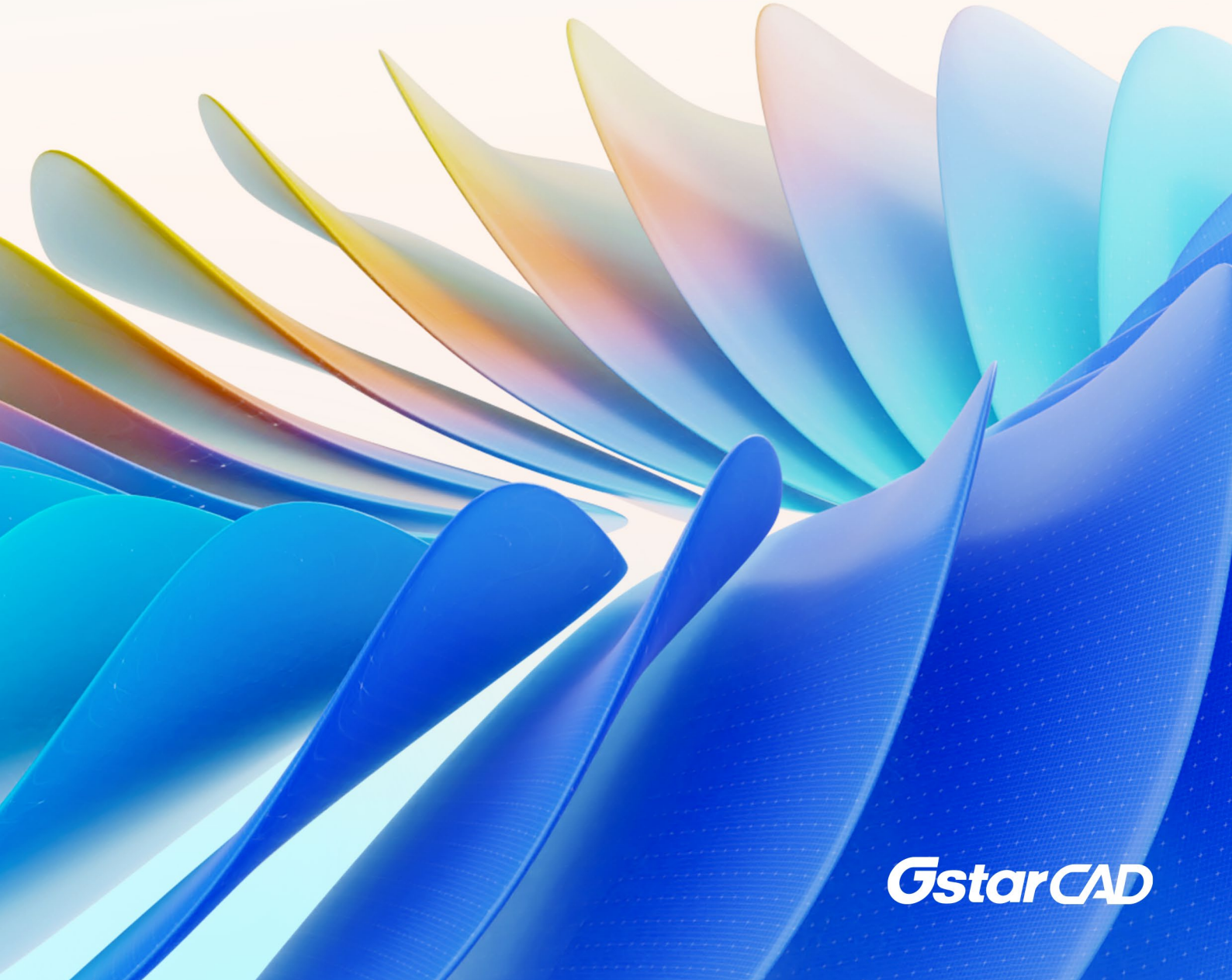
Complete Features Guide

GstarCAD 2026



GstarCAD 2026 Content

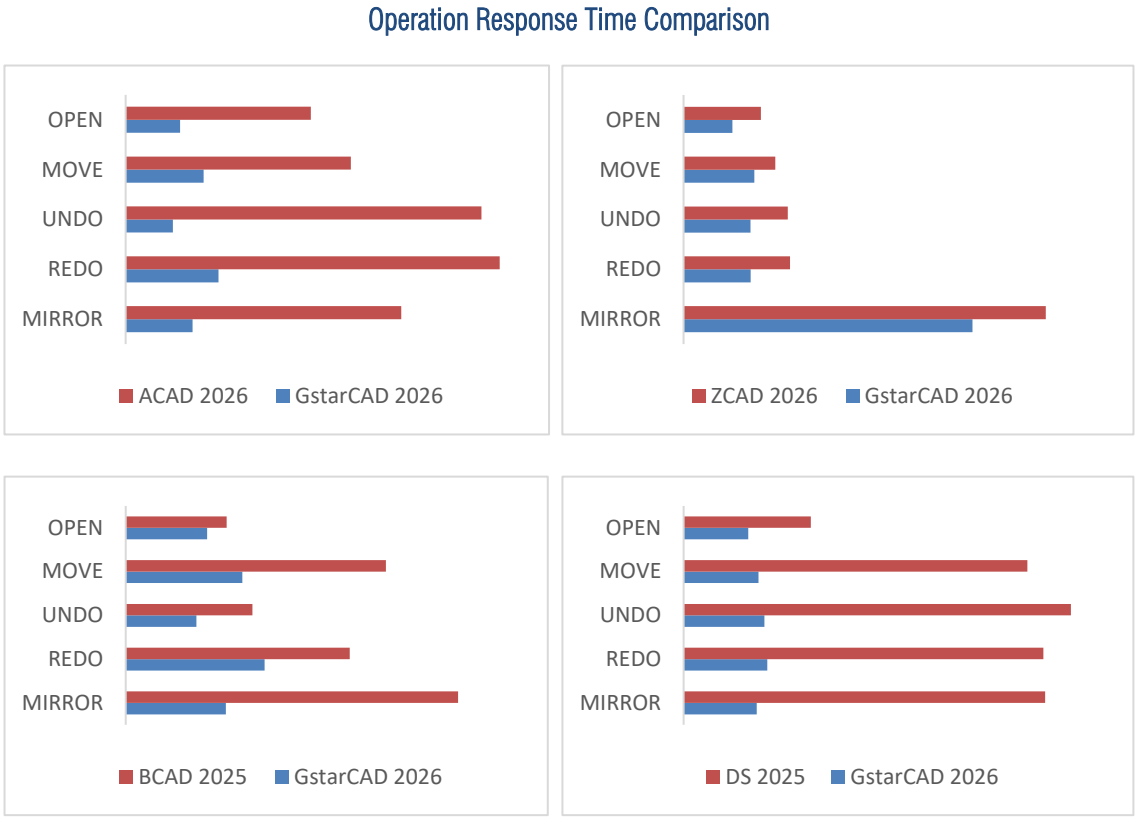
GstarCAD 2026 Complete Guide

Fresh Look, Smarter Design, Faster Speed Powered by Core

GstarCAD 2026 introduces a completely reconstructed interface, offering a sleek, modern look that enhances the user experience. Performance improvements boost efficiency across various tasks. Exciting new features include **Dimensional Constraints**, **Parameters Manager**, **DWG Compare** and more, unlocking powerful design capabilities. Innovative feature like **Drawing Merge** streamlines workflows, and **Engineering Projection** delivers precise bottom-view accuracy. Additionally, updates to **DIMCORD**, **Batch Plot**, **Batch Purge**, and **PDF Import** further enhance usability.

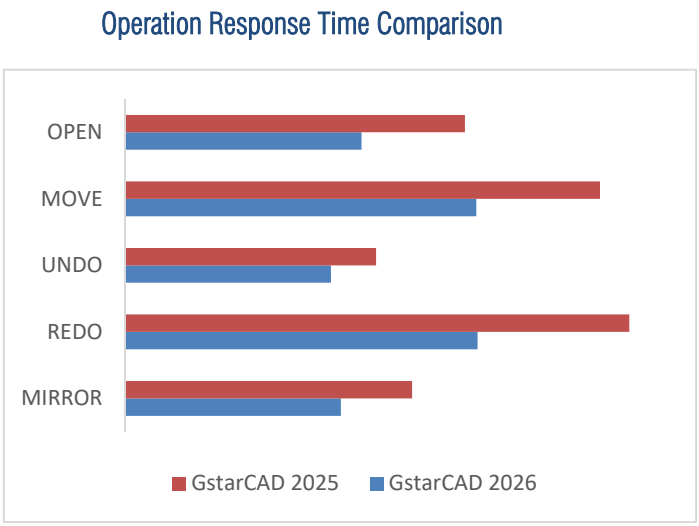
1. Excellent Performance

Performance is a core strength of GstarCAD. Whether you're working in 2D or 3D, it ensures a smooth, responsive experience that keeps pace with your ideas. Frequently used commands run noticeably faster than in other CAD software, such as MOVE, UNDO, REDO, MIRROR, COPYCLIP, and PASTECLIP. Large drawings open within seconds, and saving takes just a moment, enabling uninterrupted focus and productivity.



Compared to the previous version, GstarCAD 2026 delivers a significant leap in overall performance, ensuring a faster, smoother, and more responsive design experience across the board:

- **Drawing opening speed improved by over 40% on average**
- **Common operations improved by over 20%**



In addition to these overall gains, key performance enhancements are listed below:

Feature/Operation	Performance Gain vs. GstarCAD 2025
Multi-reference drawing opening (without clipping)	Previously lag-prone drawings now open in under 1 minute
EXTEND (Fence/Crossing)	**11× faster**
TRIM (Fence/Crossing)	**2× faster**
Clipped blocks & Xrefs	**2.9× faster** opening **4.2× faster** layout switching
Block editing preview (BEDIT/REFEDIT/INSERT)	**7× faster**
MIRROR operation	**1.4× faster**
Block creation/explosion	**5× faster** block creation with high-coordinate entities **5× faster** explosion of inserted blocks Freeze eliminated for multileader-heavy blocks
Hatch (pick-point on complex drawings)	**30× faster**

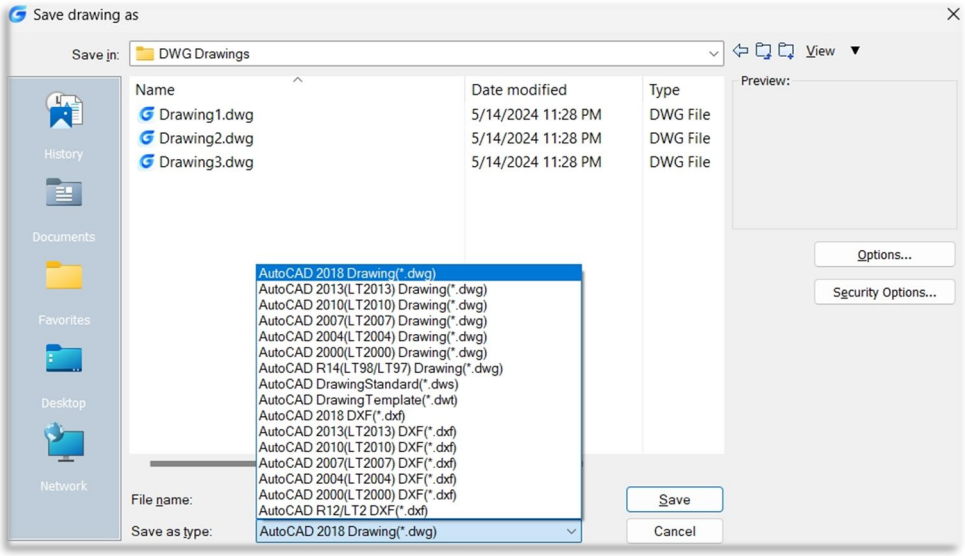
2. Perfect Compatibility

GstarCAD delivers high compatibility with ACAD and offers robust APIs for customization and automation. Seamless data format support, a familiar interface, consistent command structure, and user operation logic ensure a smooth transition from other platforms. At the same time, powerful development capabilities enable flexible adaptation to specific project needs.

