate chainlink fence linetype.XXXCreate chainlink fence linetype.XXXCreate retaining wall linetype type 1.XXXCreate inetype with circle symbol.XXX

Load Linetypes	Load custom linetypes into the drawing.		х	х	
Lavout Panel - Parking Spaces Tools					
Parking Spaces	Create parking spaces along an arc or line.	PKS	х	х	
Parking Spaces along Polyline	Create parking spaces along a polyline.	РКІ	х	х	
Parking Spaces Count Symbol	Insert a parking spaces count or handicap symbol.	РКС	х	х	
Parking Spaces Report	Create a report of the number of regular and handicap parking spaces.	PKR	х	х	
Layout Panel - Traffic Tools			Х		
Pavement Arrow Symbols	Insert pavement arrows from a Traffic Control Symbols.		х	х	
Pavement Words / Symbols	Insert pavement words and symbols from a Traffic Control Symbols.		х	х	
Caution Signs	Insert caution signs from a Traffic Control Symbols.		х	х	
Warning Signs	Insert warning signs from a Traffic Control Symbols.		х	х	
Regulatory Signs	Insert regulatory signs from a Traffic Control Symbols.		х	х	
Traffic Control Cones	Create single or multiple traffic cones along selected paths.		х	х	
Layout Panel - XREF Tools					
XREF Open	Open a XREF for editing.	OX	Х	Х	
Xref Lock Layer Toggle	Command to toggle if the Xref Attach, Xref Overlay, Xref Overlay - Modify Reference Name, Xref Overlay Multiple, and Xref Overlay2 commands lock the layer used to attach or overlay the Xref.	XLT	х	х	
XREF Attach	Attach a XREF with scale set to 1, at 0,0,0, and rotation angle 0 on its own layer named X- <xref filename="">.</xref>	XA0	х	х	
XREF Overlay	Overlay a XREF with scale set to 1, at 0,0,0, and rotation angle 0 on its own layer named X- <xref filename="">.</xref>	XO0	х	х	
Xref Overlay - Modify Reference Name	Overlay an Xref with scale set to 1, at 0,0,0, and rotation angle 0 on its own layer named X- <xref filename=""> with option to modify the XREF Reference Name.</xref>	XOOP	Х	Х	
XREF Overlay2	Overlay a XREF with scale set to 1, at 0,0,0, and rotation angle 0 on the layer XREF.	XRX	х	x	

XREF Overlay Multiple	Overlay multiple XREFs with scale set to 1, at 0,0,0, and rotation angle 0 on its own layer named X- <xref filename="">.</xref>	ХМ	х	х	
XREF Match Xclip	Apply the xclip boundary of a source XREF to selected XREFs.	ХСМ	х	Х	
XREF Color Screen	Change the colors of the xref layers from non-screen to screened colors.	XCS	х	х	
Xref Reload	Reload all Xrefs in the current drawing.	XRR	х	х	
Xref Unload	Unload all Xrefs in the current drawing.	XRU	х	х	
Layout Panel - Modify Tools	· · · ·				
Fillet with Radius Prompt	Fillet with the radius prompt. Extends two objects to a corner.	FR	х	х	
Fillet Zero	Fillet with the radius of 0. Extends two objects to a corner.	FO	х	х	
Extend and Trim	Extend and Trim multiple lines.	ETR	Х	Х	
Blipmode Toggle	Toggle blipmode.	BM	Х	Х	
Planview Panel					
Define / Edit Alignment	Define an alignment from polylines, feature lines, survey figures, or parcel lines.	ALDE	х	х	
Alignment Stationing Label	Create stationing and tick marks along alignment.	AS	х	Х	
Alignment Station and Offset Label	Create or list stationing, offset and create description labels.	ASO	х	х	
Alignment Station Instersection Label	Create alignment station intersection labels.	AF	х	х	
Laterals along Alignment	Create laterals (perpendicular / radial lines) along an alignment at entered stations.		х	х	
Planview Label Manual	Create a planview manual label	PLM	Х	Х	
Coordinate Label	Create a coordinate label at a specified point.	CRF	х	Х	
Planview Crossing Pipes Label	Create a crossing pipes label in planview for Civil 3D.	PCL	х		
Planview Structure Label	Create Planview Structure Labels for Civil 3D pipe network structures	PVSL	х		
Change Label Leader Offset	Change the leader offset from the insertion point for specific planview labels	CLO	х	х	
Endpoint Ticks	Create tick marks at endpoints of lines and arcs.	тс	х	х	
North Arrow	Insert a North Arrow using the current horizontal scale.	NA	х	х	
Barscale	Insert a Barscale using the current horizontal scale, the viewport scale, or an operator specified scale.	BS	Х	х	

Create a detail type symbol with	CSL	х	х	
optional leader and notes.				
