



GSTARCAD 2016

CAD DESIGN ENHANCED

Complete Guide

Table of Contents

The Power of Its Performance.....	3
Common Operations Performance Optimization.....	3
Layout Space Switching Performance Optimization	4
Objects Visualization Optimization	4
Implementation.....	5
Microstation Native Format Compatibility	5
Edit 3D Objects With Solid Edit Command Options	5
Ease of Use.....	6
New Visuals on Dynamic Input	6
Easy Command Recognition	8
Polyline Flexible Edition.....	9
Fillet on Inverted Mode	9
Measuring More and Accurate	10
New Additions.....	12
Object Snap Options Added	12
Plot and Publish Tab Addition	13
Addendum	14

GstarCAD 2016 Improves Your Design !

GstarCAD 2016 is aimed to save countless hours of design and rework through enhanced features, improving drafting capability through flexible operation methods upon a more optimized platform!

This version combines:

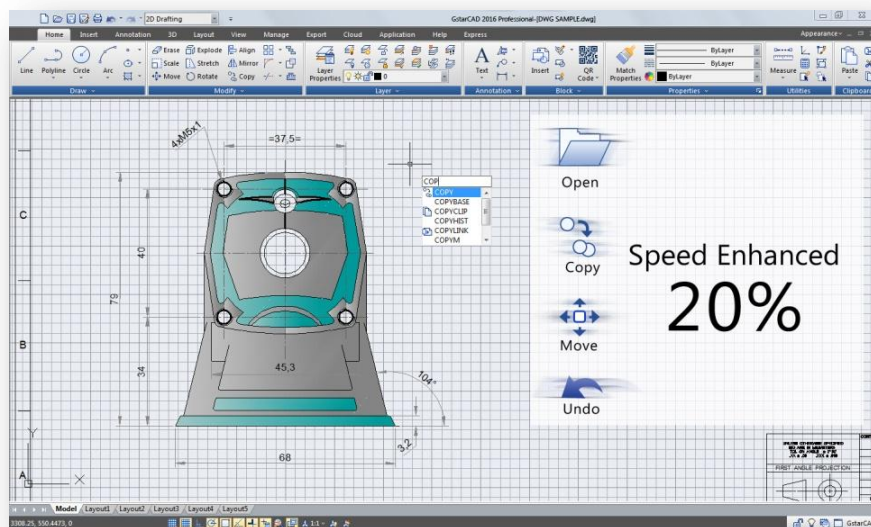
- "The power of its performance" regarding to common tasks speed and objects displaying processing.
- "Implementation" regarding to file format compatibility and 3D functionalities.
- "Ease of use" regarding to simplified drafting operation methods within commands.
- "New additions" regarding to known command options.

The Power of Its Performance

The performance plays an important role in every GstarCAD version, therefore Gstarsoft is making great effort in performance optimization continuously. On GstarCAD 2016, the performance is obviously enhanced in many aspects.

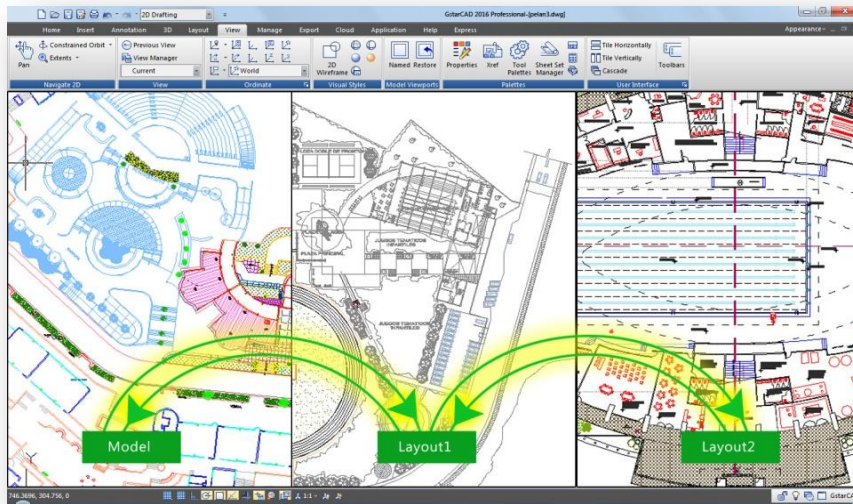
Common Operations Performance Optimization

Common operation tasks including open, copy, move, undo... the performance speed has been enhanced 20%, and users entire drawing efficiency can be improved more than 10% if compare with previous version.



