Engineering Graphics

Topic : Some Important 2D & 3D Auto Cad Command

Lecture No : 10

In AutoCad We Used 1000+ to doing our work. But in our modern day to day life we used some key board command and some times we used mouse command in AutoCad Drawing.

In this note I tell you some important primary usefull command in AutoCad.

As a beginner you are all find a lot of command of Drawing In AutoCad. Here The commands are divided into different categories to make them easy to remember.

- **Keyboard Shortcuts**
- **Status bar toggle & Basic Command.**
- **General Command**
- **Performance Related Commands**
- **Accesibility**
- **3D Command**

Keyboard shortcut keys :

Ctrl + N

You can use this shortcut to open a new drawing tab in AutoCAD.

Ctrl + S

You can use this keyboard shortcut to save a drawing file.

Ctrl + Shift + S

You can use this keyboard shortcut to save the drawing as a new file, in short, this is the hotkey for “save as” command.

Ctrl + C

Select objects from the drawing area and press Ctrl + C to copy to objects to the clipboard.

Ctrl + V

To paste the copied objects of the clipboard in the drawing keeping their original properties, you can use this keyboard shortcut.

Ctrl + Shift + V

To paste the copied objects as a block you can use this keyboard shortcut, the block thus created will have a random set of characters as its name. You can use this keyboard shortcut to make blocks quickly without going through the create block window.

Ctrl + Z
This keyboard shortcut can be used to undo the last action in your drawing. You can press this shortcut key multiple times to undo many actions.

Ctrl + Y
This keyboard shortcut can be used to redo the last undo action which you have performed.

Ctrl + Tab
You can use this keyboard shortcut to cycle through all open drawing tabs in AutoCAD.

BASIC AUTOCAD COMMANDS :

L

It can be used for making simple lines in the drawing.

C It is the command used for making a circle in AutoCAD.

PL This command can be used to make a Polyline in your drawing.

REC This command will make a rectangle in AutoCAD.

POL

This command can be used to make a polygon with minimum of 3 sides and a maximum of 1024 sides.

ARC

As the name suggests, this command can be used to make an arc in AutoCAD.

REG

This command can be used to make a region geometry in AutoCAD.

CO

This command is used to copy object(s) in AutoCAD.

ARRAY

Using this command you can make Rectangular, polar or Path array.

TR

This command is used for trimming a geometry.

EX

This command extends the selected object to meet the reference object which is selected.

X

This command can be used to explode objects like Polyline to simple lines, an array or a block to a simple geometry etc.

B

This command is used for creating a block, the properties of the block can be defined using the block definition window.

GENARAL COMMAND :

UNITS

Using this command you can set the drawing units and other settings like the precision of linear and angular dimensions and default rotation angle.

DIM

This command was introduced in AutoCAD 2016 version and it can be used to make most of the dimensions like Linear, aligned, radius, diameter and baseline.

ML

Using this command you can make a multiline geometry which contains multiple parallel lines

ID

This command can be used to find the coordinate values of a point in AutoCAD drawing

AREA

As the name suggests this command can be used to find the area of closed or open shapes in the AutoCAD drawing.

J This command helps to join similar objects to make them a single object. For example, different lines drawn continuously can be joined to make them a polyline.

S This command helps the user to stretch the object to the required length. The selection method decides the process of stretch on the object.

LEN This command helps to change the length and angle of lines and arcs.

O Using this command you can create a replica of the original sketch at a specified distance from the actual sketch.

HATCH

This command allows to fill up the closed area with a particular hatch pattern, gradient or solid fill.

GRADIENT

This command allows you to fill up the closed area with a particular color gradient.

XLINE (XL)

Using this command you can make infinite lines starting from the point of selection. When you trim or break this infinite line to a finite length it becomes a simple line geometry.

PERFORMANCE RELATED COMMANDS :

FILLMODE

Using this system variable you can turn off or on the visibility of filled area in hatches or wide polylines by changing its value to 0 or 1 respectively. By turning the FILLMODE to off you can enhance the performance of AutoCAD by limiting resources consumed on regenerating the filled geometries. You need to regenerate the drawing using REA command after changing this system variable to see its effect.

HIGHLIGHT

This system variable is also similar to SELECTIONPREVIEW but in this case, the object will appear highlighted when selected. Its default value is 1 but you can turn off this highlight effect by changing its value to 0.

This note is fully make as per Syllabus of "Webscte 1st Semester", AutoCad Has many more command to doing engineering drawing work. In this note here only provided Simple Command of Drawing and Some 2D Commands.

"It is very simple to be happy, but it is very difficult to be simple."

_____Rabindranath Tagore

Thank You___

Best of Luck Our Future Engineers