Create planview 3D polyline from an		х		
alignment and profile.				
Create a planview 3D polyline from a		х		
Civil 3D pipe network.		Λ		
List the stations elevations and offset				
along an alignment at selected points		Х		
List the stations and elevations at				
selected points from two crossing		Х		
alignments.				
Create dynamic coordinate grid ticks and		N/		
labels.	GLB	Х	Х	
Update the coordinate values and	01.00			
display of grid tick labels.	GLBD	Х	Х	
Relocate a Grid Label to the nearest				
northing, and easting coordinate values	GLBR	х	х	
rounded to 100 units.	01011	~		
Control point insertion settings		Х	Х	
Set points by specifying a point on the		~	~	
screen		Х	Х	
Set points by specifying a northing and		V	X	
easting coordinate values.		X	X	
Create a point and set its elevations				
along a calculated slope from two				
selected elevation objects along an arc	PICS	Х	Х	
or line.				
Create a point from a select point and	DTDC	N/	X	
elevation, calculate the elevation by a	PIBS	Х	Х	
Islone and a selected point (distance)			~	
siope and a selected point (distance).			A	
Create a point and elevation for a PVI				
Create a point and elevation for a PVI from two elevation objects and two	PTPVI	X	х Х	
Create a point and elevation for a PVI from two elevation objects and two slopes.	ρτρνι	х	x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at	PTPVI	x	x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks.	PTPVI BP	x x	x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks. Set points at end and radius points of	PTPVI BP	x x	x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks. Set points at end and radius points of selected objects.	PTPVI BP	x x x x	x x x x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks. Set points at end and radius points of selected objects. Set points along an alignment at	PTPVI BP	x x x	x x x x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks. Set points at end and radius points of selected objects. Set points along an alignment at specified stations and offsets.	PTPVI BP	x x x x x	x x x x x x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks. Set points at end and radius points of selected objects. Set points along an alignment at specified stations and offsets. Create points at a projection from a line	PTPVI BP	x x x x x	x x x x x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks. Set points at end and radius points of selected objects. Set points along an alignment at specified stations and offsets. Create points at a projection from a line to a target, corner offset or offset along	PTPVI BP	X X X X X	x x x x x x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks. Set points at end and radius points of selected objects. Set points along an alignment at specified stations and offsets. Create points at a projection from a line to a target, corner offset, or offset along an arc / line	PTPVI BP	x x x x x x	x x x x x x x	
Create a point and elevation for a PVI from two elevation objects and two slopes. Set one or two points along a line at specified setbacks. Set points at end and radius points of selected objects. Set points along an alignment at specified stations and offsets. Create points at a projection from a line to a target, corner offset, or offset along an arc / line.	PTPVI BP	x x x x x	x x x x x x	
	Create a detail type symbol with optional leader and notes. Create planview 3D polyline from an alignment and profile. Create a planview 3D polyline from a Civil 3D pipe network. List the stations, elevations, and offset along an alignment at selected points. List the stations and elevations at selected points from two crossing alignments. Create dynamic coordinate grid ticks and labels. Update the coordinate values and display of grid tick labels. Relocate a Grid Label to the nearest northing, and easting coordinate values rounded to 100 units. Set points by specifying a point on the screen. Set points by specifying a northing and easting coordinate values. Create a point and set its elevations along a calculated slope from two selected elevation objects along an arc or line. Create a point from a select point and elevation, calculate the elevation by a	Create a detail type symbol with optional leader and notes.CSLCreate planview 3D polyline from an alignment and profile.Create a planview 3D polyline from a Civil 3D pipe network.List the stations, elevations, and offset along an alignment at selected points.List the stations and elevations at