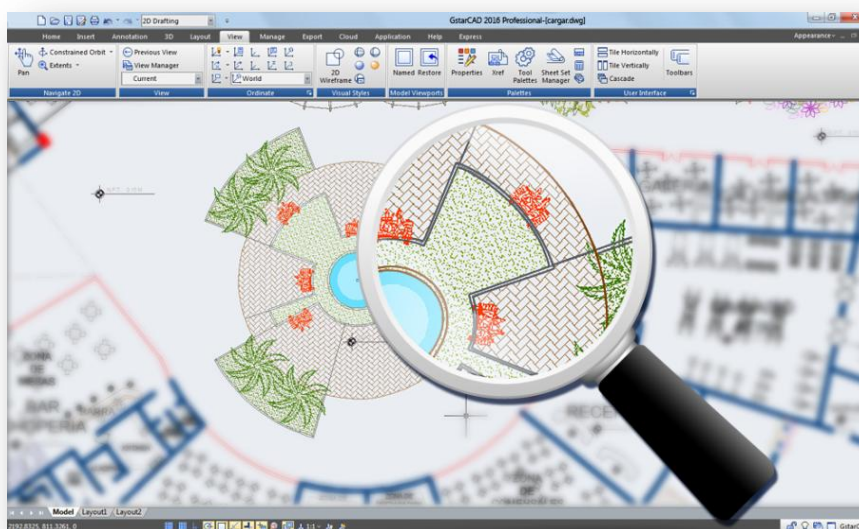
Layout Space Switching Performance Optimization

In previous versions many users got some time trouble when switching between model and layout space for big or complex drawings. Now GstarCAD 2016 focuses on layout space switching optimization, which reduces time considerably. Especially when switching layouts over twice is even much faster than before.



Objects Visualization Optimization

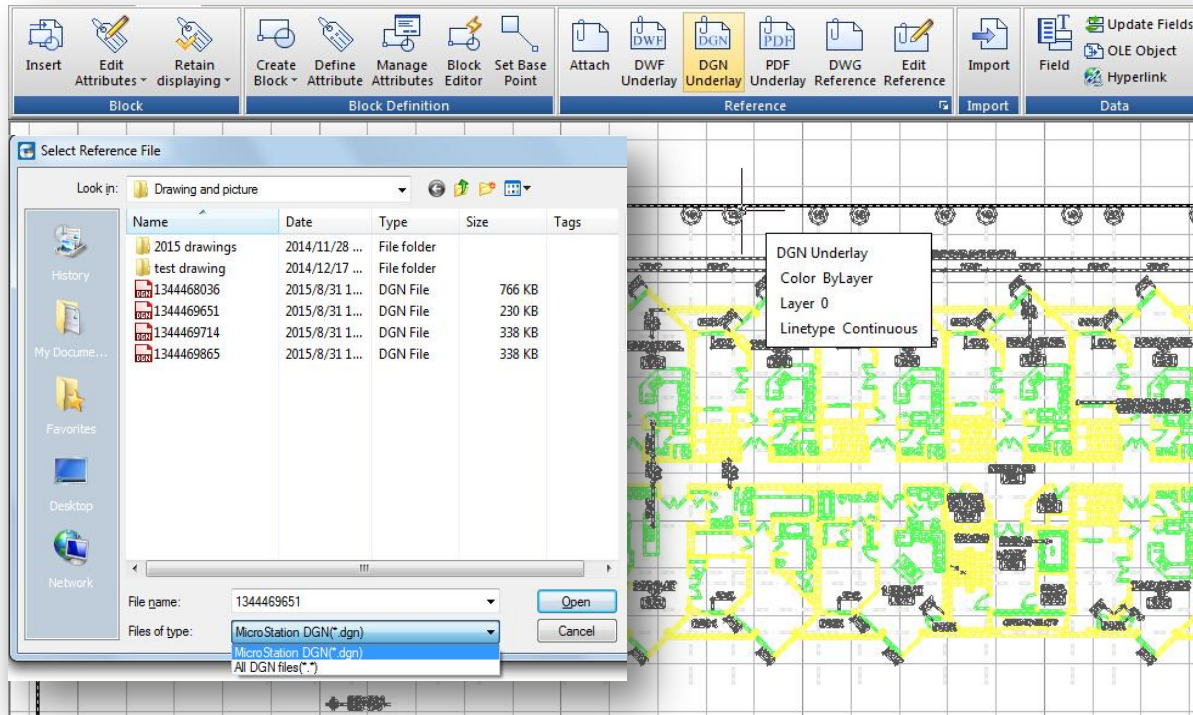
GstarCAD 2016 enhances object's visualization and the ability to snap points over these objects more accurate than previous version. Now when performing zoom in or zoom out, over circle(s) or arc(s), no matter how many of those objects you have created, these will keep the same shape (no contour edges displayed) thus you can snap points much accurately, enhancing drafting capability and better object visualization.



Implementation

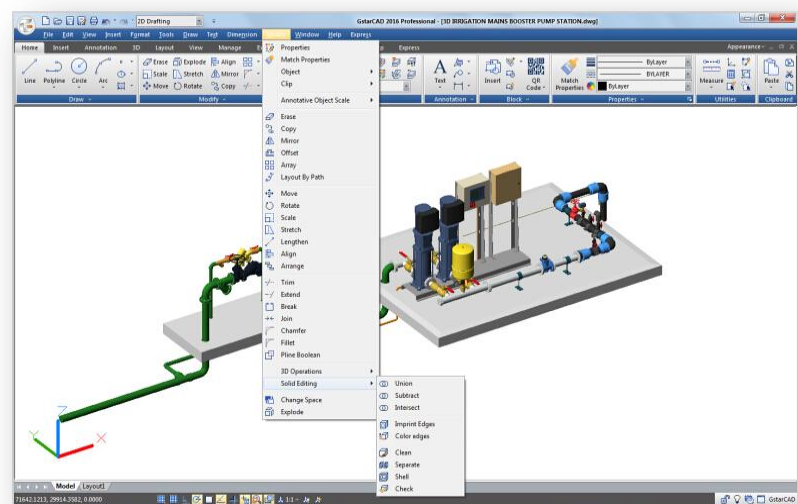
Microstation Native Format Compatibility

GstarCAD 2016 continuously improves its compatibility. This version has implemented the full DGN files support and related commands such as DGNIMPORT, DGNATTACH, DGNADJUST, DGNMAPING, etc. Now you can import and attach as underlay a Microstation native format.