➢ Data Format

GstarCAD 2026 supports native DWG and DXF file formats, fully compatible with ACAD from version 2.5 to 2018. CAD drawings based on DWG/DXF can be opened, edited, and saved without loss, ensuring smooth bidirectional exchange with other CAD platforms.

In addition, GstarCAD 2026 supports a wide range of file formats and development interfaces, providing the flexibility to create and edit drawings in original, customized ways.



Here are the main file formats and development interfaces GstarCAD 2026 supports:

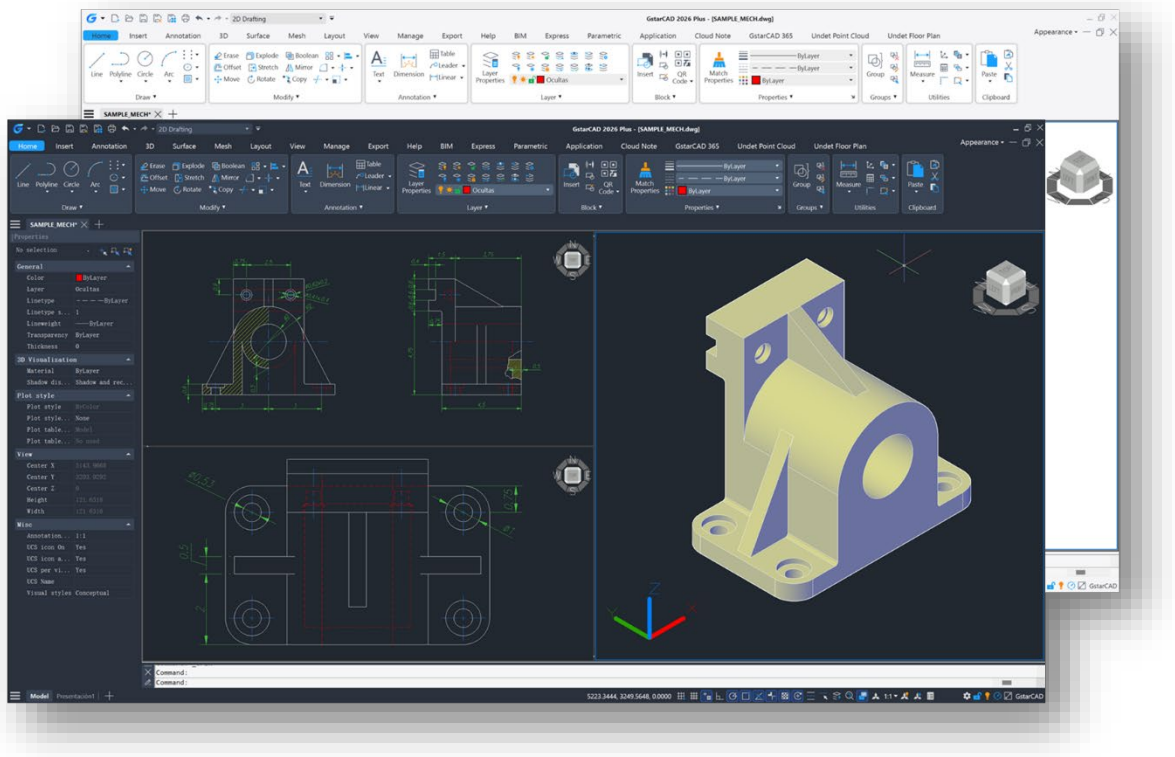
Formats and Development Interfaces	GstarCAD	ACAD
2.5-2018 DWG/DXF Versions	√	√
Drawing Template File (DWT)	√	√
Drawing standard File (DWS)	√	√
Customize User interface file (CUI/CUIX)	√	√
Old Menu File (MNU)	√	√
Drawing Sheet Set File (DST)	√	√
Hatch Pattern File (PAT)	√	√
Font File (SHX)	√	√
Line Type File (LIN)	√	√
Print Style File (CTB/STB)	√	√

Import and Export WMF	√	√
Import and Export SAT	√	√
Import 3DS	√	√
Import DGN	√	√
Export DWF/DWFX	√	√
Export STL	√	√
Export EMF	√	√
DWF Underlay	√	√
PDF Underlay	√	√
DGN Underlay	√	√
Script File (SCR)	√	√
LISP Development Interface	√	√
LSP File Loading	√	√
FAS File Loading	√	√
VLX File Loading	√	√
PY File Loading	√	×
VBA Development Interface	√	√
Class ARX Development Interface	√	√
.net Development Interface	√	√
Python Development Interface	√	×

- **Concise User Interface**

GstarCAD 2026 offers a concise and user-friendly interface, providing both dark and light themes. More than 1500 newly designed icons display clearly at any scale, helping reduce eye strain and enhancing overall visual clarity.

Interface elements such as toolbars and the command bar can be displayed, rearranged, floated anywhere on the screen, or docked as needed. Workspace switching, interface layout customization, and status bar control are all supported. In addition, the layout, menus, and ribbon panels have been further refined in GstarCAD 2026 to deliver a smoother, more efficient design workflow.



➢ Familiar Command

GstarCAD adopts a familiar command structure and shortcut system, allowing immediate use without additional learning. Both new users and experienced CAD professionals can start working efficiently right away and take advantage of features designed to enhance productivity.

GstarCAD Commands	ACAD Commands	GstarCAD Commands	ACAD Commands
Multiple	Multiple	Superhatch	Superhatch
Osnap	Osnap	Redraw	Redraw
Qselect	Qselect	Regen	Regen
Qleader	Qleader	Scalelistedit	Scalelistedit
Spell	Spell	Bedit	Bedit
Layerp	Layerp	Render	Render
Layoff	Layoff	Flatshot	Flatshot
			……

➢ Customized Settings

GstarCAD provides several methods to import customized settings such as CUI files, LISP programs, shortcut keys, blocks, DWT templates, tool palettes, plotters, and more from other CAD software. Within minutes, a familiar working environment can be recreated in GstarCAD, ensuring a smooth and efficient transition.

- **API and Add-ons**

  GstarCAD offers friendly development interfaces such as Python, GRX, .NET, VBA, Lisp, COM, etc. Nowadays, hundreds of professional applications and industrial solutions are running on GstarCAD.

  For more information about applications/add-ons of GstarCAD, please refer to the link:

  https://www.gstarcad.net/application/

3. Flexible Licensing

3.1. Licensing Policy

GstarCAD offers a flexible licensing policy with options to suit different needs. Both perpetual licenses and subscription plans are available, allowing full control over licensing preferences and upgrade timing.

- **Perpetual License**

  A perpetual license allows lifetime use of the purchased version. There is no requirement to purchase upgrades or subscriptions—buy once, use forever.

- **Perpetual License with Subscription Plans**

  The perpetual license can be paired with an annual subscription plan. As Gstarsoft releases a major version of GstarCAD each year, the subscription ensures access to the latest updates.

- **Yearly Subscription**

  The yearly subscription provides a cost-effective way to access GstarCAD on a one-year basis, similar to ACAD.

- **GstarCAD Upgrades**

  Existing licenses can be upgraded to newer versions of GstarCAD at any time by purchasing an upgrade. Major upgrades are released annually.

3.2. Licensing Options

GstarCAD not only provides a flexible licensing policy, but also provides flexible licensing Options. GstarCAD offers Stand-alone and Network licenses, both are available with Soft key (serial number) and Dongle (USB-key).

- **Stand-alone license**

  The software is constrained to a certain host. A license is needed for each computer on which the software will be installed.

- **Network license**

  A pool of licenses is available on the server, for users of any computers on the network. You only need to have licenses for the maximum number of simultaneous users expected, not for each computer where the software will be installed.

  A Network license allows a pool of licenses to be managed on a server and shared among multiple users within a local network. Licenses are allocated based on concurrent usage, so only the maximum number of simultaneous users needs to be licensed, not every computer.

	Stand-alone	Stand-alone	Network	Network
	License-key Serial number	USB-key Dongle	License-key Serial number	USB-key Dongle
Perpetual license	√	√	√	√
Rental license	√	×	√	×
License borrowing	×	×	√	×
Connection to license server	×	×	√	√

4. Innovative Features

GstarCAD includes over 100 unique and innovative tools such as Area Table, Auto Layer, Viewport to Layout, and Autoxlstable. These tools are designed to significantly enhance drafting efficiency and streamline the design workflow.

GstarCAD Innovative Features	Description
Autolayer	Automatically switch the current layer while drawing the graph and draws the graphic to the set layer.
Area Table	Automatically dimension and count the area of an enclosed object and export the result to a table in the current drawing area.
Break Object	Breaks Objects by intersecting lines and allows to set the gap.
Block Break	Breaks or shelters the graphic under the block.
Graphic Compare	Compares graphic of two groups of objects or two files.

Line2pl	Converts one or multiple connected straight line(s), arc(s) to one polyline.
Sptpl	The spline created can be converted to a polyline according to the accuracy (number of segments of the arc).
GstarCAD Tools	A set of GstarCAD practical tools to enhance design efficiency, Including Drawing Scale, Rotate Cursor, Draw Axonometric Line, Extension, Normal Connect, etc.
Drawing Lock	Turns the drawing into a whole block to prevent being modified by others.
Attribute Increment	Specifies attribute of blocks with incremental value, and modifies attribute value of blocks according to the sort method.
Define Layout Viewport from Model Space（M2LVPORT）	Defines the range of drawing displayed in the viewport from the model space, calculates the viewport size based on the set scale and positions the viewport in the layout space.
Align Tool	Aligns selected objects such as rectangle, circle, line, spline, arc, pline, block and even 3D model object along X or Y axis coordinates.
Arrange Tool	Adjusts the arrangement of multiple objects. It can align multiple objects at left, right, top, bottom and center and also can arrange vertically or laterally.
MEASUREGEOM	Supports measuring distance, radius, angle, area, volume sum area and so on.
Symmetric Draw	Generates the symmetrical object automatically when drawing an object.
Outline Objects	Extracts the outline shape of selected closed objects in a window selection method.
Invert Fillet	The FILLET command now offers a new option called Invert. You can create a reverse fillet with this option.
Magnifier	Views a specific area of your drawing as a magnifier with the capability of snap points without performing zoom in/out.
Barcode & QR Code	Creates Barcode & QR Code by entering data or picking data from drawings.
Shortcut Customization(CUSTACC)	The CUSTACC command allows you to customize, delete or modify existing command shortcuts.
Table Tools	A set of practical tools to draw and edit tables and can export CAD tables to Excel files.
AutoXLSTable	Opens Excel file to edit the data and insert it into GstarCAD. It also allows updating the table data after the drawing was modified.
Pline Boolean	Supports different Boolean operation options such as union, intersection and subtraction.
Batch Print	Batch print drawings with the same drawing frame attribute in a drawing.
Arrange Frame	Inserts frames of drawings, calculates according to the size of the frame and then arranges them to a big drawing.
...	...

