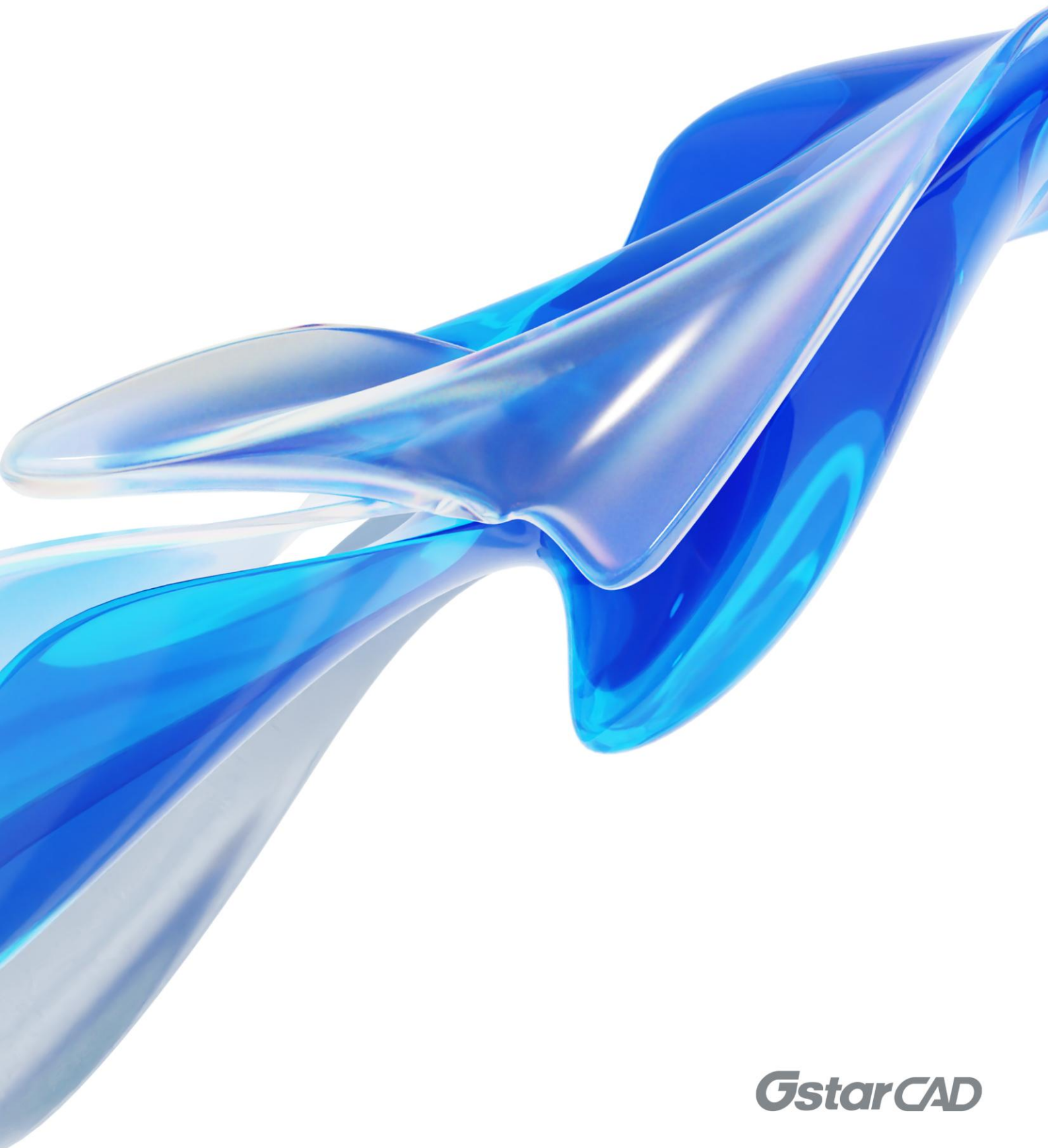




# ***GstarCAD 2025 vs ZWCAD 2025***

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***GstarCAD 2025***



**GstarCAD**

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# GstarCAD 2025 VS ZWCAD 2025

GstarCAD 2025 elevates performance to a new level with Hardware Acceleration and other improvements, significantly enhancing the design experience. Exciting new features include Parametric Constraints, BIM Data Editing, and Voice Annotation, etc., which further enrich functionality. Moreover, compatibility has been expanded with the addition of Python support, empowering more robust customization and automation.

## 1. Comprehensive Evaluation

### ● Performance

Higher performance plays an important role in GstarCAD. GstarCAD 2025 introduces an incremental save mechanism, boosting SAVEAS speed by over 30% and QSAVE by more than three times. File reading, display, and software initialization are optimized, improving average drawing opening speed by over 25%. TRIM and EXTEND performance on complex drawings improved by about 69%, and HATCH display precision is also enhanced, eliminating excess lines in gradient and transparent hatch, ensuring a more efficient workflow.

At present, the performance of common operations such as Open, Save, Regen , Select All, Move, Undo, Redo, and Mirror ,etc. are significantly better than that of ZWCAD 2025, which greatly improves the design efficiency.

### ● Stability

GstarCAD 2025 has made comprehensive improvements to software's quality, and its stability has been greatly enhanced. ZWCAD 2025 crashes and white screen appears sometimes when using it, which affects the work efficiency.

### ● Functionalities

GstarCAD 2025 adds Parametric Constraints, Smart DIM, Voice Annotation, 3D Mouse Device Adaption, Lasso selection, Hardware Acceleration, Application Manager and other functions, supports 3D models such as IFC Export and RVT Import, and improves Undo, Batch Print, File & Layout Tab Bar, CAD table to Excel and other functions to better fit the actual scenario and make design work more efficient.

Most of the new functions released by ZWCAD 2025, such as STEP Import, Visual Style, Hide & Show panels, FAS/VLX supported, etc., are already available in GstarCAD. Overall, GstarCAD 2025 is compatible with various format files such as DWG, DXF , PDF, DGN , DWF / DWFX , 3DS, IFC , STEP, RVT. The Text, Layer, Dimension, 2D & 3D Editing, Block, and Print related functions have obvious advantages over ZWCAD 2025. GstarCAD

also supports creating, editing, and exporting the hand-drawn table collaborates with Office Excel. What's more, GstarCAD provides a variety of practical tools such as Drawing Lock, Merge layout, Viewport Synchronization, Super Axonometric, and Cross to Break. It has richer functions and more complete details, which can fully meet the design needs of users.