Edit 3D Objects With SolidEdit Command Options

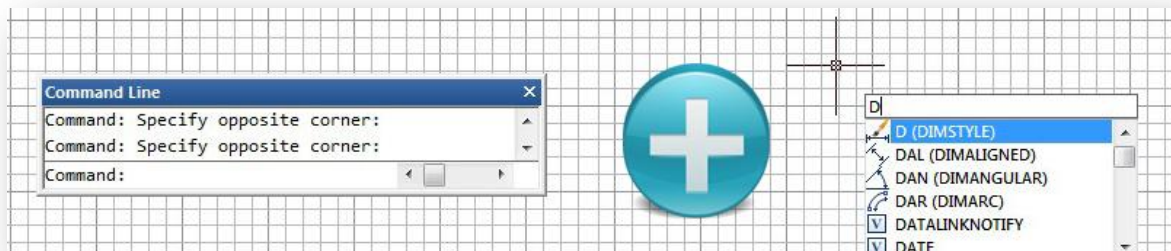
Now SOLIDEDIT command supports related 3D solid editing options like Union, Subtract, intersect, Imprint Edges, Color Edges ,etc.



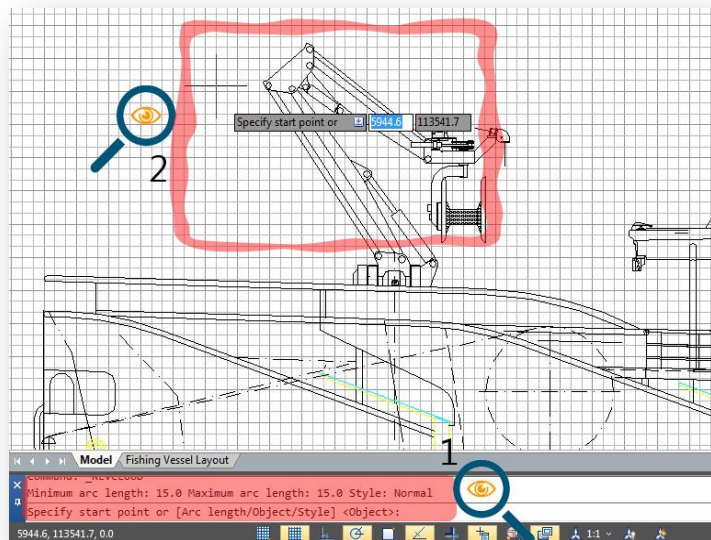
Ease of Use

New Visuals on Dynamic Input

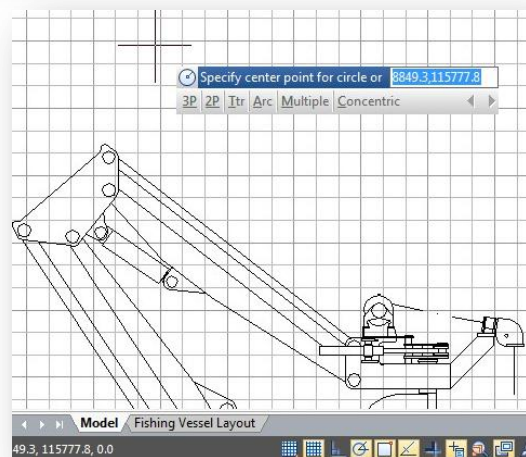
The traditional dynamic input has been enhanced, so now the dynamic input achieves the command line integration which means a great benefit by gaining more workspace and less eyes concentration.



Usually when users execute a command with several options, first they have to focus at command line (if the command line is turned on as shown as number 1) to select the properly option rather than focus on the drawing area (as shown as number 2) or even on most of cases, using the dynamic input tooltip cannot display all the command options to accomplish the drawing workflow in short time.

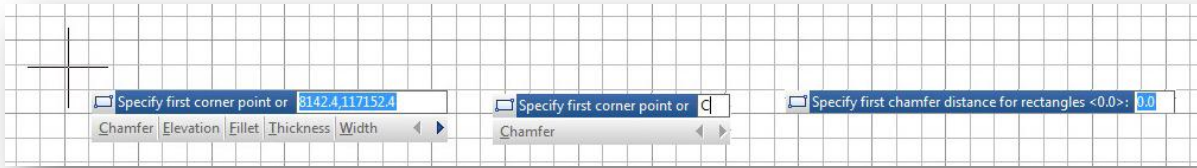


Now the dynamic input in GstarCAD 2016 displays all options of a command and could select them in different methods. With this enhancement, users no longer need the command line either floated or docked, gaining more workspace to get wider viewing of the drawing and the most important, users will focus directly at the right spot of the drawing avoiding eyes concentration at command line.