5. What's New in GstarCAD 2026

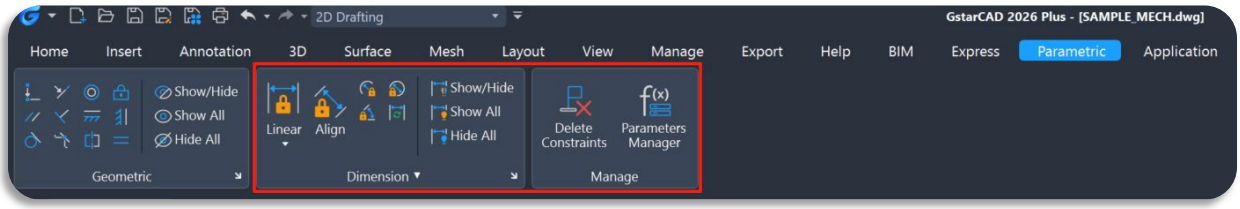
5.1. Parametric Constraints (Phase 2) *New*

5.1.1. Dimensional Constraints

Introduced last year with Geometric Constraints, GstarCAD 2026 expands Parametric Constraints with Dimensional Constraints, which are used to control the size and proportions of a design, ensuring consistency in dimensions and shapes during editing. Includes:

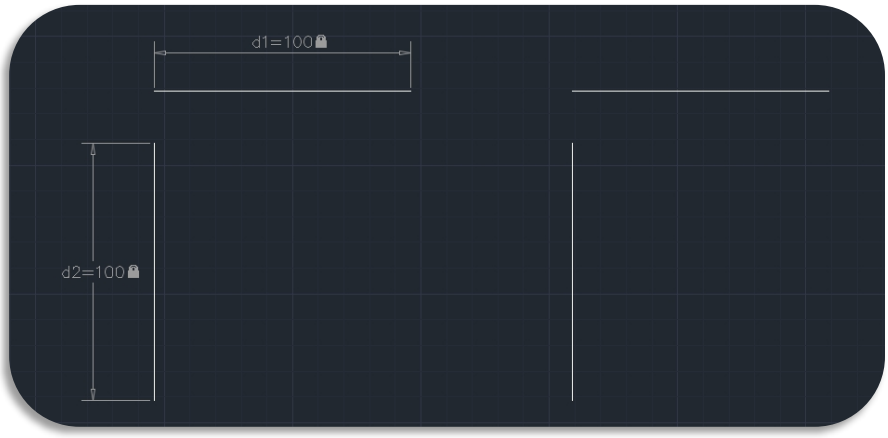
- **7 types of dimensional constraints**: Linear, Horizontal, Vertical, Aligned, Angular, Radius, and Diameter.
- **2 auxiliary functions**: Form and Convert.

Note: This feature is only available in the GstarCAD 2026 Plus version.



（1）**Linear:** Constrains the horizontal or vertical distance between points.

- **Access:** Click Ribbon ➤ Parametric ➤ Dimensional ➤  or enter DCLINEAR command.
- **Command Prompts:**
  - Select first constraint point or [Object(0)]: Specify the first point of the object to be constrained
  - Select second constraint point: Specify the second point of the object to be constrained.
- **Example:** Select both endpoints of the horizontal/vertical line to add a linear constraint, and the horizontal/vertical distance between the endpoints of the object will be constrained.



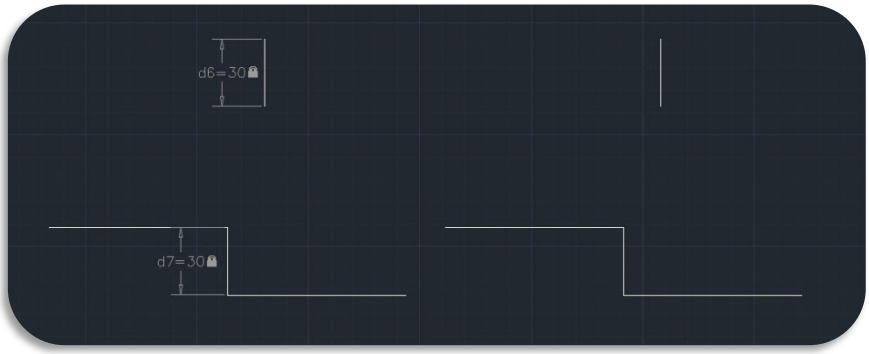
（2）**Horizontal:** Constrains the X-distance between points on an object, or between points on different objects.

- **Access:** Click Ribbon ➤ Parametric ➤ Dimensional ➤  or enter DCHORIZONTAL command.
- **Command Prompts:**
  - Select first constraint point or [Object(0)]: Specify the first point of the object to be constrained
  - Select second constraint point: Specify the second point of the object to be constrained.
- **Example:** Select both endpoints of the horizontal line to add a horizontal constraint, and the horizontal distance between the endpoints of the object will be constrained.

（3）**Vertical:** Constrains the Y-distance between points on an object, or between points on different objects.

- **Access:** Click Ribbon ➤ Parametric ➤ Dimensional ➤  or enter DCVERTICAL command.
- **Command Prompts:**
  - Select first constraint point or [Object(0)]: Specify the first point of the object to be constrained
  - Select second constraint point: Specify the second point of the object to be constrained.

- **Example:** Select both endpoints of the vertical line to add a vertical constraint, and the vertical distance between the endpoints of the object will be constrained.



（4）**Aligned:** Constrains the distance between two points on an object or between two points on different objects.

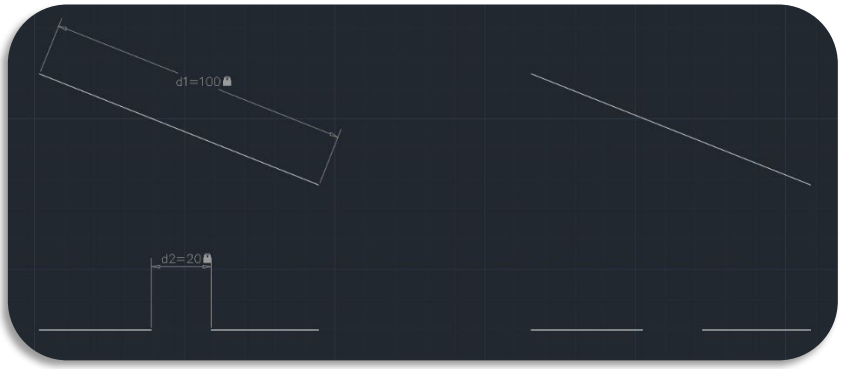
- **Access:** Click Ribbon ▶ Parametric ▶ Dimensional ▶  or enter DCALIGNED command.

- **Command Prompt:**

  - Select first constraint point or [Object(0)/Point & line(P)/2Lines(2L)]: Specify the first point of the object to be constrained

  - Select second constraint point: Specify the second point of the object to be constrained.

- **Example:** Select both endpoints of the line or two points on different objects to add an aligned constraint, and the distance between the two points will be constrained.



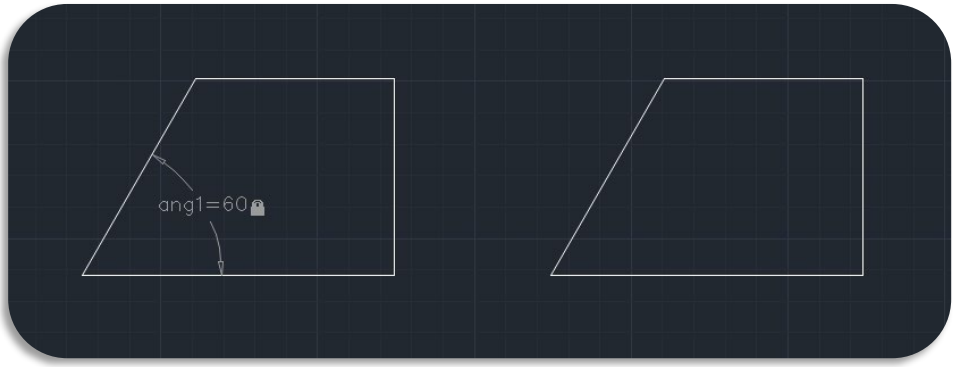
（5）**Angular:** Constrains the angle between line or polyline segments, the angle swept out by an arc or a polyline arc segment, or the angle between three points on objects.

- **Access:** Click Ribbon ▶ Parametric ▶ Dimensional ▶  or enter DCANGULAR command.

- **Command Prompts:**

- Select first line or arc or [3Point(3P)]: Specify the first line to be constrained
- Select second line: Specify the second line to be constrained.

➢ **Example:** Select two lines to add an angular constraint, and the angle between the two lines will be constrained.



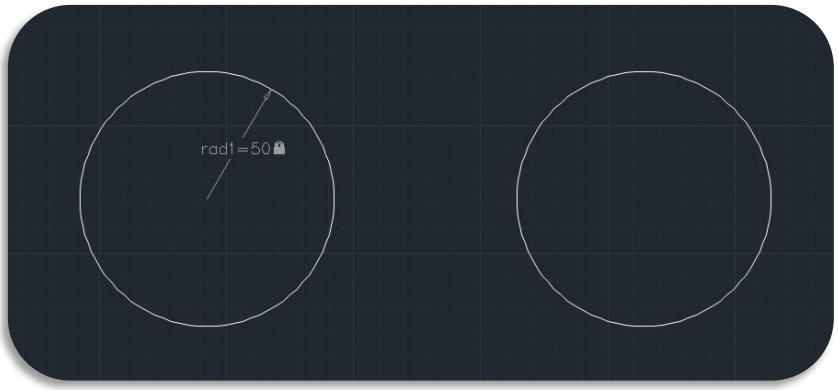
（6）**Radius:** Constrains the radius of a circle or an arc.

➢ **Access:** Click Ribbon ➤ Parametric ➤ Dimensional ➤  or enter DCRADIUS command.

➢ **Command Prompts:**

- Select arc or circle: Select the arc or circle to be constrained.

➢ **Example:** Select the circle to add a radius constraint, and the radius of the circle will be constrained.



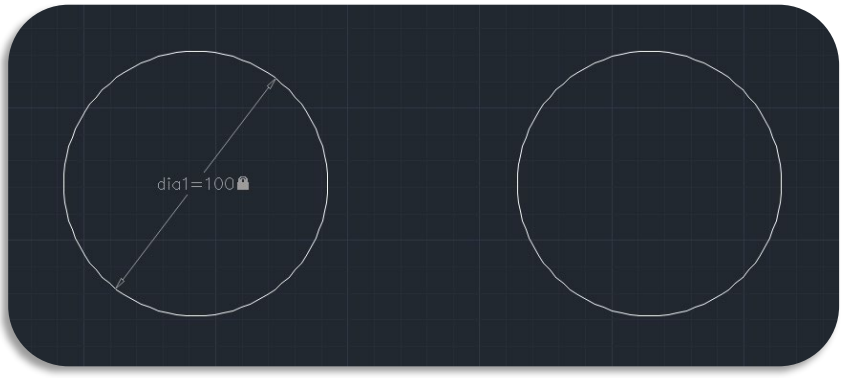
（7）**Diameter:** Constrains the diameter of a circle or an arc.

➢ **Access:** Click Ribbon ➤ Parametric ➤ Dimensional ➤  or enter DCDIAMETER command.

➢ **Command Prompts:**

- Select arc or circle: Select the arc or circle to be constrained.

- **Example:** Select the circle to add a diameter constraint, and the diameter of the circle will be constrained.