selected points from two crossing alignments.Create dynamic coordinate grid ticks and labels.GLBUpdate the coordinate values and display of grid tick labels.GLBDRelocate a Grid Label to the nearest northing, and easting coordinate values rounded to 100 units.GLBRControl point insertion settings.Set points by specifying a point on the screen.Set points by specifying a northing and easting coordinate values.PTCSCreate a point and set its elevations along a calculated slope from two selected elevation objects along an arc or line.PTCS	Create a detail type symbol with optional leader and notes.CSLXCreate planview 3D polyline from an alignment and profile.XXCreate a planview 3D polyline from a Civil 3D pipe network.XXList the stations, elevations, and offset along an alignment at selected points.XXList the stations and elevations at selected points from two crossing alignments.XXCreate dynamic coordinate grid ticks and labels.GLBXUpdate the coordinate values and display of grid tick labels.GLBDXRelocate a Grid Label to the nearest northing, and easting coordinate values rounded to 100 units.XXControl point insertion settings.XXSet points by specifying a point on the screen.XXCreate a point and set its elevations along a calculated slope from two selected elevation objects along an arc or line.XX	Create a detail type symbol with optional leader and notes.CSLXXCreate planview 3D polyline from an alignment and profile.XXCreate a planview 3D polyline from a Civil 3D pipe network.XXList the stations, elevations, and offset along an alignment at selected points.XXList the stations and elevations at selected points from two crossing alignments.XXCreate dynamic coordinate grid ticks and labels.GLBXXUpdate the coordinate values and display of grid tick labels.GLBDXXRelocate a Grid Label to the nearest northing, and easting coordinate values rounded to 100 units.XXXControl point insertion settings.XXXSet points by specifying a northing and easting coordinate values.XXXCreate a point and set its elevations along a calculated slope from two selected elevation objects along an arc or line.XXXCreate a point from a select point and elevation, calculate the elevation by aPTBSXX

	Assign a calculated elevation to AutoCAD civil product point objects				
Point Elevation	from a Profile and Alignment, Surface, 3D Polyline, Feature Line, Parcel Segment, or Survey Figure.	EP	х	х	
Modify Elevation of Points: Absolute Hinge	Use a hinge line to edit the elevations of selected points. The hinge line is defined by two points. The absolute slope can be a slope (%) or a slope (X:1).	ΕΡΑ	Х	х	
Modify Elevation of Points: Relative Hinge	Use a hinge line to edit the elevations of selected points. The hinge line is defined by two points. The relative slope can be a slope (%) or a slope (X:1).	EPR	х	x	
Points Report using Surface(s)	Report the elevations of selected points.	PTRP	х	х	
Cross Sections from Points	Create cross sections from points collected in the field in a cross-sectional pattern along an alignment.	РТХ	х	х	
Station and Offset Report from Points	Create a station and offset report from points along an alignment.	PTSOR	х	х	
Point Station and Offset Information	Associate a point with an alignment, add the station, offset, and offset direction to the point data. When the point is moved, the station, offset, and offset direction update.		х	х	
Create Point Station and Offset Table	Instruction to create a station and offset point table.		х	х	
Point Label	Create a point label either by selecting point blocks, AutoCAD civil product point objects.	PTL	х	х	
Point Labels Rotation	Rotate the labels of SmartDraft point blocks, Civil 3D points, and BricsCAD v24 Civil points.	PTR	х	x	
Point Labels Clean	Reposition Civil 3D Point's Point Label Styles to enhance label readability. Multiple methods available.	PTCR	х	х	
Point Labels Drag Location Export	Export the drag state location of all the Civil 3D point labels in the current drawing.	PTDLE	х	х	
Point Labels Drag Location Import	Import the drag state location of all the Civil 3D point labels from an exported PLX file created with the Point Labels Drag Location Export command.	PTDLI	х	х	
Point Block Extract	Extract the block from selected Civil 3D point objects with a block defined in their current point style.	PTBE	x	x	

Points to Spot Label	Create a spot elevation label from a point object.	P2S	х	х	
Label Northing and Easting Difference	Create a northing and easting difference label from the selected points.	NED	х	х	