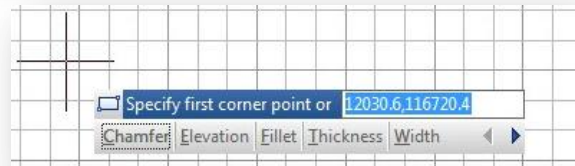


What are the methods to select a command option on dynamic input?

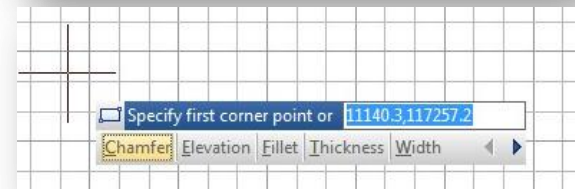
1st. Method: After entering a command just type the CAPITAL letter of the option to be selected and press ENTER. Then the tooltip will prompt the command message.



2nd. Method: After entering a command just use the arrow keys (right/left) to cycle select the option and press ENTER. Notice while selecting any option, this will be dot highlighted.



Under the same method, after pressing the right arrow key, users can select an option using the cursor as they like. Notice when hovering the cursor over an option, it will be color highlighted.

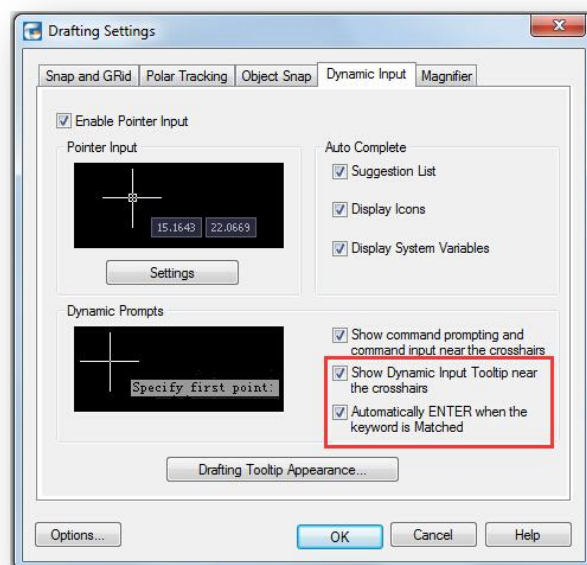


How could I accelerate the method to select a command option on dynamic input?

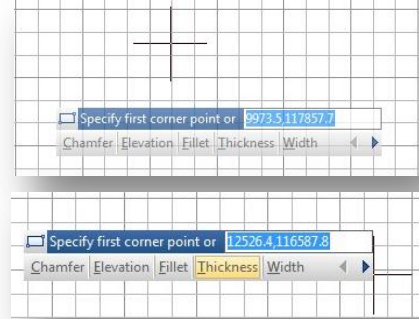
Within Drafting Settings dialog box, under Dynamic Input tab, besides Dynamic Prompts title, there is an option called *Automatically Enter when the keyword is Matched*. This option allows to typing the CAPITAL letter of the command option to be selected. After typed, you don't need to press ENTER. The option will be executed automatically.

Could dynamic input tooltip be in fix position?

Within Drafting Settings dialog box, under Dynamic Input tab, besides Dynamic Prompts title, there is an option called *Show Dynamic Input Tooltip near the crosshairs*. By default, this option is checked, but if you uncheck it, when executing a command, the dynamic input tooltip will be fixed and away from the crosshair.

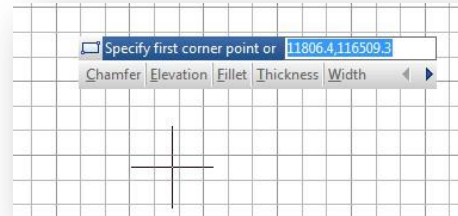


When the dynamic input tooltip is fixed, it turns semi-transparent as default. At this stage you can freely move the cursor over the workspace but when you move it over the dynamic input, it will be highlighted. What's more, you can select a command option with the cursor.



Could dynamic input tooltip be dragged around workspace with the cursor?

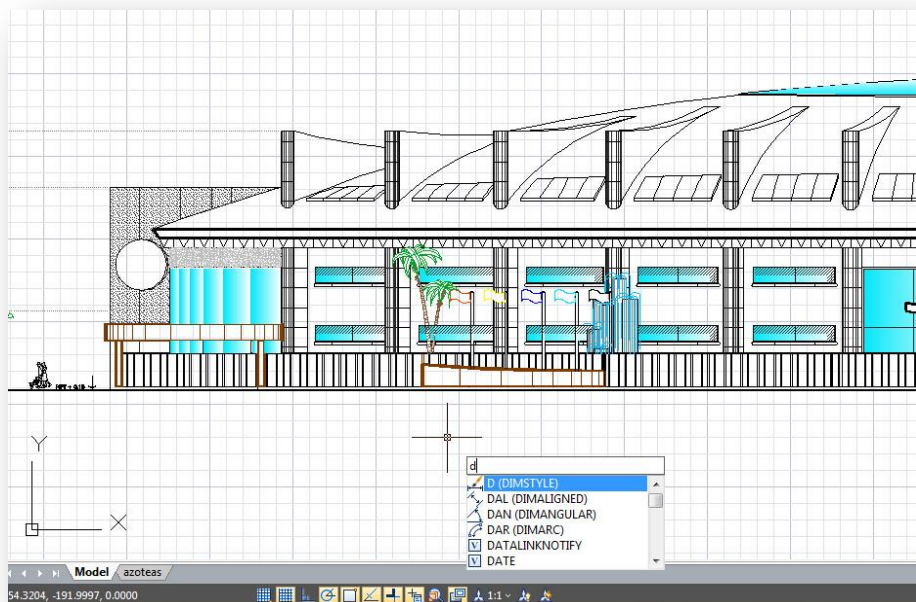
If you already select the option *Show Dynamic Input Tooltip near the crosshairs*, you can drag with the cursor, the dynamic input tooltip to anywhere around workspace. When dynamic input is dragged, it turns highlight.