（8）**Form:** Specifies whether the created dimensional constraint is a dynamic constraint or an annotational constraint.

- **Dynamic Constraints:** By default, dimensional constraints are dynamic. They are ideal for normal parametric drawing and design tasks. Dynamic constraints have the following characteristics:
  - Maintain the same size when zooming in/out
  - Can easily be turned on/off globally in the drawing
  - Display using a fixed, predefined dimension style
  - Automatically place text information and provide triangular grip points, which can be used to modify the dimensional constraint values.
  - Not displayed when the drawing is plotted

Note: If you need to control the dimension style of dynamic constraints, or if you need to plot dimensional constraints, use the Properties palette to change dynamic constraints to annotational constraints.

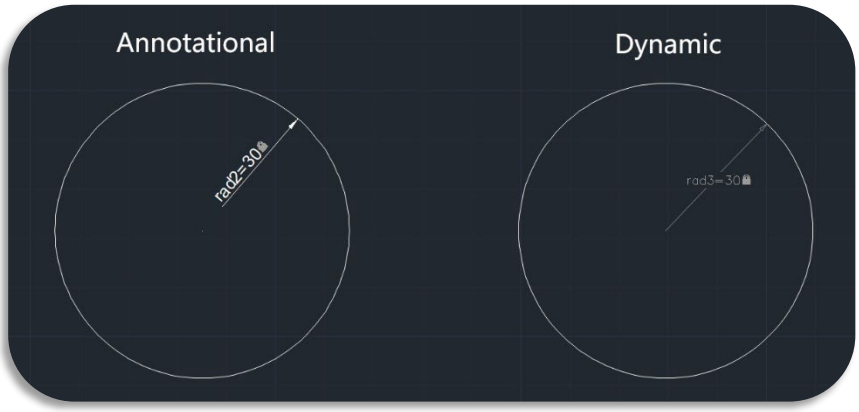
- **Annotational Constraints:** Annotational constraints are useful when you want dimensional constraints to have the following characteristics:
  - Change size when zooming in or out
  - Display independently with layers
  - Using the current dimension style to display
  - Provide grip points capabilities that are similar to those on dimensions
  - Display when the drawing is plotted

- **Access:** Click Ribbon ➤ Parametric ➤ Dimensional ➤ Dynamic Constraint Mode / Annotational Constraint Mode or enter DCFORM command to select.

➢ **Command Prompts:**

- Enter constraint form[Annotational(A)/Dynamic(D)]: Apply annotational/dynamic constraints to objects.

➢ **Example:**



Note: To display the text used in annotational constraints in the same format as used in dimensions, set the CONSTRAINTNAMEFORMAT system variable to 1.

After plotting, you can use the Properties palette to convert annotational constraints back to dynamic constraints.

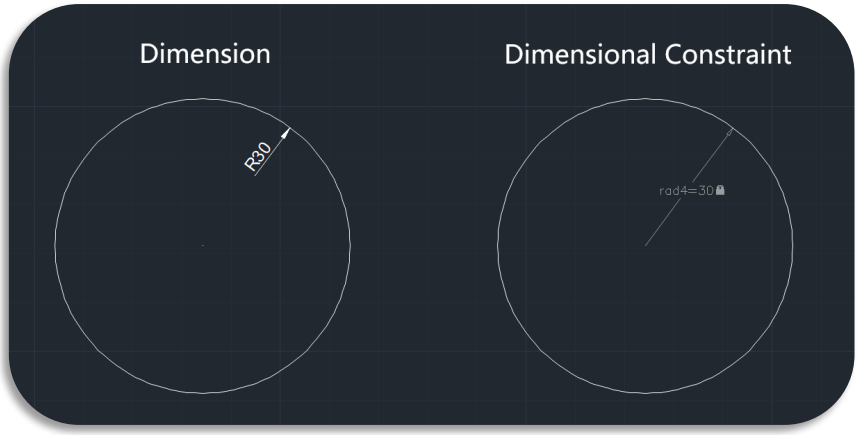
（9）**Convert:** Convert dimensions to dimensional constraints.

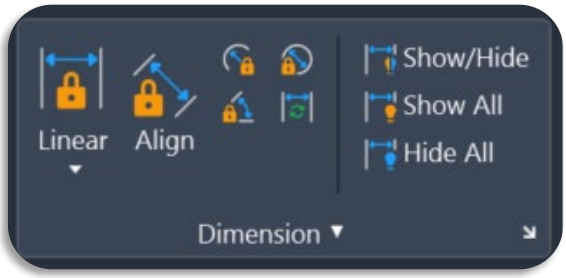
➢ **Access:** Click Ribbon ➤ Parametric ➤ Dimensional ➤  or enter DCCONVERT command.

➢ **Command Prompts:**

- Select associative dimensions to convert: Select the associative dimensions to convert to dimensional constraints.

➢ **Example:**



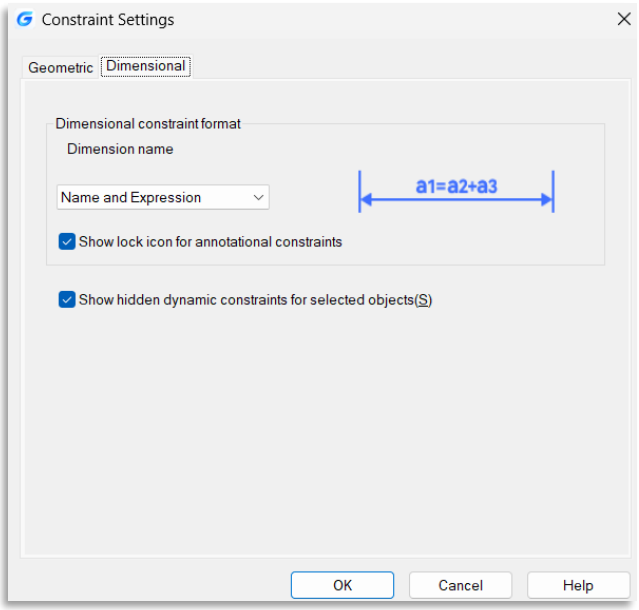


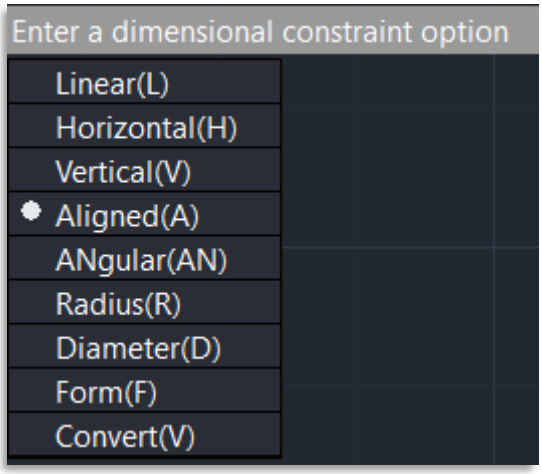
Show/Hide (DCDISPLAY): Select objects to display or hide their associated dynamic constraints.

Show All: Display all dynamic constraints.

Hide All: Hide all dynamic constraints.

Constraint Settings (CONSTRAINTSETTINGS): Manage settings related to constraints





Note: You can also use **DIMCONSTRAINT** command to establish or maintain dimensional relationships between objects or points on objects. Each option of this command corresponds to an individual command from (1) to (9).

Parametric Constraint Related System Variables

System Variable	Description	Value	Value Description

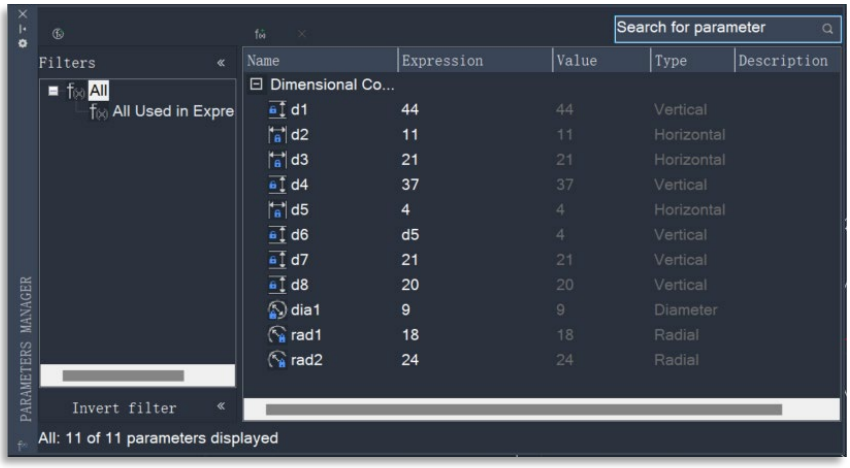
CCONSTRAINTFORM	Controls whether an annotational constraint or a dynamic constraint is applied to the object.	0	Dynamic
		1	Annotational
CONSTRAINTNAMEFORMAT	Controls the text format of dimensional constraints.	0	Name (e.g., Width)
		1	Value (e.g., 4.0000)
		2	Expression (e.g., Width = 4.0000)
DIMCONSTRAINTICON	Controls the display of the lock icon for dimensional constraints.	0	Does not display the lock icon next to any dimensional constraints (either dynamic or annotational).
		1	Display the icon for dynamic constraints.
		2	Display the icon for annotational constraints.
DYNCONSTRAINTMODE	Displays hidden dimensional constraints when selecting constrained objects.	0	Keeps constraints hidden when an object is selected.
		1	Displays hidden constraints when dimensionally constrained objects are selected.
PARAMETERCOPYMODE	Controls how constraints and referenced user parameters are handled when copying constrained objects between drawings, model space, layouts, and block definitions.	0	Do not copy any dimensional constraints or constraint parameters. Constraints are removed from copied objects.
		1	Copy dimensional constraints and constraint parameters. Always replace expressions with numerical constants. Rename dimensional parameters if there is a naming conflict.
		2	Copy dimensional constraints, constraint parameters, and user parameters. Reference existing user parameters when available, otherwise replace expressions with numerical constants.

		3	Copy dimensional constraints, constraint parameters, and user parameters. Reference existing user parameters when available, otherwise create any missing user parameters. Change missing referenced dimensional constraints into user parameters.
		4	Copy all dimensional constraints, constraint parameters, and expressions. Rename the parameters of copied objects if conflicts in value occurs for copied parameters.
PARAMETERSSTATUS	Indicates whether the Parameters Manager is displayed or hidden.	0	Hidden
		1	Displayed

5.1.2. Parameters Manager

Controls the associative parameters used in the drawing, including: creating, editing, and deleting dimensional variables, filtering variable display, sorting columns, defining parameter groups, searching parameters, and highlighting dimensional constraints, etc.

When accessed from the drawing area, the Parameters Manager palette displays all available associative variables (dimensional constraint variables and user-defined variables) in the drawing. You can create, edit, rename, group, and delete associative variables.



- **Access:** Click Ribbon ▶ Parametric ▶ Manage ▶  or enter PARAMETERS command.

- **List of Options:** The following options are displayed.

Column	Default Dimension Type
Name	Displays the variable name
Expression	Displays the real number or the equation for the expression, for example, d1+d2
Value	Displays the value of the expression
Type	Displays the dimensional constraint type or variable value
Description	Displays the comments or notes associated with the user variable

- **Create a Dimensional Variable:** Apply a dimensional constraint to an object in the drawing to create a dimensional variable. Dimensional variables are displayed under the Dimensional Constraint Parameters group header in the Parameters Manager panel.

  User variables are custom variables that allow you to create and drive object relationships. These variables can include constants, or equations.