- **Secondary Development**

GstarCAD offers robust APIs for developers to migrate or build applications on GstarCAD. This year, in addition to the continuous improvement of integrity and compatibility of GRX, .NET and LISP interfaces, GstarCAD 2025 now supports Python, offering over 790 commonly-used Python interfaces, thus empowering more robust customization and automation. Compared with ZWCAD 2025, GstarCAD 2025 supports more secondary development types, reliability and more stable interface, allowing secondary development programs to run normally after migration, further reducing the cost of secondary development migration. In addition, GstarCAD 2025 also provides more comprehensive and practical secondary development application softwares, which can be downloaded on GstarCAD official website.

## 2. Performance Comparison

The performance of common-use operations like Open, Save, Regen , Select All, Move, Undo, Redo, and Mirror ,etc. are much faster than ZWCAD 2025.

The chart below provides an overview of the the performance. We build an operation speed comparison of the basic features between GstarCAD and ZWCAD. To make sure the data validation, same operations will be tested twice and get the average value.

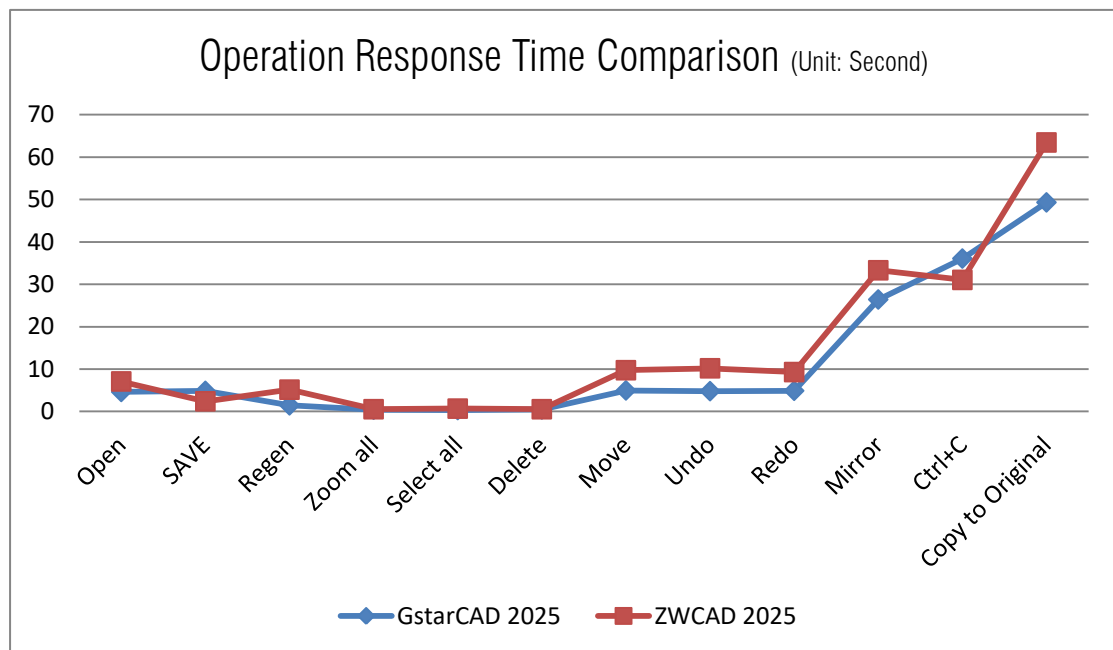
### Operation Time Comparison between GstarCAD 2025 and ZWCAD 2025 (Hardware Acceleration is off)

Testing environment:

Computer Model	ASUS Desktop
Operating System	Windows 10 Professional 64-bit
Processor	Intel Core i5-10400@ 2.90GHz Hexa-core (14 nm)
Memory	16 GB (Kingston DDR4 3200MHz 16GB)
Graphic Card	Intel UHD Graphics 630 (128MB/ASUS)

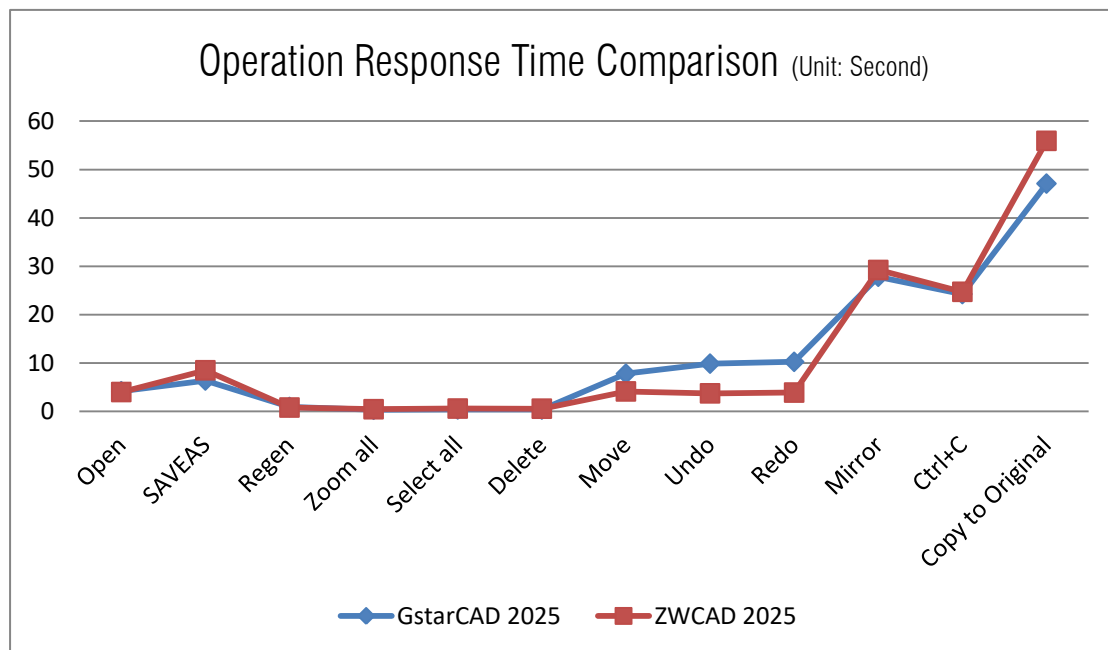
Test drawing 1: TESTFILE01 (48.8MB), time unit: seconds (s)