Easy Command Recognition

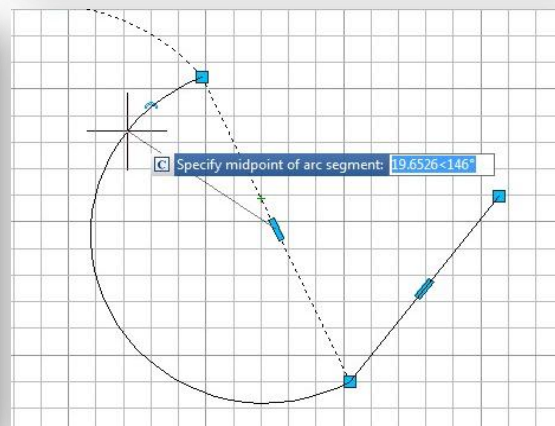
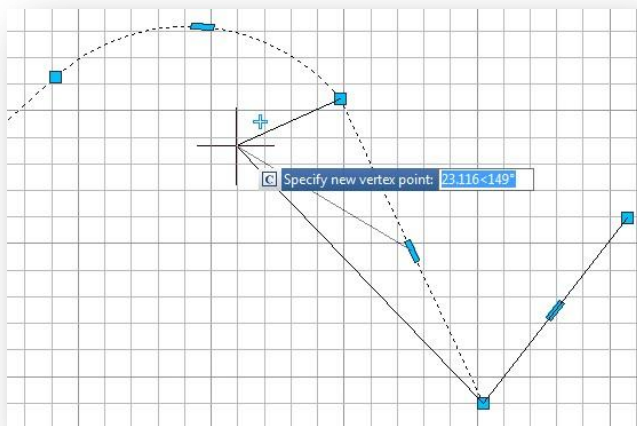
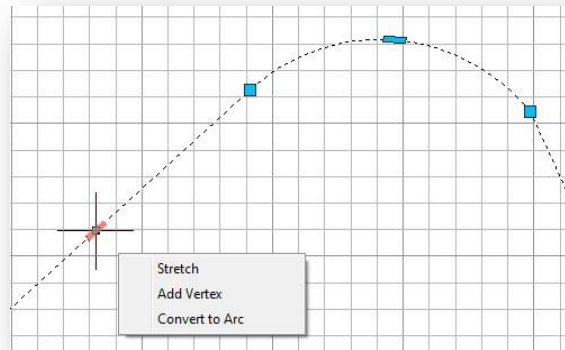
In addition to dynamic input enhancement, now the auto complete command entry has a light enhancement regarding to command icon display. When type a command using the dynamic input, it displays a list of all the commands whose prefix matches what you've typed plus it will display all their icons making easier to recognize them at glance.

Within Drafting Settings dialog box, under Dynamic Input tab, users can select more auto complete options such as suggestion list display, display icons, and display system variables according to their visual need.



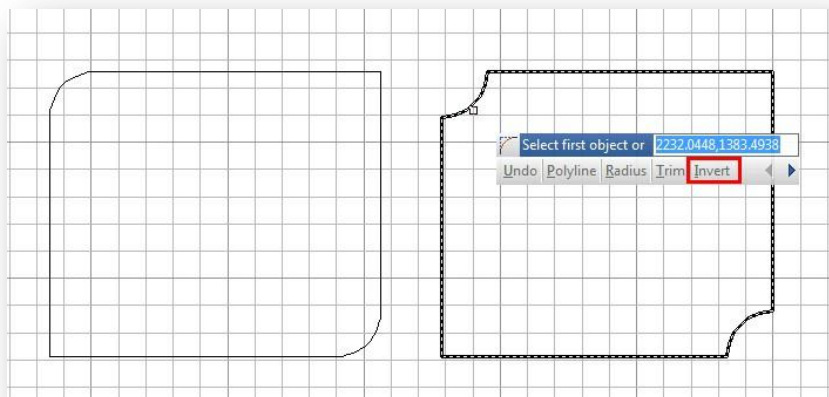
Polyline Flexible Edition

Polyline objects in GstarCAD 2016 now support multifunctional options. The available functions (Stretch, Add Vertex, and Convert to Arc) can be seen by hovering over a grip, and you can choose an option directly from the context menu that appears. You can cycle through the available functions by pressing CTRL, or choosing one of the options from the right-click menu. Icons next to the cursor indicate the active function.



Fillet on Inverted Mode

Invert Fillet has a very wide range of usage particularly in construction and furniture industry. The FILLET command now offers a new option called *Invert*. You can create an inverted fillet by this option.