  Click the Create a new user parameter icon on the Parameters Manager panel to create a user variable. Or you can also double-click an empty cell to create a user-defined variable.

  User variables have the following characteristics:

  - Default values are: Name = user1, Expression = 1, and value = 1.00.
  - Names should be alphanumeric and cannot start with a number, contain spaces, or exceed 256 characters.
  - Expression values should be within -1e100 to 1e100.

- **Edit a Dimensional Variable:** You can edit the dimensional variable name and expression. Steps:

  - Double-click the name or expression box.
  - Select the row and press F2. Press Tab to edit the contiguous columns.
  - You cannot edit the Value column.

  When renaming a dimensional variable, all instances of the variable will be updated in the drawing and in the Parameters Manager panel.

- **Delete a Dimensional Variable:** When deleting a dimension variable:

- The associated dimensional constraint in the drawing will be removed.
- The variables will retain the value calculated by the expression as a constant. This action is for variables referenced by other variables, and ensures that the geometry does not change.

➢ **Filtering the Display of Variables:** You can filter the display of variables to:

- Display All Parameters- Displays all associative variables with no filter applied.
- Display Parameters Used in Expressions - Displays all variables containing expressions to evaluate a value, and variables contained in expressions.

➢ **Sorting a Column:** Click a column header to sort the variables in ascending or descending order based on that column's properties.

- When sorting by variable type, the Name column serves as the secondary sorting criterion.
- The sorting order is persistent and remains unchanged when adding variables or modifying names/expressions.

➢ **Defining a Parameter Group:** You can define parameter groups in the drawing editor:

- A parameter group is a collection of named parameters. It can include any subset of parameters defined in the current space or remain empty.
- Click the Filter icon to create a group, which will display a filter tree in the left vertical panel of, allowing you to show, hide, or expand group filters. Drag and drop parameters from the grid into the parameter group.
- The Invert Filter check box displays all the parameters which do not belong in the group.

Filtering options for the display of variables:

- **All:** Displays all associative variables with no filter applied.
- **All Used in Expressions**: Displays all variables that contain expressions to evaluate a value, and variables contained in expressions.
- **Custom group filter**: Displays all parameters added in the defined parameter group.

➢ **Searching a Parameter:** You can search for parameters by name using the search boxw.

➢ **Highlighting Dimensional Constraints:** When selecting a dimensional constraint in Parameters Manager, the associated object will be highlighted in the drawing.

If the parameter is a hidden dynamic constraint, selecting the cell will temporarily display and highlight the dynamic constraint.

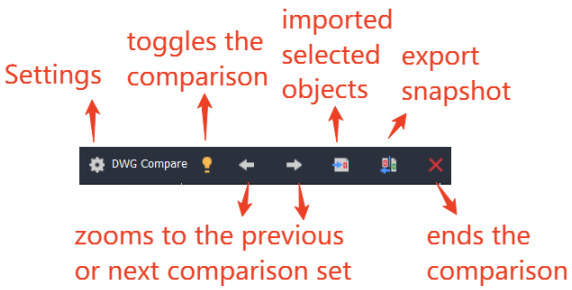
➢ **Shortcut Menu Options**

Column Header Shortcut Menu	
Expression	Displays or hides the Expression column
Value	Displays or hides the Value column
Type	Displays or hides the Type column
Description	Displays or hides the Description column
Maximize All Columns	Displays all columns using the maximum value in each column as the base.
Row Shortcut Menu	
Show Filter Tree	Expands and displays the Filter Tree.
Remove from Group Filter	Removes the selected parameters from the group filter.
Delete Parameter	Removes the selected parameters from both the drawing and the Parameters Manager.
Cell Header Shortcut Menu	
Cut	Deletes the cell value and pastes it to the clipboard.
Copy	Copies the value in the cell and pastes it to the clipboard.
Paste	Pastes the immediately transferred value from the clipboard.
Delete	Deletes the value in the selected cell.
Expressions	Displays a list of available functions in the expression column (available only within the Expression cell)
Group Filter Shortcut Menu	
New Group Filter	Creates a new parameter group filter.
Rename	Edits the name of a group filter.
Delete	Deletes the group filter.
Isolate Dynamic Constraints in Group	Displays only the dynamic constraints for the group filter.

5.2. DWG Compare *New*

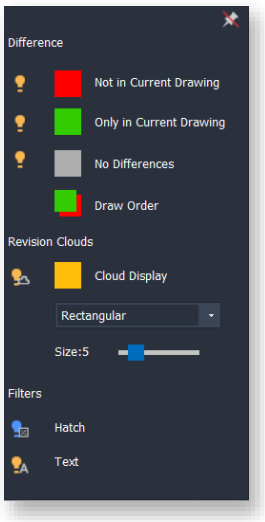
The DWG Compare feature allows you to visually compare a specified drawing with your current drawing, highlighting the differences using revision clouds. This is especially useful for reviewing different versions of a drawing.

Enter COMPARE command or go to Ribbon ➤ GstarCAD 365 ➤ Efficiency Tools ➤ DWG Compare to activate this feature. Once a comparison file is selected, the DWG Compare toolbar appears, docked at the top of the drawing area.



The toolbar displays settings and commands when comparing a drawing with your current drawing.

- **Settings Panel:** The settings panel lets you control which types of drawing differences are visible, such as objects, hatches, and text, as well as the use of revision clouds and display colors. You can pin this panel for quick access if you're frequently adjusting settings. To enhance visual clarity, especially for color-blind users, friendly color schemes are available.



- **Difference:** You can use the light bulb icons to manage the visibility of the objects in the comparison result. You can also click the color swatches to customize colors. Additionally, Draw Order determines which objects are rendered on top when they overlap.

- **Revision Cloud Settings:** When comparing drawings, differences between the current and reference files are visually enclosed using revision clouds. These clouds automatically group nearby changes into sets, referred to as change sets. The system determines change sets based on the spatial proximity of the changes. You can customize the appearance of revision clouds through the Cloud Display option, which lets you adjust their color.

  Note: The arc size of the revision clouds cannot be manually adjusted. It scales automatically according to the size of the extents of the drawing.

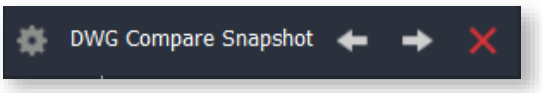
  - Rectangular: Draws a single rectangular boundary around each change set.
  - Polygonal: Generates polygonal revision clouds by merging rectangles around each difference to show the changes.
  - Size: Defines the offset distance from a change set to the rectangle used for creating each revision cloud.

- **Filters:** Provides a way to exclude text or hatch objects from the comparison result.

- **Toggle Comparison:** Toggles the display of the comparison result in the current drawing.

- **Previous or Next:** Zooms into each successive change set in the current drawing.

- **Import Objects:** Starts the COMPAREIMPORT command. When you select objects at the prompt, only those objects that are not already in your current drawing are selectable. This provides a reliable way of limiting the objects being imported to the objects that are unique to the comparison drawing.
- **Export Snapshot:** Starts the COMPAREEXPORT command. Exports the comparison results into a new drawing file, called a snapshot drawing. The DWG Compare Snapshot toolbar displays whenever you open a snapshot drawing.

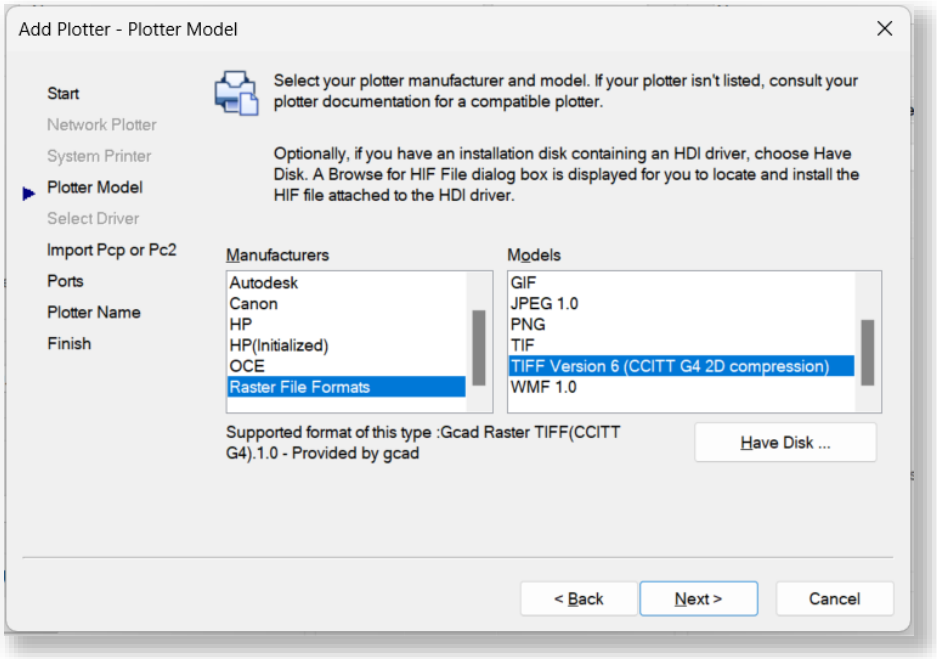


This toolbar is similar to the DWG Compare toolbar, providing a Settings panel and the Previous and Next controls.

- **Exit Comparison:** Starts the COMPARECLOSE command, which exits the comparison in the current drawing.

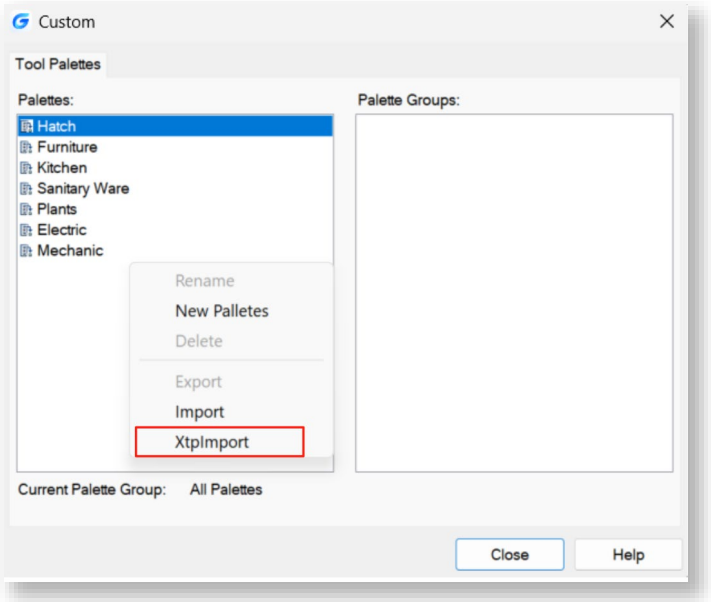
5.3. PLOT: "TIFF Version 6 (CCITT G4 2D Compression)" Plotter Support *New*

A new custom plot driver, TIFF Version 6 (CCITT G4 2D Compression), is now supported. This driver outputs in black and white only, and is designed to significantly reduce file size while maintaining the accuracy of lines, text, dimensions, and other drawing elements.