Item	GstarCAD 2025	ZWCAD 2025
Open	4.61	7.09
SAVE	4.87	2.40
Regen	1.45	5.15
Zoom all	0.43	0.54
Select all	0.34	0.68
Delete	0.48	0.54
Move	4.97	9.74
Undo	4.80	10.19
Redo	4.89	9.30
Mirror	26.42	33.31
Ctrl+C	36.08	31.04
Copy to Original	49.32	63.45



**Test drawing 2:** TESTFILE175 (114MB), time unit: seconds (s)

Item	GstarCAD 2025	ZWCAD 2025
Open	4.19	4.02
SAVEAS	6.40	8.52
Regen	0.94	0.82
Zoom all	0.36	0.47
Select all	0.42	0.61
Delete	0.40	0.58
Move	7.81	4.15
Undo	9.89	3.75
Redo	10.26	3.91
Mirror	27.84	29.24
Ctrl+C	24.26	24.73
Copy to Original	47.09	55.92



It's obvious that GstarCAD 2025 responses significantly faster than ZWCAD for most of the frequently used commands. The operation time of GstarCAD and ZWCAD for few commands is similar. From the comparison data above, we get the conclusion that GstarCAD provides a better performance to enhance your working speed.

### 3. Features Comparison

Most of the ZWCAD 2025 released new features such as Visual Styles, STEP Import, Hide & Stack the panel have been supported by GstarCAD. In addition, ZWCAD 2025 doesn't support some important features such as Navigation Cube, Merge layout, Sync viewports, System variable monitor, Collaboration 365, etc.

While GstarCAD 2025 offers more practical features according to user needs. With nearly a hundred more functions than ZWCAD 2025, GstarCAD has obvious advantages.

What's more, the interface and functional details of ZWCAD 2025 still have a big gap with GstarCAD.

Category	Comparison Item	GstarCAD 2025 Plus	ZWCAD 2025 Pro
<b>File Format Compatibility</b>	DWG R14/2000/2004/2007/2010/2013/2018	✓	✓
	DXF R12/2000/2004/2007/2010/2013/2018	✓	✓
	PDF Import and Export	✓	✓
	DWF / DWFX Import and Export	✓	✓
	SVG Import and Export	✓	○
	DGN Import and Export	○	✓
	SHEETSET	○	✓
<b>User Interface</b>	Color Themes	✓	○
	Workspace (2D Drafting, Classic Interface , 3D Modeling)	○	✓
	Customize User Interface (CUI)	✓	✓
	Dynamic Input	✓	✓
	File Tab bar	✓	○
	Layout Tab Bar	✓	○
	Maximize & Minimize Viewport (VPMAX & VPMIN)	✓	✓
<b>2D Draw, Dimension, Text, Layer</b>	Lasso Selection	✓	✓
	Frame Selection	✓	○
	Cycling Selection (SELECTIONCYCLING)	✓	✓
	UNDO	✓	○

FREESCALE	✓	✗
ALIGNTOOL	✓	✗
ARRANGETOOL	✓	✗
Pline Boolean(GC_BOOLOP)	✓	✗
LAYOUTBYPATH	✓	✗
BREAKOBJECT	✓	✗
Break at Point (BREAKATPOINT)	✓	✓
Move/Copy/Rotate (MOCORO)	✓	✗
Trim Enhancement (EXTRIM)	✓	✓
Extended Offset (EXOFFSET)	✓	✗
EXTEND	✗	✓
Extend Clip (CLIPIT)	✓	✗
Multiple Copy (COPYM)	✓	✗
SUPERHATCH	✓	○
Spline to Line (SPLINE2LINE)	✓	✗
Spline to Polyline (SPTPL)	✓	✗
Line to Pline (LINE2PL)	✓	✗
Layer Draworder(LAYDRAWORDER)	✓	✗
Draworder by Color (CDORDER)	✓	✗
Outline	✓	✗
Region	✓	✓
Group	○	✓
QR code (QRCODE , -QRCODE)	✓	○
Barcode (BARCODE)	✓	○
Smart Dimension (DIM)	✓	✗
Revision Cloud (REVCLOUD)	○	✓
Area Table (AREATABLE)	✓	✓
DIMREASSOCIATE	✓	✓
Rapid Dist (RAPIDDIST)	✓	✗



	Change Dimension Text (CHGDIMTXT)	✓	✗
	Update Dimension (DIMUPDATE)	✓	✗
	Dimension style import & export (DIMIM & DIMEX)	✓	✓
	DATALINK	✓	✓
	Data Extraction(DATAEXTRACTION)	✓	✓
	Table Export (TABLEEXPORT)	✓	✓
	Scale (SCALETEXT)	✓	✗
	Justify (JUSTIFYTEXT)	✓	✗
	Text Incremental Copy (GC_DZTEXT)	✓	✗
	Statistic Summation (KLL01)	✓	✗
	Text on Line (TextOnLine)	✓	✗
	Text Outline (EXPLODETEXT)	✓	✗
	Arc Text (ARCTEXT)	✓	✓
	Automatic Text Numbering (TCOUNT)	✓	✓
	Make Rtext (RTEXT)	✓	✗
	Enhanced Text Editor (MMTEXT)	✓	✗
	Change Text (CHANGETEXT)	✓	✗
	Text Match(TEXTMATCH)	✓	✗
	Text Align (TEXTALIGN)	✓	✗
	Text Fit (TEXTFIT)	✓	✓
	Convert Text to Mtext (TXT2MTXT)	✓	✗
	Change Text Case (TCASE)	✓	✓
	Enclose Text with Object (TCIRCLE)	✓	✓
	Text Mask & Unmask (TEXTMASK & TEXTUNMASK)	✓	✓
	Justify Text (TJUST)	✓	✓
	Rotate Text (TORIENT)	✓	✓
	Change Text Style (CHGSTY)	✓	✗
	Chinese Characters Split (TXTSPLIT)	✓	✗
	Character Break (TXTBREAK)	✓	✗