Measuring More and Accurate

MEASUREGEOM command is more powerful in GstarCAD 2016, not only adds missing options such as measure radius, measure angle, measure volume, but also sum area and total length.

Measure radius: Calculates the radius and diameter of a specified arc and circle.

Measure angle: Calculates the angle associated with selected arc, circle, polyline segments or line objects.

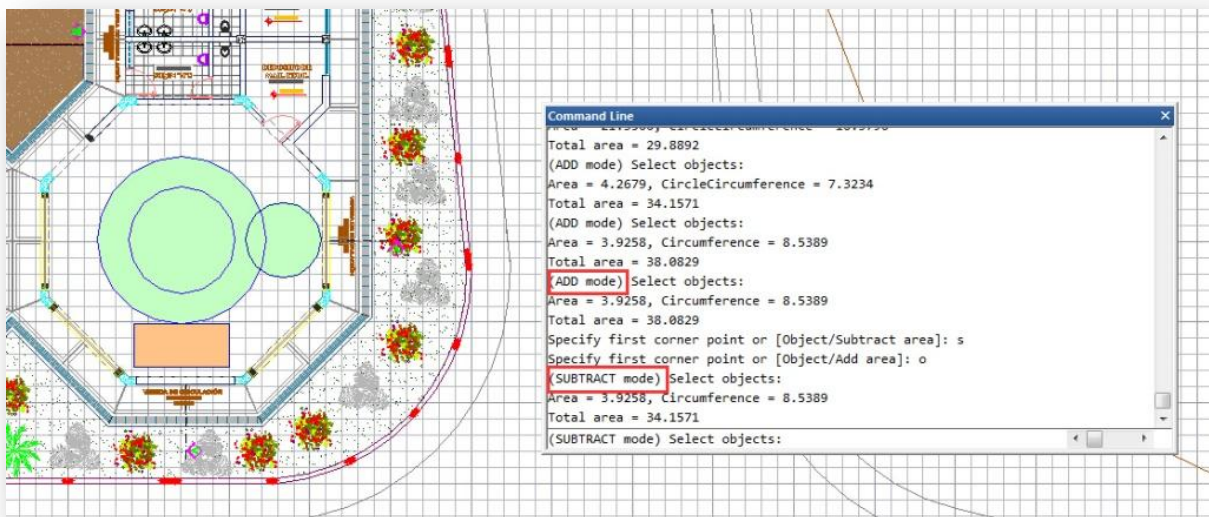
Measure volume: Calculates the volume of an object or a region area specified by picking point.

Measure area: Calculates the area and perimeter of objects and even the defined area. There are three options for area command, as show below:

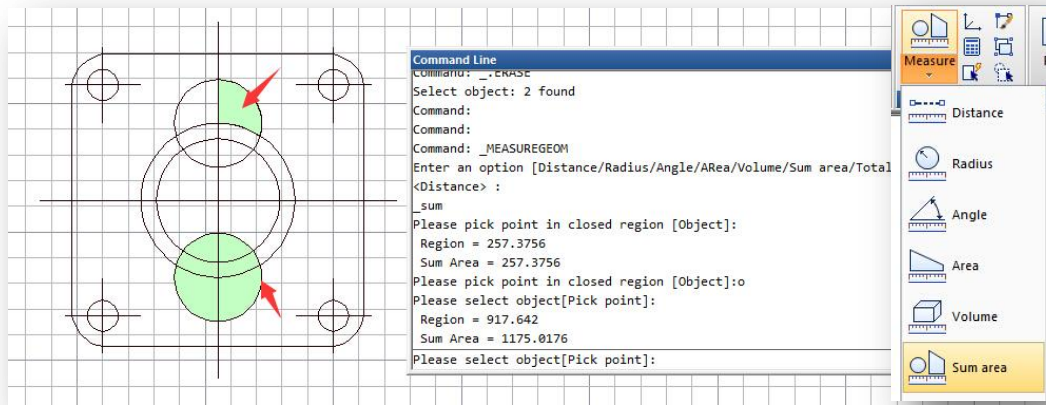
Object: Calculates a close object area and perimeter at a time, after you get the calculation at the command line, the command ends.

Add area: Calculate any region area and perimeter that specified by picking points or the closed objects you select, the selected area will be filled with color which is more intuitive, the area and the total area calculation and even the perimeter will list at the command line prompt subsequently.