5.4. Tool Palette: XTP File Import *New*

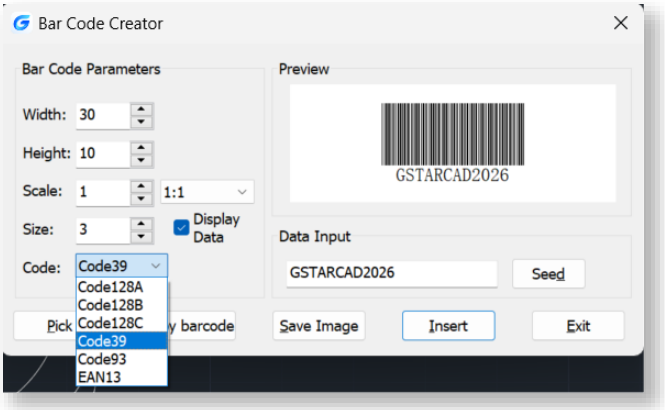
In the right-click menu of Tool Palettes, open Customize Palettes…, a new "Import XTP" option has been added. Selecting this option opens a file dialog where you can choose an XTP file to import. The feature accurately imports text, separators, and blocks.



5.5. Barcode: Code 39 Support *New*

The Code 39 barcode is widely used across various industries and offers the following advantages:

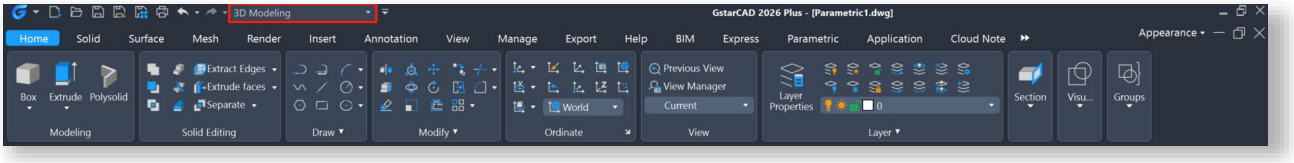
1. Low cost and high ease of use, suitable for basic engineering identification needs.
2. Great industry compatibility, especially suitable for traditional industrial environments.
3. Alphanumeric support, offering more flexibility than numeric-only barcodes.



5.6. 3D Modeling Interface *New*

In addition to the existing Classic and 2D Drafting interfaces, a new "3D Modeling" workspace has been added.

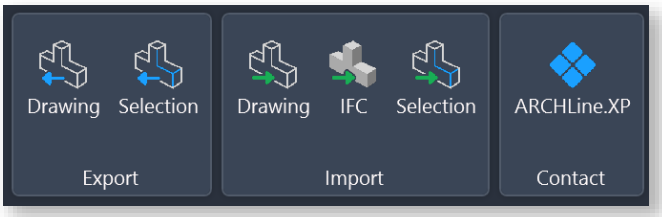
The "3D Modeling" workspace includes only toolbars, menus, and palettes related to 3D tools. Interface items unrelated to 3D are hidden, maximizing the workspace available for modeling tasks.



5.7. GstarCAD × ARCHLine.XP Plugin *New*

ARCHLine.XP is a versatile, professional BIM application that provides 2D floor plans, 3D modeling, technical documentation and photorealistic rendering capabilities for architectural and interior design needs.

Integrated with ARCHLine.XP, this plugin enables direct transfer of drawings in DWG or IFC format between GstarCAD and ARCHLine.XP, eliminating tedious import/export steps and offering an effortless CAD-to-BIM workflow.



- **Export Panel**
  - **Drawing button:** Automatically exports the DWG drawing currently opened in GstarCAD, and then automatically imports and opens it in ARCHLine.XP
  - **Selection button:** Automatically exports the selected objects in GstarCAD, and then automatically imports and opens them in ARCHLine.X
- **Import Panel**
  - **Drawing:** Automatically exports the DWG drawing currently opened in ARCHLine.XP, and then automatically imports and opens it in GstarCAD.
  - **IFC:** Automatically exports the IFC model currently opened in ARCHLine.XP (including BIM properties and structure), and then automatically imports and opens it in GstarCAD.

- **Selection:** Automatically exports the selected objects in ARCHLine.XP, and then automatically imports and opens them in GstarCAD

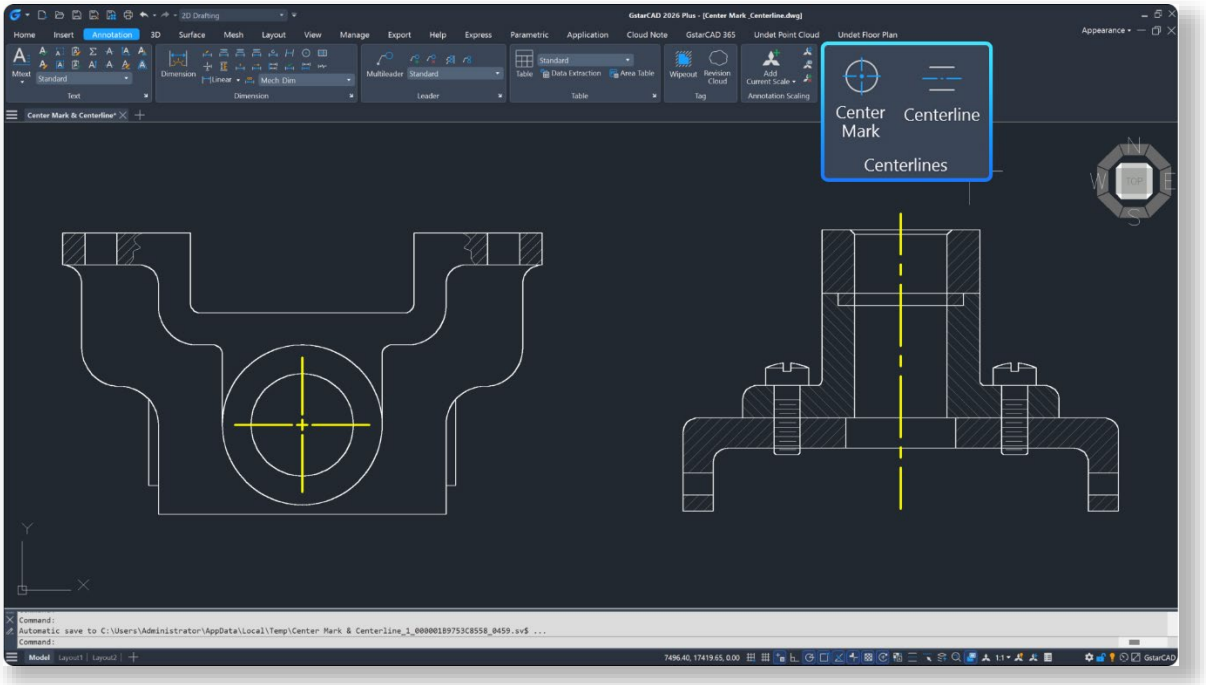
➢ **Contact Panel**

- **ARCHLine.XP button:** Opens the ARCHLine.XP official website for product info and support.

5.8. Center Mark & Centerline *New*

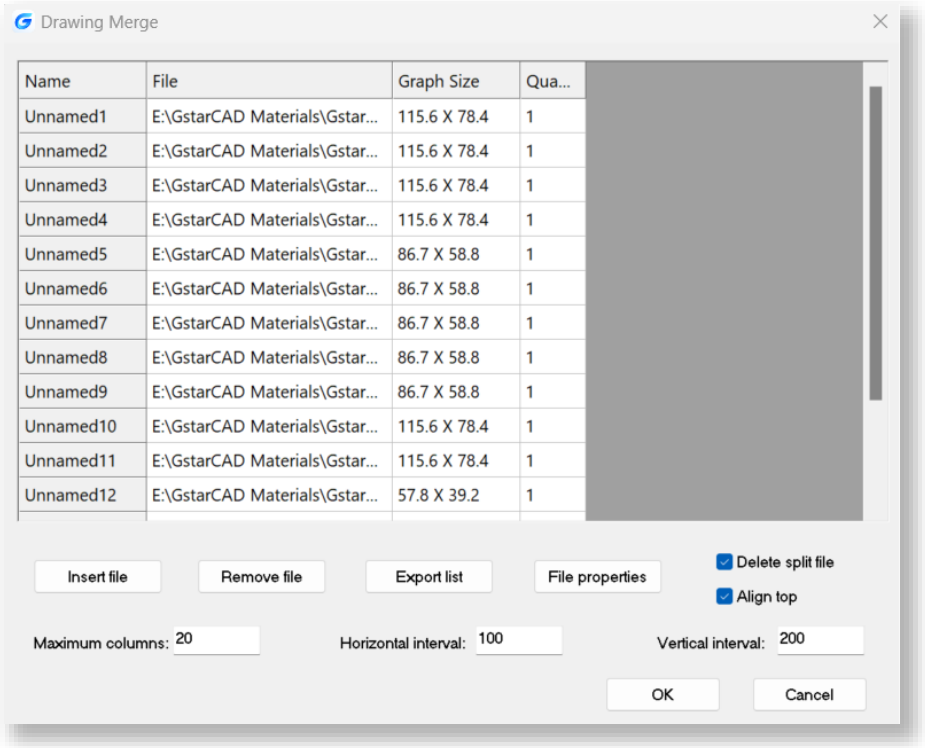
Center Mark and Centerline features enhance drawing efficiency by allowing quick placement of center marks on circles, arcs, and polyline arcs, as well as automatic creation of centerlines between the apparent midpoints of two lines or polylines. Layer and linetype management is automated based on the defined settings, ensuring consistency and saving time.

Note: This feature will be available in GstarCAD 2026 SP1.



5.9. Drawing Merge *Innovative*

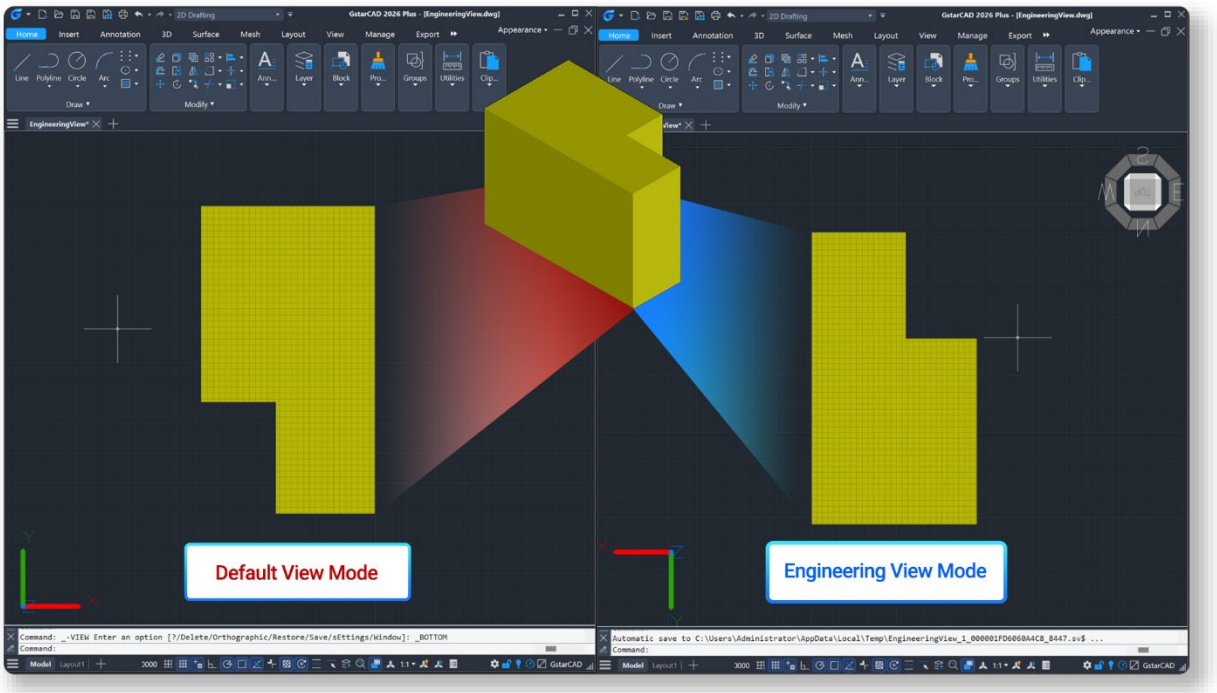
Drawing Merge searches frames of selected drawings and merge them into one drawing. You can enter AUTOMERGE command or go to Ribbon ➤ Express ➤ Drawing ➤  Drawing Merge to activate this feature.