	Change Character (DDEDIT)	✓	✓
	Change One Character (CHGTX)	✓	✗
	Change Text Height/Width/Angle/Position (TXTHEI, TXTWID , TXTANG , TXTPOS)	✓	✗
	Delete Annotation (WZOFF)	✓	✗
	Adjust Character (TTL2)	✓	✗
	Glossary Storeroom (CHKCK)	✓	✗
	Modify Text Hight/Width Factor/Angular/Obliquing Angle/Options (TXT40, TXT41, TXT50, TXT51, EDTXT)	✓	✗
	Enable Autolayer(AUTOLAYER)	✓	✗
	Isolate Layer to Current Viewport (LAYVPI)	✓	✗
	Unlock All Layers (LAYULKALL)	✓	✗
	Off Other Layers (LAYOFFOTHER)	✓	✗
	Lock Other (LAYLCKOTHER)	✓	✗
	Freeze Other (LAYFRZOTHER)	✓	✗
	Copy Object to New Layer(COPYTOLAYER)	✓	✗
	Change Object Color in Same Layer (LAYCHGCOLOR)	✓	✗
	Move Object in Same Layer (LAYMOVE)	✓	✗
	Layer Translator(LAYTRANS)	✓	✓
	Layer Browser(LAYERBROWSER)	✗	✓
<b>Reference, Block, Attribute</b>	PDF Underlay (PDFATTACH)	✓	✓
	DWF / DWFX Underlay (DWFATTACH)	✓	✓
	DGN Underlay(DGNATTACH)	✓	○
	OLE Object (INSERTOBJ)	✓	✓
	Point Cloud (POINTCLOUDATTACH)	○	✓
	HYPERLINK	✓	○
	Dynamic block/Editable block (BEDIT)	✓	○
	BLOCK Authoring Palettes (BAUTHORPALETTE)	✓	✗
	Parameter Sets - Lookup Set( _BParameter)	✓	✗

Block Table (BTABLE)	✓	✗
Block Test (BTEST)	✗	✓
Block Break (BLOCKBREAK)	✓	✓
Change Base (CHANGEBASE)	✓	✓
Replace Block with Another Block (BLOCKREPLACE)	✓	✓
Copy Nested Objects (NCOPY)	✓	✓
Define Attributes (ATTDEF)	✓	✓
Explode Attributes to Text (BURST)	✓	✓
Batch Modify Attribute Value (GATTE)	✗	✓
Attribute Increment (ATTINC)	✓	✗
Import & Export Attribute Information (ATTIN & ATTOUT)	✓	✓
Attribute Extraction (EATTEXT)	✓	✓
Edit block attributes in place (ATTIPEDIT)	✓	✗
Block Attribute Manager (BATTMAN)	✓	✓
Stat. Block Number (BLKNUM) / ZWCAD (BLOCKSUM)	✓	✓
Count Blocks (BCOUNT)	✓	✓
Change Block Color (BCHGCOL) / ZWCAD (CHGBCOL)	✓	✓
Change Block Linewidth (BCHGWID) / ZWCAD (CHGBWID)	✓	✓
Change Block Text Angle (BCHGANG) / ZWCAD (CHGBANG)	✓	✓
Change Block Text High (BCHGHEI) / ZWCAD (CHGBHEI)	✓	✓
Change Block Layer (BCHGLAY) / ZWCAD (CHGBLAY)	✓	✓
Block Scale (BSCALE)	✗	✓
Convert Block to Xref (BLOCKTOXREF)	✓	✗
List Xref/Block Properties (XLIST)	✓	✗
Trim to Nested Objects (BTRIM)	✓	✗
Extend to Nested Objects (BEXTEND)	✓	✗
External Reference Relocate (CHGXREFPATH)	✓	✗

	Raster to Vector Conversion (VECTORIZATION )	✗	✓
Print	Plot (PLOT)	✓	✓
	Batch Print (BP) / Smart Print (zwplot)	✓	○
	Arrange Frame Automatically (FRAMEAR) / ZWCAD (zwjoinplot)	✓	○
	Print Style Table CTB / STB	✓	○
	Shaded Plot	✓	✓
	Plot Stamp (PLOTSTAMP)	✓	✓
	Publish, Automatically Publish (PUBLISH,AUTOPUBLISH)	✓	○
	Rapid Publish (PUBLISHRASTER)	✗	✓
3D	3D Modeling	✓	○
	3D Editing	✓	○
	3D Orbit (3DORBIT, 3DFORBIT, 3DCORBIT, 3DXORBIT, 3DYORBIT, 3DZORBIT)	✓	○
	Navigation Tool (NAVVCUBE)	✓	✗
	Visual Styles (VISUALSTYLES , VSCURRENT)	✓	○
	Camera - Adjust viewing Distance, Swivel (3DDISTANCE, 3DSWIVEL)	✗	✓
	3D Walk and 3D Fly (3DWALK, 3DFLY)	✗	✓
	RENDER	○	✓
	MATERIAL	✓	○
	IFC Import (IFCIMPORT)	✓	○
	BIM Structure Panel (STRUCTUREPANEL)	✓	○
	IFC Export (IFCEXPORT)	✓	✗
	STP Import (STPIMPORT)	✓	✓
	IGS Import (IGSIMPORT)	✓	✗
	RVT Import (RVTIMPORT)	✓	✗
	3ds, dae , fbx , obj , ply , stl Import (OPEN3RD)	✓	✗
Utilities	Quick Properties (QUICKPROPERTIES)	✓	✓