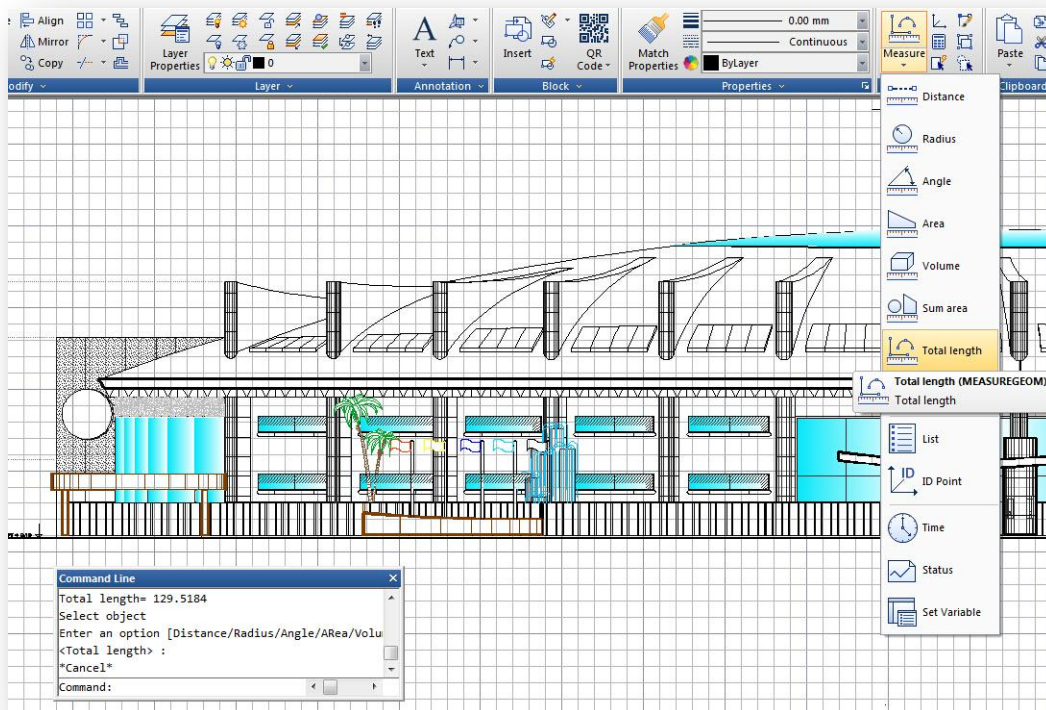
Subtract area: Subtracts areas and perimeters from a total area and the selected area will be filled with color. You can pick points or select objects to obtain the calculation.



Sum area: Not only can calculate the area of a closed object but also can calculate a closed region area. If there are multiple objects need to be selected, window selection is available .



Total length: Calculates the object length and total length associated with selected arc, circle, polyline segments or line objects. You can either select the single object by doing click or select multiple objects with window selection.

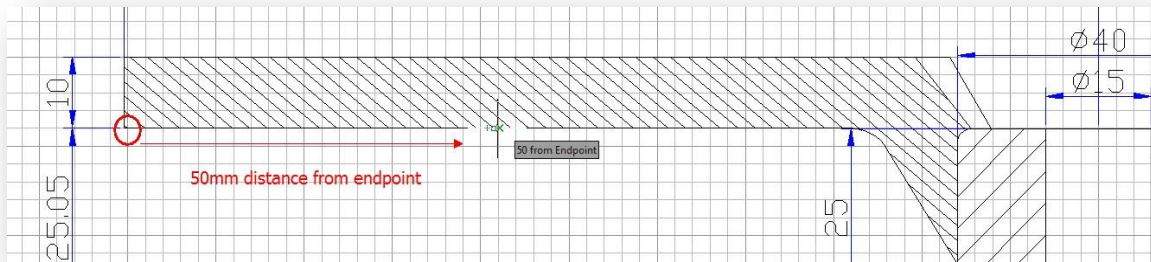
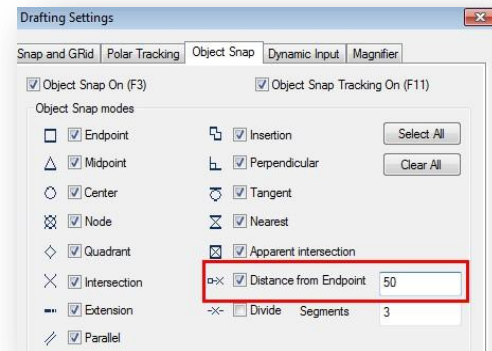


New Additions

Object Snap Options Added

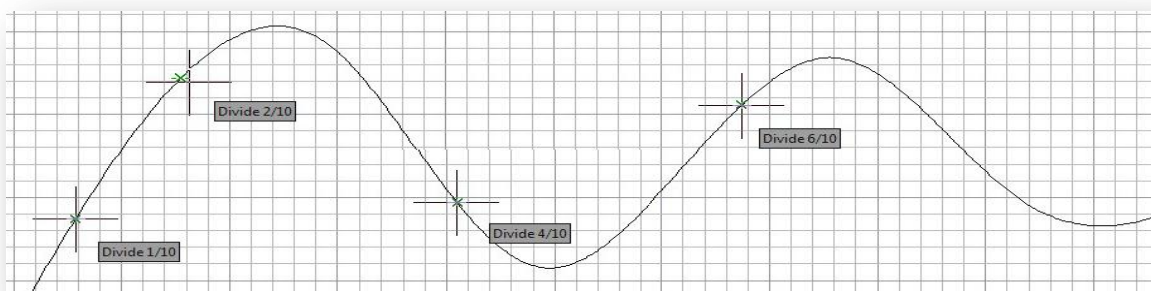
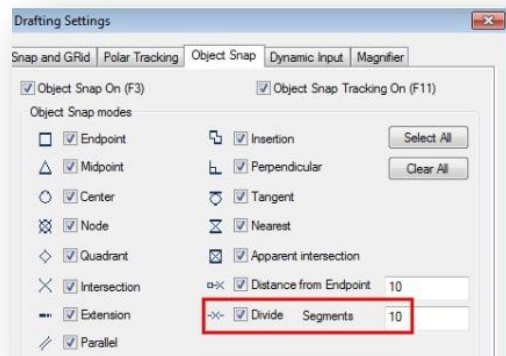
Distance from Endpoint

Now within Object Snap tab, you can find a new added option called *Distance from Endpoint*. This option allows snap a certain distance from any endpoint of objects like line, arc, spline, pline, ellipse arc, mline and any other lines. As long as you pass the cursor over an object from its endpoints, you will see a green snap point at accurate distance.