After inserting drawings, this feature analyzes and splits drawings as needed before merging them via external references. Users can configure settings such as the maximum columns, horizontal and vertical interval, alignment method, and whether to delete the split files at the current drawing's location. Additionally, users can view entity data from the drawings through "File Properties" and export the list of drawings to a .lst file.

5.10. Engineering Projection *Innovative*

The ENGINEERINGVIEWMODE system variable controls the display of the bottom view. When set to 0, the bottom view follows the current display method, which is consistent with ACAD. When set to 1, the bottom view is adjusted to correctly reflect the engineering projection, ensuring a more accurate representation.



5.11. Interface Reconstruction *Improvement*

The interface reconstruction is based on the WPF framework and integrates various proprietary technologies. By approaching from both technical and visual perspectives, we have completely rewritten the underlying architecture to create a new interface.

5.11.1. Technical System Reconstruction

We have adopted a new WPF technology architecture, and added secondary development data interfaces to eliminate data transmission bottlenecks. Additionally, the interface library is now compatible with ACAD's interface library, enabling zero-cost migration of industry software developed on .NET.

- **Underlying Architecture Reconstruction**

  We have moved away from traditional MFC technology and fully embraced WPF to revamp the interface's underlying architecture. With WPF's powerful graphics rendering capabilities, the interface is now more visually refined, seamlessly adapting to different screen resolutions for a clearer and more detailed display. At the same time, GstarCAD's overall smoothness and responsiveness have been significantly enhanced, providing a more fluid and intuitive user experience.

- **Secondary Development Interface Restructuring**

To address common pain points in secondary development, we've built a new set of secondary development interfaces with over 7,000 additions. Leveraging .NET technology, these interfaces enable zero-cost migration and seamless integration with our new interface architecture, making functional expansion and personalized customization effortless, fueling innovation and energizing our product ecosystem.

- **Configuration File Parsing Restructuring**

  Our interface configuration file parsing library has been completely restructured, boosting read/write efficiency greatly. The new parsing library not only delivers exceptional performance but also exposes related secondary development interfaces, allowing developers to easily read and modify configuration files, therefore quickly adapt to changing business needs and support flexible configuration and efficient operations.

- **System Resource Scheduling Optimization**

  We have developed industry-leading compute resource scheduling technology that makes system resource management smarter and more efficient. With precise management and optimization of compute resources, GstarCAD maintains smooth, stable operation even during multitasking and complex scene transitions, significantly reducing lag and frame drops. This ensures a seamless user experience under demanding conditions and achieves a perfect balance between performance and usability.

5.11.2. Visual System Reconstruction

Building on the capabilities enabled by our technology system restructuring, we have developed a brand-new visual system and set of guidelines to enhance design efficiency. This creates a workspace that is layered, aesthetically pleasing, and practical, bringing to life a vibrant and technology-driven style.

- **New Icons**

  We've reworked over 1,500 icons from the ground up—refining their proportions, creating more intuitive forms, and establishing a vibrant yet comfortable color palette. All icons are now in scalable vector format, ensuring they remain sharp and smooth at any size. The overall visual style feels more natural, polished, and alive.

- **New Themes**

  To reduce visual fatigue from dense information, we redesigned the theme color system and now offer both dark and light modes—with more themes coming soon for even greater personalization. How to switch:

  - Go to Ribbon ▶ Appearance ▶ Theme and choose between "Dark" or "Light".
  - Enter OPTIONS in the command line, then go to Options ▶ Display ▶ Appearance Theme, and select a theme.
  - Enter COLORTHEME in the command line and select "0" (dark, default) or "1" (light)

    Note: We've streamlined the COLORTHEME system variable—values 2, 3, 4, 5 from older versions have been removed, keeping only 0 and 1.

➢ **New Visual Effects**

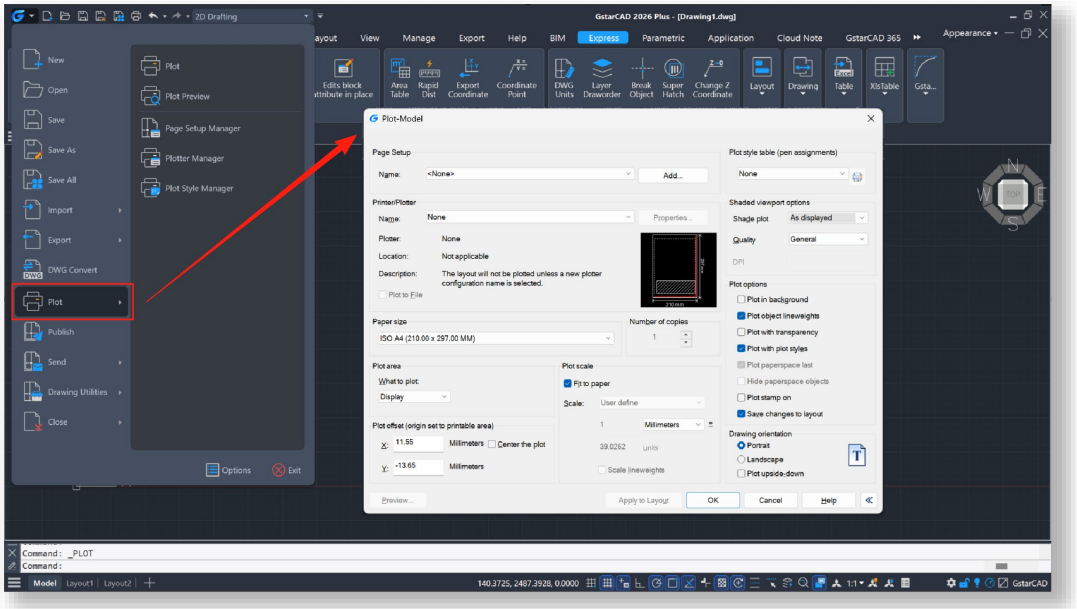
To create a softer and more immersive interface, we introduced rounded corners, shadows, and subtle enhancements across the UI. These refinements bring more depth and realism to the workspace.

5.11.3. Usability Optimization

We've also made over 10 additional improvements to enhance your overall experience.

➢ **Application Menu**

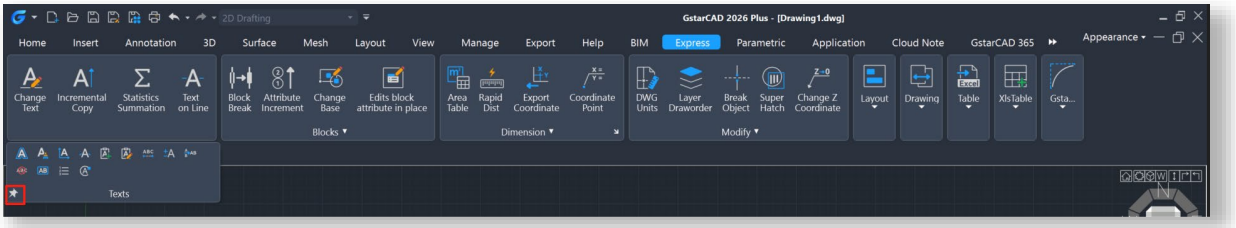
- **New:** Top-level buttons are now clickable, leading directly to commands and dialogs, e.g. "Plot" and "Send".



- **Improved:** Updated the main menu button design for better display.
- **Improved:** Recent Documents now display icons and names, with support for up to 50 entries.
- **Improved:** Further refined KeyTip clarity and usability.

➢ **Ribbon**

- **New:** Support pinning expanded panels to keep all tools visible.



- **New:** Adding Visibility Control options on Ribbon

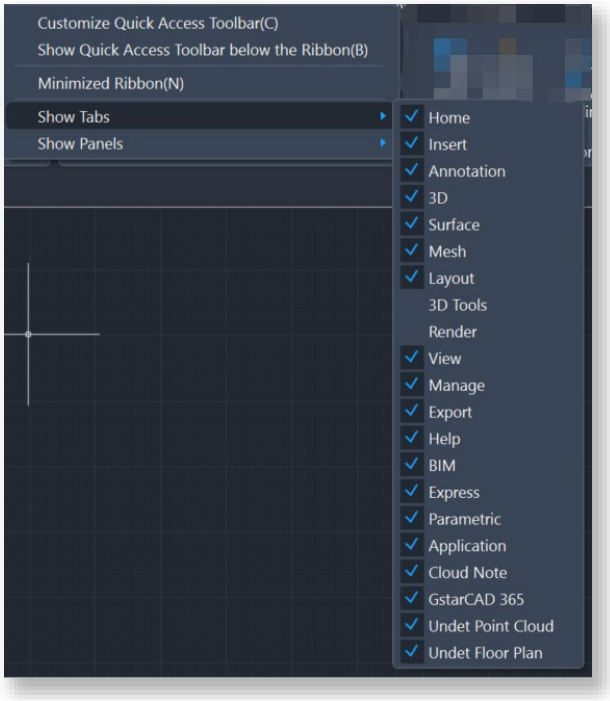
  In both 2D Drafting and 3D Modeling workspaces, users can now right-click anywhere in the Ribbon area to access a new Visibility Control menu. This feature allows users to customize which tabs and panels are displayed, improving workspace flexibility and efficiency.

  - **Tab Visibility:** By default, most commonly used tabs are visible and checked. The "3D Tools" and "Render" tabs are unchecked by default.

    Note: In the Plus version, a "Parametric" tab appears after the "Express" tab.

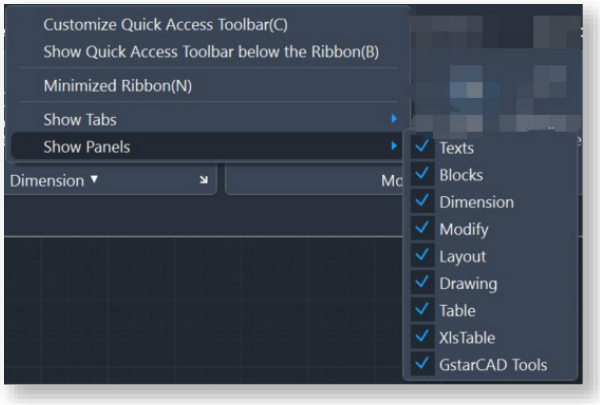
    Standard version users can still access the 3D Tools and Render tabs, but certain core features are restricted. When attempting to use a restricted feature, a command line message will display a notification

    (e.g., "This feature is not supported in the current version").