DWG Convert (DWGCONVERT)	✓	×
Security Options (set password)	✓	×
Digital Signature (DIGITALSIGN , SIGVALIDATE)	✓	✓
Symmetric draw	✓	×
Modify Drawing Units (DWGUNITS)	✓	×
Graphic Compare (OCMP)	✓	×
Drawing Compare (CMP)	○	✓
AutoXLSTable (AutoXLSTable)	✓	×
Hand-drawn table (BGE)	✓	×
Hand-drawn Table Export (CAD table to Excel)	✓	○
Region Scale (DYJT / REGSCALE)	✓	×
Dimension Coordinate Point (HCZZBD/DIMCORD)	✓	×
Coordinate Export (COEXPORT)	✓	×
Viewport Scale (VPSCALE)	✓	×
Synchronize Viewports (VPSYNC)	✓	×
Merge Layout (LAYOUTMERGE)	✓	×
Magnifier (MAGNIFIER)	✓	×
Command Alias editing (ALIASEDIT , AI_EDITCUSTFILE)	✓	✓
Make Line Type (MKLTYPE)	✓	✓
Make Shape (MKSHAPE)	✓	×
Breakpoint Check (CLOSELINE)	✓	✓
System Variable Monitor (SYSVARMONITOR)	✓	×
Drawing Scale (SASCL)	✓	×
Rotate Cursor (RTCUR)	✓	×
Draw Axonometric Line (salpl)	✓	×
Extension (ETT)	✓	×
Normal Connect (GXFILT)	✓	×
Flex Connect (GXFSS)	✓	×
Supper Axonometric (SUPERAXON)	✓	×

	Cross to Break (CBK)	✓	✗
	Supper Axonometric (SFILLET)	✓	✗
	Modify Lineweight (LCW)	✓	✗
	eTransmit (ETRANSMIT)	✓	✓
	Drawing Lock & Unlock (LOCKUP/UNLOCK)	✓	✓
	Quick Calculator (QUICKCALC)	✓	✓
	Quick Select (QSELECT)	✓	✓
	Selection Tools/Enhanced Selection	✓	✓
	Configuration Migration	✓	✓
	SXF Conversion (DWG2SXF, SXF2DWG, SXFIN, SXFOUT)	✗	✓
	3D Mouse	○	✓
	Smart Mouse	✗	✓
	Voice Annotation/Smart Voice	✓	○
	Application Manager	✓	✗
	Hardware Acceleration	✓	✓
	Online Help	✓	✓
GIS	ArcGIS	✓ For 2024 (For 2025 to be launched)	○
	Geographical location (GEO)	To be launched	○
Parametric Constraint	Geometric Constraint: Coincident	✓	✗
	Geometric Constraint: Collinear	✓	✗
	Geometric Constraint: Concentric	✓	✗
	Geometric Constraint: Fix	✓	✗
	Geometric Constraint: Parallel	✓	✗
	Geometric Constraint: Perpendicular	✓	✗
	Geometric Constraint: Horizontal	✓	✗
	Geometric Constraint: Vertical	✓	✗
	Geometric Constraint: Tangent	✓	✗

	Geometric Constraint: Smooth	✓	✗
	Geometric Constraint: Symmetric	✓	✗
	Geometric Constraint: Equal	✓	✗
	Show/Hide Geometric Constraints	✓	✗
	Deleting Constraints	✓	✗
	Constraint Settings	✓	✗
<b>Collaborative Design(365)</b>	Project	✓	✗
	Information	✓	✗
	Share drawings	✓	✗
	Cloud Annotation	✓	✗
	Collaborative Design	✓	✗
	Collaborative Management	✓	✗
	Quote Edit	✓	✗
	Collaborative settings	✓	✗
<b>Secondary Development</b>	ARX- alike	✓	✓
	Lisp	✓	✓
	Lisp Debugger	✓	✓
	Fas	✓	✓
	Vx	✓	✓
	DCL	✓	✓
	.NET	✓	✓
	VBA	✓	✓
	Python	✓	✗

**Remark:** The "✗" symbol in the table above indicates the function difference or function partially supported.

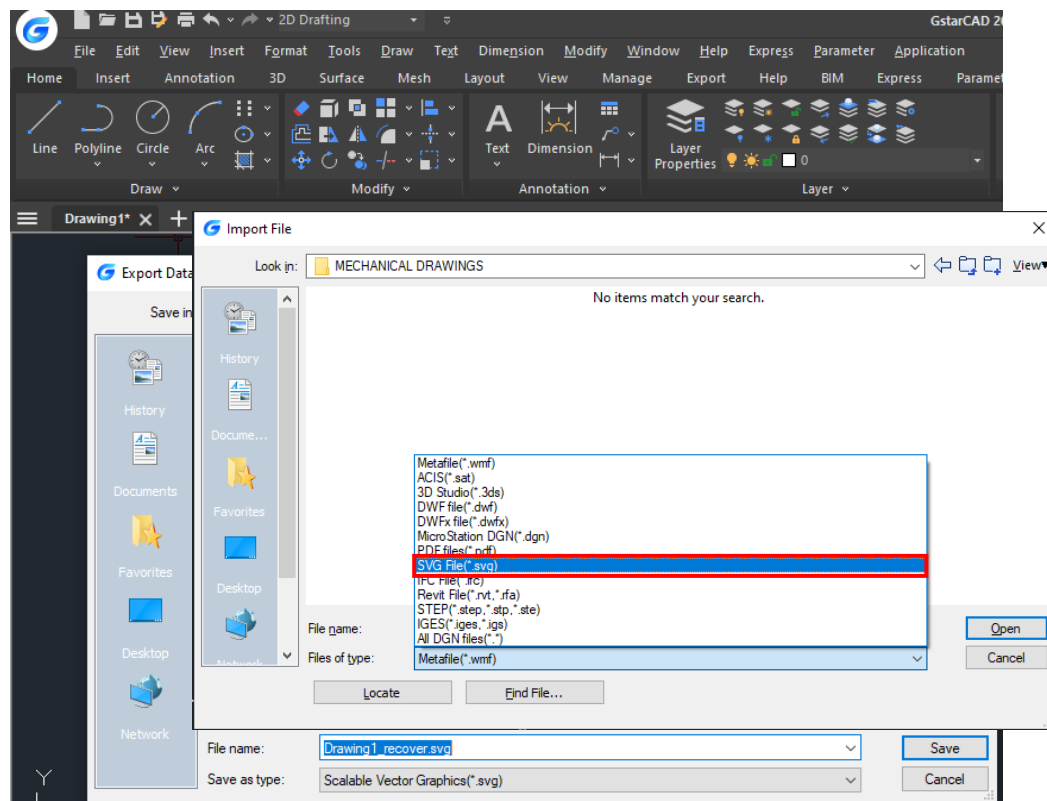
From the commonly used functions comparison table above, you can see GstarCAD 2025 provides richer functions than ZWCAD 2025.