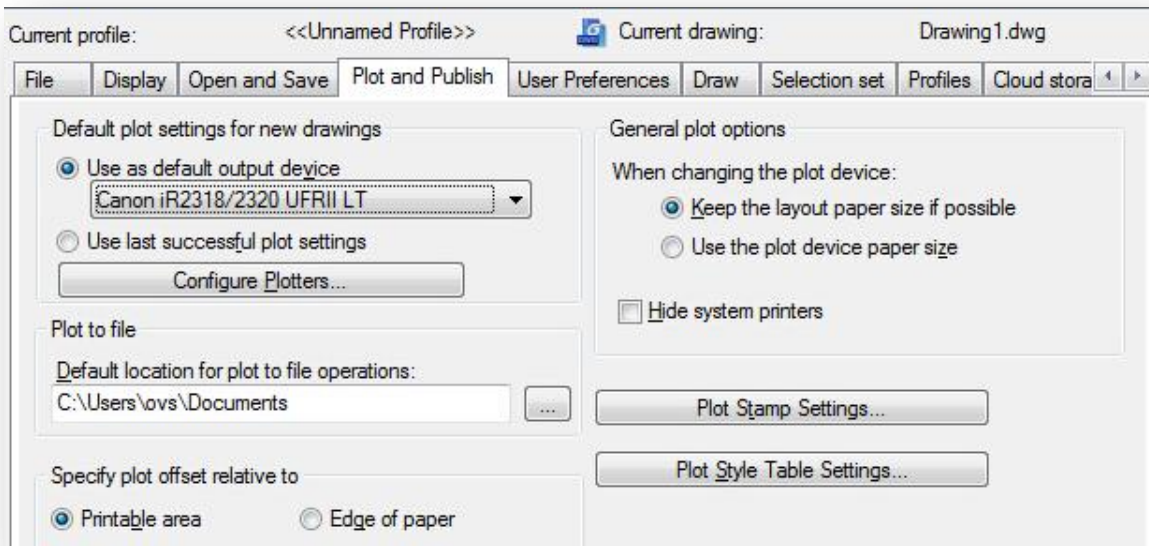
Divide Segments

Within Object Snap tab, you can find a new added option called *Divide Segments*. This option allows snap the divided segment points of objects like line, arc, spline, pline, ellipse arc, mline and any other lines. Before, if you want to find the divide point, first you need to generate the divide points object, then snap those points to draw. Now as long as you pass the cursor over an object mentioned above, you will see a green snap point at accurate distance.



Plot and Publish Tab Addition

Now the Options dialog box supports a new tab (Plot and Publish). This tab helps users to control options related to plotting and publishing. The following options are displayed.



Default plot settings for new drawings: Controls default plotting settings for new or older drawings.

Use as default output device: Sets the default output device for new or older drawings. The list displays any plotter configuration files (PC3) found in the plotter configuration search path and any system printers that are configured in the system.

Use last successful plot settings: Sets the plotting settings to match those of the last successful plot.
Add or configure plotters: Displays the Plotter Manager (a Windows system window).

Plot to file: Specifies the default location for plot to file operation.

General plot options:

Keep the layout paper size if possible: Uses the paper size specified in the Page Setup dialog box as long as the selected output device can plot to this paper size. If the selected output device cannot plot to this paper size, the program displays a warning message and uses the paper size specified either in the plotter configuration file (PC3) or in the default system settings if the output device is a system printer.

Use the plot device paper size: Uses the paper size specified either in the plotter configuration file (PC3) or in the default system settings if the output device is a system printer.

Hide System Printer: Controls whether Windows system printers are displayed in the Plot and Page Setup dialog boxes. This option hides standard Windows system printers only. It does not hide Windows system printers that have been configured using the Add-a-Plotter wizard.

Specify plot offset relative To:

Printable Area: Specifies that the plot offset is relative to the printable area.

Edge of Paper: Specifies that the plot offset is relative to the edge of the paper.

Plot Stamp Settings: Opens the Plot Stamp dialog box.

Plot Style Table Settings: Opens the Plot Style Table Settings dialog box.

Addendum

Now AutoXlsTable has a separate installation package in GstarCAD 2016, users can install it manually according to the version and the bit of your Microsoft Office (32/64-bit).

About GstarCAD 2016

GstarCAD 2016, the CAD platform solution is aimed to save countless hours of design and rework through enhanced features which boost drafting capability through flexible operation methods upon a more optimized platform!

About Gstarsoft

Gstarsoft is the recognized leading of 2D/3D CAD software solutions for industries involving AEC, Civil Engineering, Mechanical, Manufacturing, Electrical, Electronics, GIS, Survey, Mapping, etc. With more than 20 years of proud history of technology innovation and practical application, Gstarsoft provides the most powerful and dwg compatible CAD software and solutions for customers and partners worldwide.