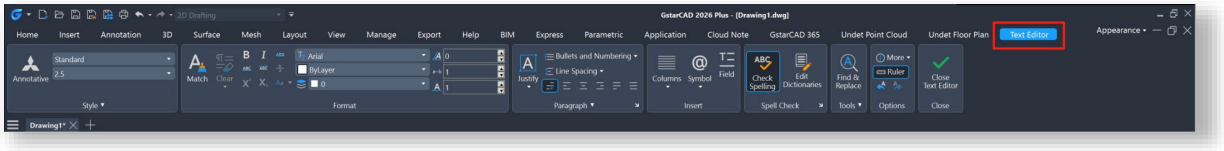
Tab	Panel	Restricted Feature
3D Tools	Modeling	Extrude, Revolve, Loft, Sweep
	Solid Editing	All functions
	Surface	All functions
Render	Lights	All functions
	Rendering	All functions

  - **Panel Visibility:** Users can also control the visibility of individual panels within a tab. For example, in the "Home" tab, panels like Draw, Modify, and Layers can be toggled on or off individually for a customized layout.



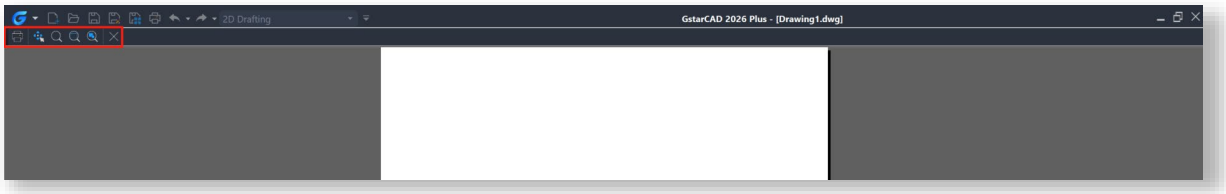
- **New:** Adding Text Editor tab on Ribbon

  In the 2D Drafting and 3D Modeling workspaces, when users enter MTEXT command, the Text Editor tab will now appear on the Ribbon.



  GstarCAD has long included a floating "Text Format" toolbar. With this update, the text editing tools are now integrated into the Ribbon, providing users with a more streamlined and accessible editing experience.

- **Improved:** Updated the Appearance menu visuals and content; supports switching between light/dark modes.
- **Improved:** Better display logic for disabled menu, when dialogs are open, text and icons now appear grayed to clearly indicate they are unavailable.
- **Improved:** Redesigned the Plot Preview panel into a toolbar-style layout.



- **Improved:** Further refined KeyTip clarity and usability.

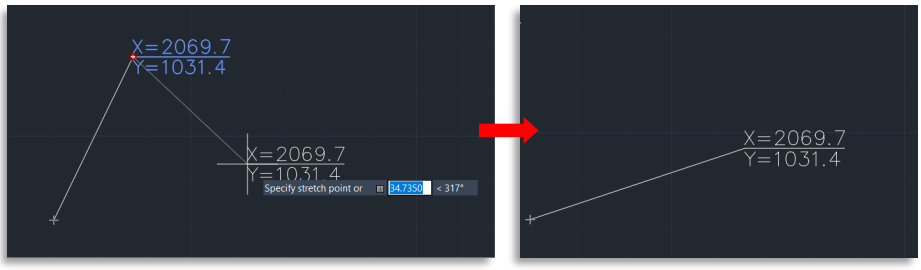
➢ **Status Bar**

- **Improved:** Selected style of quick-access tools
- **Improved:** Further refined KeyTip clarity and usability.

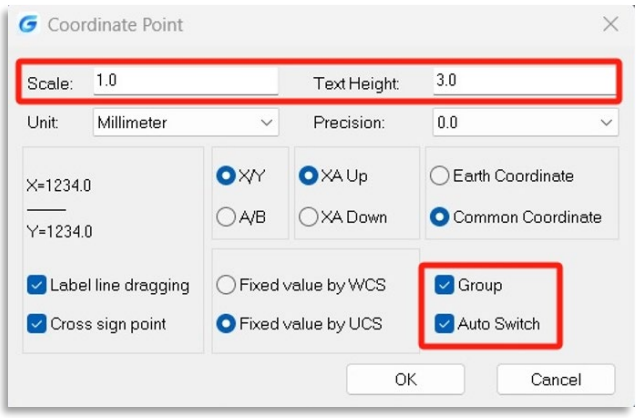
5.12. DIMCORD *Improvement*

DIMCORD command has been improved based on user feedback. Key updates include:

➢ Using leaders instead of lines, when ungrouped, moving the text block will also move the leader line, allowing for more flexible placement of the dimension text, as shown below:



- Support adjustments for Scale and Text Height in the "Parameters" dialog box. These settings also remember the last used values, making repeated operations more efficient. The interface is shown below:



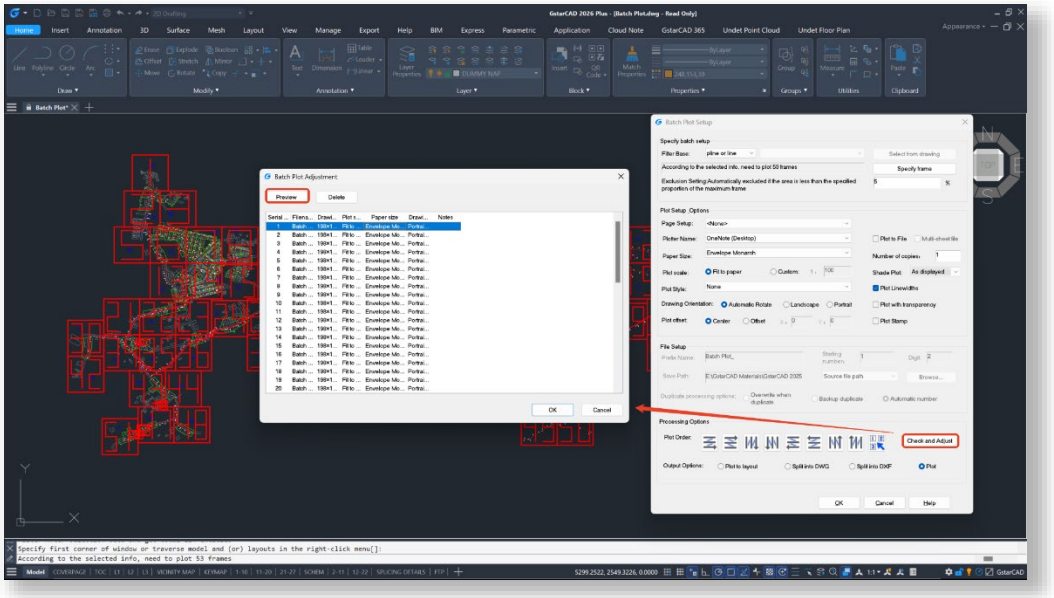
- New options for Group and Auto Switch.
  - When Group is checked, the generated coordinate dimensions will be grouped. If unchecked, they will be created as separate objects.
  - When Auto Switch is checked, GstarCAD automatically adjusts the direction of the text and leader line if they intersect, improving readability.

5.13. Batch Plot *Improvement*

Supports a new sequential preview feature.

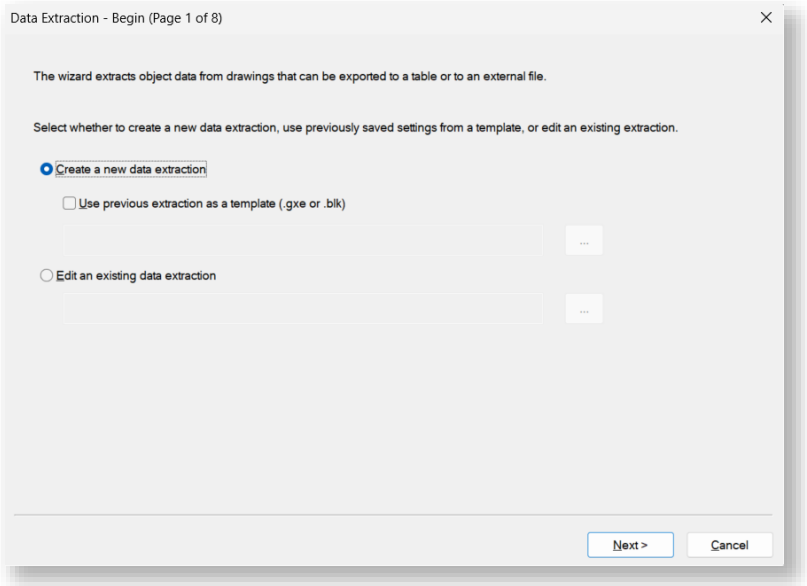
After clicking Check and Adjust button, you can manually click on any drawing frame record to start the preview. Once in preview mode, pressing the spacebar will cycle to the next drawing frame record. The currently previewed frame will also be highlighted on the drawing, helping you easily confirm which frame is being reviewed.

When the last frame has been previewed, pressing the spacebar again will exit the sequential preview mode and return to the Check and Adjust dialog box.



5.14. Data Extraction *Improvement*

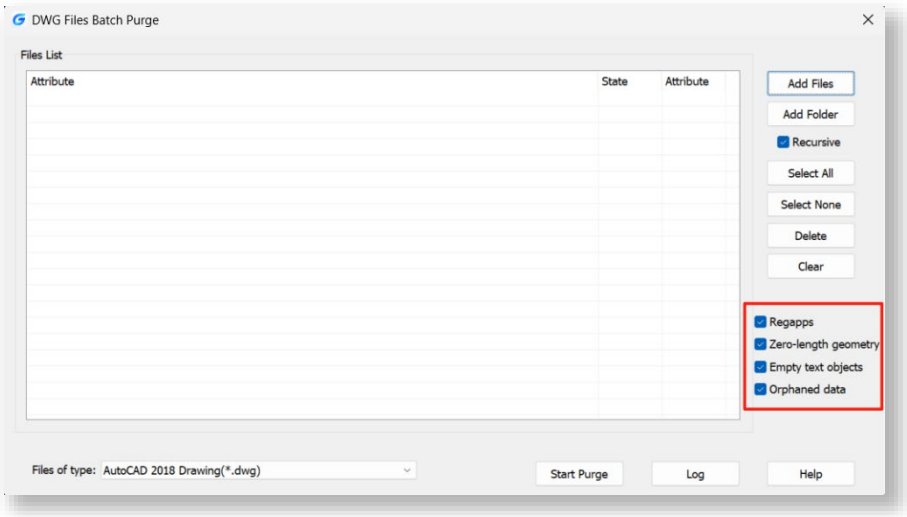
Now supports saving data extraction settings in a GXE file. The GXE file can be used as a template to perform the same type of data extraction across different drawings. You can also edit the GXE file—for example, by adding or removing drawings and objects, or by selecting different properties to extract. Tables that reference the same GXE file will reflect any changes when updated.



Note: Not Compatible with ACAD

5.15. Batch Purge *Improvement*

The Batch Purge feature now supports cleaning up registered applications, zero-length geometries, empty text objects, and orphaned drawing data.



5.16. PDF Import *Improvement*

To deliver a smoother and more reliable user experience, the PDF import engine has been fully upgraded to the modern and actively maintained PDFium library, replacing the outdated engine that was no longer supported.

What's Improved:

- **Sharper Image Rendering:** Improved handling of raster images, with better support for transparency, enhanced clarity, and more accurate color representation.
- **Smarter Text Recognition:** Text import now uses MText entities. The recognition logic has been optimized to treat text on the same line as a single MText entity, making it easier to edit. Additionally, a width factor is now applied based on the first character during import, ensuring consistent text appearance.
- **Clean Text Decoding:** Solved issues with character encoding that previously caused garbled text.
- **Better Hatch Rendering:** Enhanced display of filled areas for improved visual consistency.
- **Faster Performance:** Enjoy noticeably faster PDF processing times, especially with large files.

GstarCAD 2026

https://www.gstarcad.net

Gstarsoft