## 4. Function Detail Comparison

GstarCAD 2025 not only offers more commands than ZWCAD 2025, it is also better in the details of interfaces and some functions. The following is the function detail comparison according to the comparison table above.

### 1. SVG Import and Export

- GstarCAD 2025 supports the SVG Import and Export.
- ZWCAD 2025 only supports SVG Export, not support SVG Import.



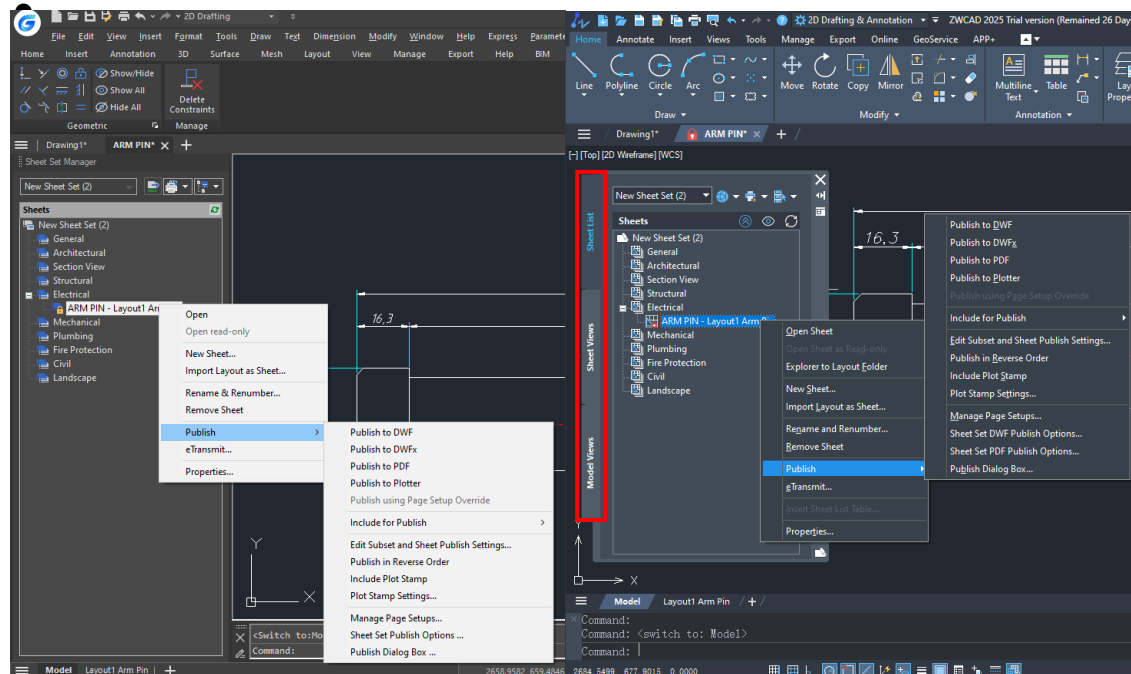
### 2. DGN Import and Export

- Some V8 format of DGN drawings in GstarCAD CAD 2025 display abnormally after importing, and DGN export is not supported currently.
- ZWCAD 2025 supports the import and export of DGN drawings in V7 and V8 formats.



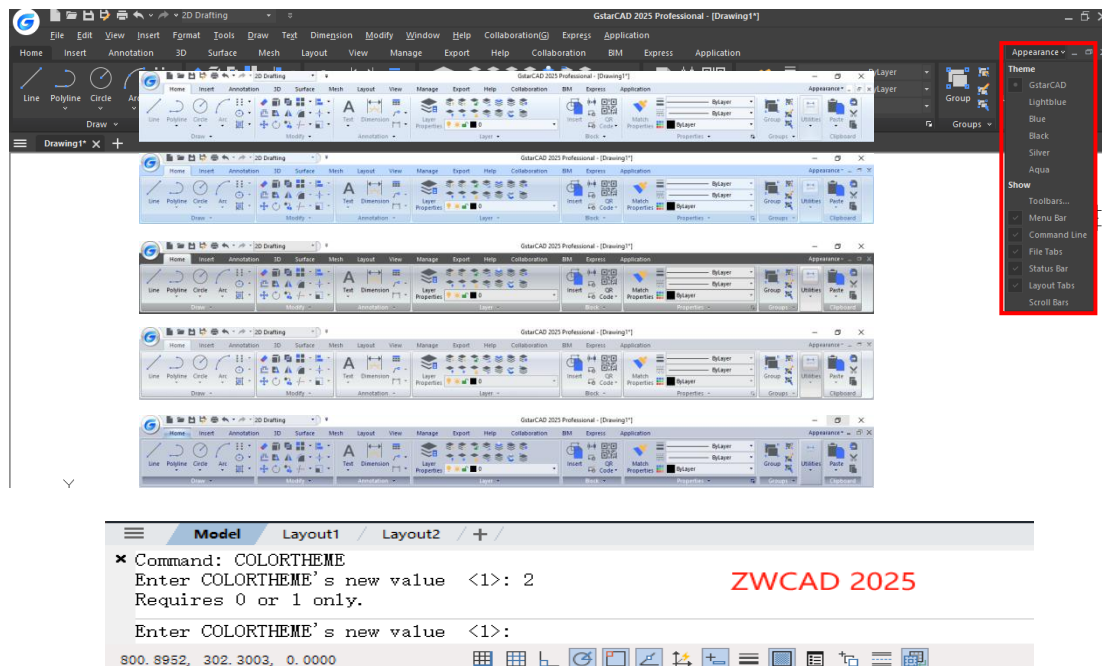
### 3. Sheet Set

- Both support the functions of Open, Create, Export, Publish and Print in sheetset.
- The Sheet Set Manager of ZWCAD 2025 supports drawing view Tab and model view Tab.