Point Coordinate Table	Create a coordinate list of points.		Х	Х	
Associate Survey Working Folder	Associate / set the Civil 3D Survey Working Folder with a drawing.	SVF	х	х	
Merge Point Files	Merge the point data from two ASCII point files.		х	х	
Display who has a Survey Database Open	Display who has the Survey Database open for the current survey working folder.		х	х	
Point Description Find and Replace	Find and Replace a point raw descriptions or descriptions of Civil 3D Survey points.	PTFR	х	х	
Point Zoom to	Zoom to the location of a specified point number.	PTZ	х	Х	
List Available Point Numbers	List the available point numbers in the drawing.	ΡΤΑ	х	х	
List Available Point Numbers in Survey Database	List the available point numbers in the open survey database.	PTADB	х	х	
Points: Create Selection Set	Create a selection set of point blocks, and points objects.	SSP	х	х	
Convert Survey Points into Drawing Points	Convert survey database points currently in the drawing into drawing points. This command converts survey database points in the drawing into drawing points so the points can be moved, elevation edited, and re- imported into the survey database using the Import Points from the Drawing into the Survey Database.	PSCV	x	×	
Import Drawing Points into the Survey Database	Import points from the drawing into the Survey Database.	PSIM	х	х	
Convert ASCII Point File to Fieldbook File	Convert ASCII Point File to Fieldbook File.	PTFB	х	х	
Points Import	Import points from a file.	PTIN	Х	Х	
Points Export	Export point data to a file.	PTEX	Х	Х	
Point Group States Manager	Saves, restores, and manages sets of point group orders that are called named point group states.	PTGM	x	х	
Purge Point Groups	Purge empty Point Groups from the drawing		Х	Х	
Delete Point Groups	Delete selected Point Groups.		Х	Х	
Point Groups for a Point	Display a list of Point Groups for a selected point	PTGP	x	х	
Point Label Style to As Composed for a Point	Change the Dragged State Display Value to As Composed for Point Groups of a selected point	PTAS	х	х	

Reset Civil Point Drag to Home	Reset BricsCAD v24 or later Civil Point drag state to Home	PTRS	х	х	
Export Description Key Set	Export a Description Key Set to a CSV file.	DKSEX	х	х	
Import Description Key Set	Import Description Key Set information from a CSV file to update or create a set.	DKSIM	х	х	
Polylines Panel - Parcel Tools					
Define Parcels	Define a parcel from a closed polyline.	ARD	х	х	
Label Parcels	Label a parcel's name and area.	ARL	Х	Х	
Create Reports: Area, Closure, and Legal Description	Create Reports from defined parcels.	ARP	х	х	
Parcel Inquiry	View and Modify Parcel Data	PRQ	Х	Х	
Parcel List Reset	Reset the Parcel list in the current drawing session.	PRLR	х	Х	
Area Divide	Divide a closed area by sliding or rotating a division line.	ARV	х	Х	
Area Table	Create an area table.	ART	Х	Х	
Legel Description From Polyline	Create a legal description from a selected polyline or Parcel Label.	PLL	х	х	
Legal Description Style Manager	Create and modify legal description styles to be used with the Legal Description Report commands.		х	х	
Polylines Panel - PConnect Tools					
PConnect	Create polylines with straight and curved segments to represent geometric shapes by connecting specific point descriptions.	PC	х	х	
PConnect Description Key Manager	Create and modify PConnect's Description Key Styles	РСМ	х	х	
Pconnect Template Manager	Create and modify PConnect templates.	РСТ	х	х	
PBlock	Process point description keys to insert blocks and format the full descriptions	РВ	х	х	
Pblock Style Manager		PBM	Х	Х	
Erase Polylines	Erase polylines on selected or all layers.	EPL	х	х	
Erase 3D Polylines	Erase 3D polylines on selected or all layers.	E3PL	х	х	
Polylines Panel - Polyline Tools					
Reverse Direction	Reverse polyline direction.	RP	Х	Х	
Polyline Change Start Point	Change the starting point of a closed polyline.	PLS	х	х	
Convert to Tree Line	Convert an arc, line or polyline to a Tree / Brush line.	PLTL	х	Х	
Convert 2D to 3D Polyline	Convert 3D Polyline to 2D polyline.		Х	X	
Convert 3D to 2D Polyline	Convert 3D Polyline to 2D polyline.		Х	Х	
Convert Spline to Polyline	Convert a Spline to a 2D or 3D Polyline.	PLS	Х	х	

Convert Survey Figure to Polyline /	Convert Civil 3D survey figure to polyline		x	x	
Feature Line	/ feature line.		Λ	Λ	
Add Vertices	Add vertices to a polyline.	PLAV	Х	Х	
All segments to Arcs	Modify the (bulge) arc factor of all		x	x	
	segments in a polyline.		Λ	Λ	
Modify Slected Segment	Add, Modify, or Remove an arc from a selected polyline segment.	PLBE	х	х	
Polyline Edit Width	Modify the width of polylines.	CW	Х	Х	
Edit Polyline Linetype gen to ON	Turn the PLINEGEN attribute of polylines to on.		х	х	
Edit Elevation of Polylines	Edit the elevations of Polyline, increment the elevations.		х	х	
Create Polyline by Objects	Create a polyline over existing objects.	PLO	х	х	
Create 3D Polyline	Create 3D polyline from selected object.	3DP	х	х	
Create Polyline with Arcs - tree or brush line	Create a polyline with arcs - free form tree or brush line.		х	х	
Join	Join arcs, lines, polylines, and text strings.	JN	х	х	
Join with tolerance (gap)	Join arcs, lines, and polylines on the same layer and at the same elevation.	PJ	х	х	
Join Quick	Join arcs, lines, and 2D polylines with gap tolerance.	QJ	х	х	
Profile Panel					
Profile Panel Profile by Station and Elevation	Create a profile from stations and elevations.		х		
Profile Panel Profile by Station and Elevation Profile by Distance and Elevation/Slope	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes.		x x		
Profile Panel Profile by Station and Elevation Profile by Distance and Elevation/Slope Profile from Digitizing	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations.		x x x		
Profile Panel Profile by Station and Elevation Profile by Distance and Elevation/Slope Profile from Digitizing Profile Station Label	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels.		X X X X		
Profile Panel Profile by Station and Elevation Profile by Distance and Elevation/Slope Profile from Digitizing Profile Station Label Profile Labels along Alignment	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment.		X X X X X X		
Profile PanelProfile by Station and ElevationProfile by Distance and Elevation/SlopeProfile from DigitizingProfile Station LabelProfile Labels along AlignmentAlignment Lables along Profile	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment. Create alignment labels along the Profile.		X X X X X X X		
Profile PanelProfile by Station and ElevationProfile by Distance and Elevation/SlopeProfile from DigitizingProfile Station LabelProfile Labels along AlignmentAlignment Lables along ProfileProfile from Points	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment. Create alignment labels along the Profile. Create a profile from points along an Alignment.		x x x x x x x x x	X	
Profile PanelProfile by Station and ElevationProfile by Distance and Elevation/SlopeProfile from DigitizingProfile Station LabelProfile Labels along AlignmentAlignment Lables along ProfileProfile from PointsProfile by Slope	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment. Create alignment labels along the Profile. Create a profile from points along an Alignment. Create profile lines at given slopes.		X X X X X X X X X	X	
Profile PanelProfile by Station and ElevationProfile by Distance and Elevation/SlopeProfile from DigitizingProfile Station LabelProfile Labels along AlignmentAlignment Lables along ProfileProfile from PointsProfile by SlopeProfile Crossing Pipe	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment. Create alignment labels along the Profile. Create a profile from points along an Alignment. Create profile lines at given slopes. Create crossing pipe symbols in the profile.		X X X X X X X X X X X X	X	
Profile PanelProfile by Station and ElevationProfile by Distance and Elevation/SlopeProfile from DigitizingProfile Station LabelProfile Labels along AlignmentAlignment Lables along ProfileProfile from PointsProfile Dy SlopeProfile Crossing PipePipe Cutaway Symbol	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment. Create alignment labels along the Profile. Create a profile from points along an Alignment. Create profile lines at given slopes. Create crossing pipe symbols in the profile. Create cut away pipe symbols.		X X X X X X X X X X X X X X	X	
Profile PanelProfile by Station and ElevationProfile by Distance and Elevation/SlopeProfile from DigitizingProfile Station LabelProfile Labels along AlignmentAlignment Lables along ProfileProfile from PointsProfile Dy SlopeProfile Crossing PipePipe Cutaway SymbolProfile Curb Return	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment. Create alignment labels along the Profile. Create a profile from points along an Alignment. Create profile lines at given slopes. Create crossing pipe symbols in the profile. Create cut away pipe symbols. Create a curb return profile.		X X X X X X X X X X X X X X X X X X X	X	