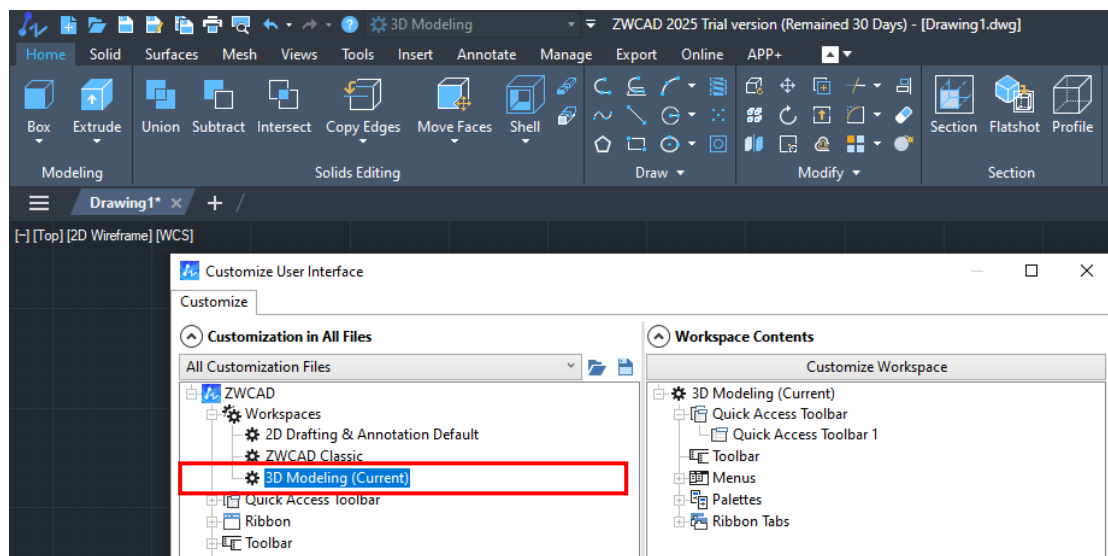
### 4. Color Themes

- GstarCAD 2025 provides a variety of color themes to meet the preferences of different users
- ZWCAD 2025 only provides two color themes.



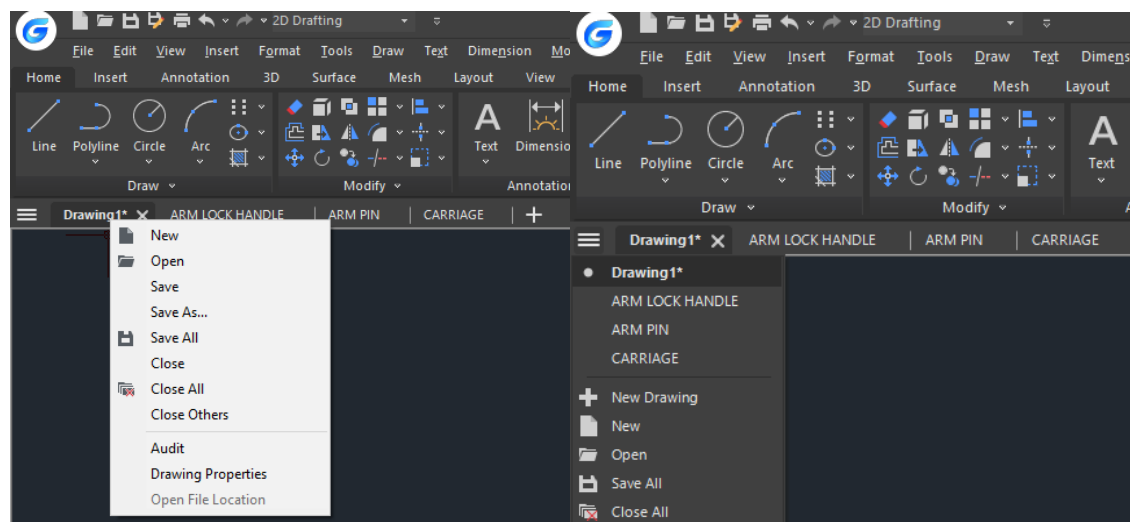
## 5. Workspace

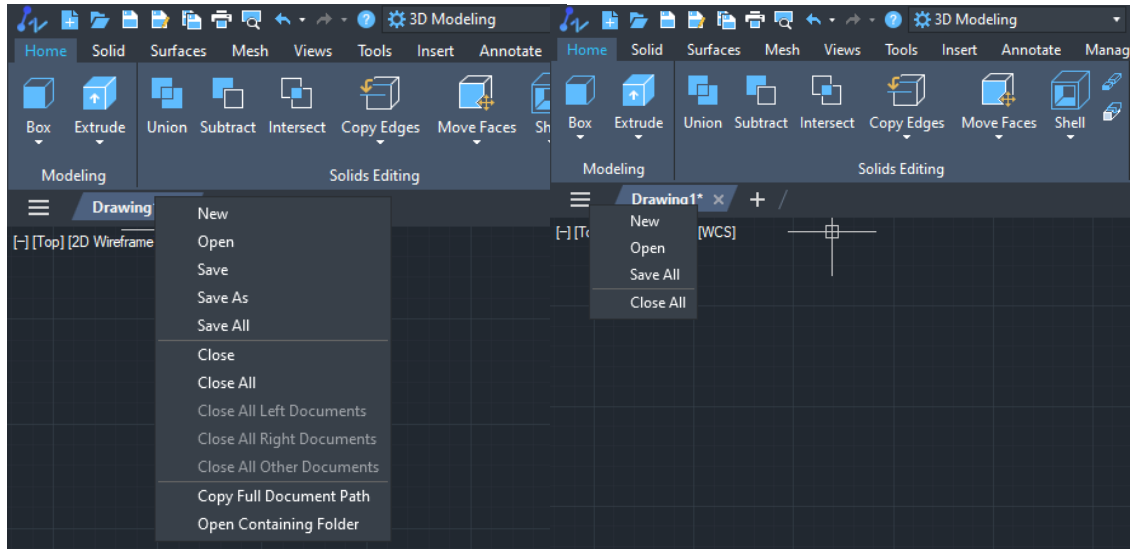
- Both support 2D Drafting interface/classic interface. The 2D Drafting interface contains 3D features in GstarCAD 2025.
- The 2D Drafting interface in ZWCAD2025 doesn't contain 3D features. ZWCAD 2025 adds a 3D modeling interface to switch.