Profile PanelProfile by Station and ElevationProfile by Distance and Elevation/SlopeProfile from DigitizingProfile Station LabelProfile Labels along AlignmentAlignment Lables along ProfileProfile from PointsProfile Dy SlopeProfile Crossing PipePipe Cutaway SymbolProfile Arc Leader	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment. Create alignment labels along the Profile. Create a profile from points along an Alignment. Create profile lines at given slopes. Create crossing pipe symbols in the profile. Create a curb return profile. Create a narced leader with an arrowhead on the profile text layer.	ALRP	X X X X X X X X X X X X X X X X X X	X	
Profile PanelProfile by Station and ElevationProfile by Distance and Elevation/SlopeProfile from DigitizingProfile Station LabelProfile Labels along AlignmentAlignment Lables along ProfileProfile from PointsProfile Crossing PipePipe Cutaway SymbolProfile Arc LeaderProfile Straight Leader	Create a profile from stations and elevations. Create a profile from distances, and elevations or slopes. Create a profile from digitized planview points and elevations. Create station and elevation labels. Create profile labels along the Alignment. Create alignment labels along the Profile. Create a profile from points along an Alignment. Create profile lines at given slopes. Create crossing pipe symbols in the profile. Create cut away pipe symbols. Create a curb return profile. Create an arced leader with an arrowhead on the profile text layer. Create a straight leader with an arrowhead on the profile text layer.	ALRP	X X X X X X X X X X X X X X X X X X X	X	

Profile Dimension	Label the distance between two selected points on the profile text layer.	DSPF	х		
Profile Cross Sections	Create station and offset labels for Land Desktop cross sections.		х		
Profile Calculator	Profile slope, intersection and vertical curve calculator.		х		
Text Panel					
Text Parallel	Create text parallel or tangent to a selected line, arc or polyline.	TW	х	х	
Arc Text	Create text along an arc.	TAR	Х	Х	
Polyline Text	Create text to follow along a polyline and other multiple segment and curved objects.	TPL	х	х	
Add Note	Create text with the same style, rotation, layer and standard spacing as selected text.	TN	х	х	
Edit Label	Edit text, mtext, attributes, and labels.	ED	х	х	
Edit Label	Modify text created with TEXT, DTEXT, Labeling, ARCTEXT, Blocks with Attributes, AutoCAD civil product point objects, and Point Label, Point Elevation, Label Coordinate, Slope Label (1 Point), Dimension Arc, and SD Arc Text.	ED	х	х	х
Edit Multiple Labels	Modify multiple text strings at once or blocks with attributes.	EDD	х	х	
Text Edit Properties	Modify the properties of text, Mtext and attributes within a block.	TE	х	х	
Erase Emtpy Strings	Erases all empty text string objects.		Х	Х	
Text Online	Insert a text symbol along a line or arc.		х	х	
Sequential Numbering (Lettering)	Create text with sequential numbers or letters.	TS	х	х	
Adjust Number	Adjust the number within a text string.	TAD	х	х	
Add Prefix / Suffix	Add a prefix and/or a suffix to text and attributes.	TFF	х	х	
Add (), {}. {}, <>	Add a prefix and/or a suffix to text and attributes.	VARIES	х	х	
Remove Prefix / Suffix	Remove prefix and suffix.	UP	Х	Х	
Underline / Overscore	Add underline / Overscore to text.		Х	Х	
Copy String (Match)	Copy / Match the source text string to target text string(s).	MTT	х	х	
Text Swap	Swap one text string for another.	TSW	Х	Х	
Text Mathematices	Add, Subtract, Multiply, and/or divide numeric values of selected text, mtext, or attribute objects.	ТМН	x	x	
Text Respacing	Adjust the spacing between selected text strings.	TRS	х	х	

Text Spacing	Create text with DTEXT and prompts for the line spacing.	TSG	x	х	
Fit Text	Fit text between selected points.	TFF	х	x	
	Rotate text vertical to the bottom of the				
Text Vertical	screen.	TV	X	X	
Text Horizontal	Rotate text horizontal to the bottom of				
	the screen.	THZ	X	Х	
	Rotate and moves text parallel or radial				
Align Parallel	to a line, arc or polyline.	TPL	X	Х	
	Modify the horizontal alignment point of				
X-Align	text along the vertical axis of the current	TL	x	x	
5	VIEW TWIST.				
Import Text	Import an ASCII file.		х	х	
Export Text	Export text to an ASCII file.		х	х	
Text Panel - Masking Tools			1		<u> </u>
	Places a mask object behind selected				
Mask	text, mtext, arc text, pline text, or	AM	x	x	
	attributes. The mask is offset from the				
	text by a specified value.				
	Removes the mask objects from text.				
	mtext, arc text, pline text, mtext, and				
Unmask	attributes that have been masked with	ΔΠ	x	x	
Unnusk	the Text Arc Text and Attribute Mask	7.0			
	command				
View Panel			Į		<u> </u>
View Panel	Twist or tilt the view around the line of				
View Panel View Twist	Twist or tilt the view around the line of	VT	x	x	
View Panel View Twist	Twist or tilt the view around the line of sight.	VT	x	x	
View Panel View Twist	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to	VT	x	x	
View Panel View Twist View Twist 0	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up.	VT V0	x x	x x	
View Panel View Twist View Twist 0 View All	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*.	VT V0 VA	X X X	X X X	
View Panel View Twist View Twist 0 View All View Save All	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*.	VT V0 VA VSA	X X X X	X X X X X	
View Panel View Twist View Twist 0 View All View Save All	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with	VT V0 VA VSA	X X X X X	X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen.	VT V0 VA VSA UV	X X X X X X	X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a	VT V0 VA VSA UV	X X X X X X	X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction.	VT V0 VA VSA UV UW	X X X X X X X	X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction.	VT V0 VA VSA UV UW	X X X X X X X	X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object.	VT V0 VA VSA UV UW UO	x x x x x x x x x	x x x x x x x x	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object.	VT V0 VA VSA UV UW UO	X X X X X X X	X X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in	VT V0 VA VSA UV UW UO	X X X X X X X	X X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools Viewport Make	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in modelspace.	VT V0 VA VSA UV UW UO	X X X X X X X X	X X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools Viewport Make	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in modelspace. Viewport zoom setup by selecting the	VT V0 VA VSA UV UW UO VPM	X X X X X X X X	X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools Viewport Make Viewport Zoom	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in modelspace. Viewport zoom setup by selecting the viewport frame.	VT V0 VA VSA UV UW UO VPM VPZ	x x x x x x x x x x x x x	X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools Viewport Make Viewport Zoom	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in modelspace. Viewport zoom setup by selecting the viewport frame. Divide a viewport vertically or	VT V0 VA VSA UV UV UV UV VPM	X X X X X X X X X	X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools Viewport Make Viewport Zoom	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in modelspace. Viewport zoom setup by selecting the viewport frame. Divide a viewport vertically or horizontally.	VT V0 VA VSA UV UW UO VPM VPZ VPD	x x x x x x x x x x x x x x x x x	x x x x x x x	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools Viewport Make Viewport Zoom	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in modelspace. Viewport zoom setup by selecting the viewport frame. Divide a viewport vertically or horizontally. Create a polyline of the viewport frame	VT V0 VA VSA UV UW UO VPM VPZ VPD	x x x x x x x x x x x x x x x x x x	X X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools Viewport Make Viewport Zoom Viewport Divide Viewport Frame	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in modelspace. Viewport zoom setup by selecting the viewport frame. Divide a viewport vertically or horizontally. Create a polyline of the viewport frame in modelspace.	VT V0 VA VSA UV UW UO VPM VPZ VPD VPF	X X X X X X X X X X X X X X X	X X X X X X	
View Panel View Twist View Twist 0 View All View Save All Crosshairs Horizontal to Screen Crosshairs to 0 Crosshairs Align to Object View Panel - Viewport Tools Viewport Make Viewport Zoom Viewport Divide	Twist or tilt the view around the line of sight. Restore a drawing's view (if twisted) to the northerly direction pointing up. Restore named views, ALL or All-*. Save named views, ALL or All-*. Rotate the crosshairs to be parallel with the bottom of the screen. Rotate the crosshairs to point in a northerly direction. Align crosshairs to a selected object. Create viewport by selecting rectangle in modelspace. Viewport zoom setup by selecting the viewport frame. Divide a viewport vertically or horizontally. Create a polyline of the viewport frame in modelspace.	VT V0 VA VSA UV UW UW UO VPM VPZ VPD VPF	x x x x x x x x x x x x x x x x x x x	X X X X X X	

Viewport Move by Interval	Move the contents of a viewport vertically or horizontally by a given interval.	VPMV	х	
Move up 1 unit	Move the contents of a viewport up 1 unit.	VPU1	х	
Move up 5 units	Move the contents of a viewport up 5 unit.	VPU5	х	
Move down 1 unit	Move the contents of a viewport down 1 unit.	VPD1	х	
Move down 5 units	Move the contents of a viewport down 5 unit.	VPD5	х	
Viewport Lock	Lock viewport	VL	Х	
Viewport Lock All	Lock all viewports in the drawing	VLA	Х	
Viewport UnLock	Unlock viewport	VU	Х	