## 6. File tab bar

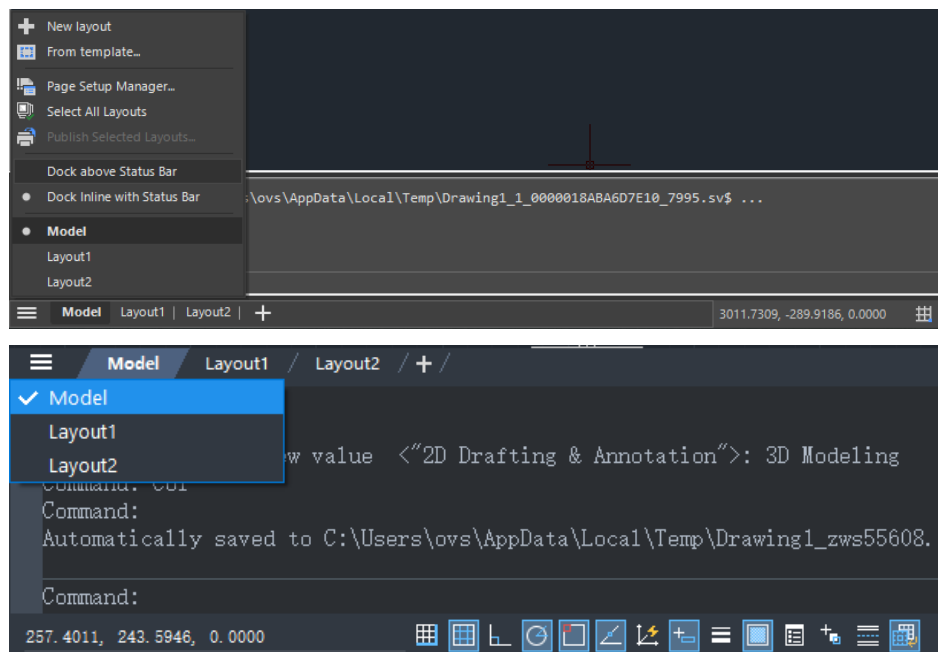
- Both support creating, opening, saving, and switching drawings, and clearly display the drawing status.
- GstarCAD 2025 supports more options in drop down list than that of ZWCAD 2025 , GstarCAD can switch, create, save, and close drawings.
- ZWCAD 2025 supports the floating window by dragging the File tab.





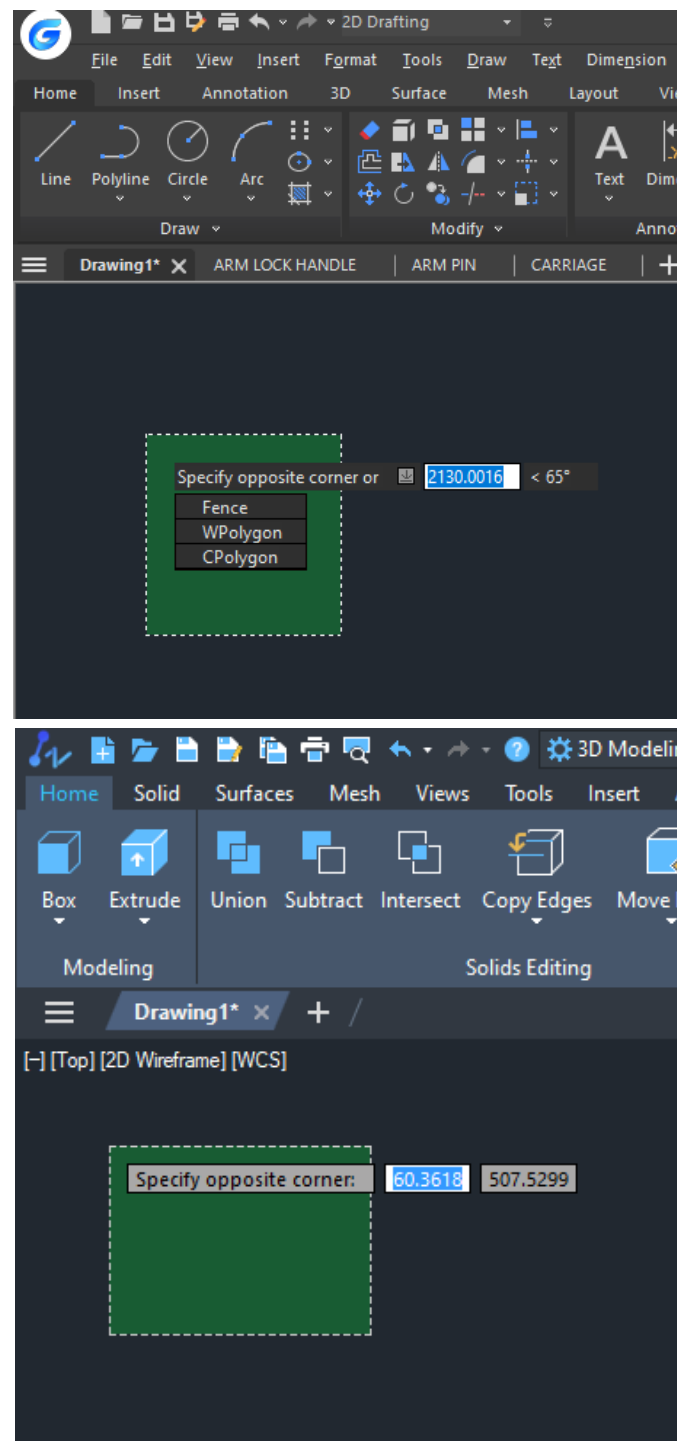
## 7. Layout Tab Bar

- The Layout tab bar in GstarCAD 2025 can be fixed above the status bar, and can also be aligned with the status bar to save more work space. ZWCAD 2025 does not support this yet.
- GstarCAD 2025 provides more options in layout tab pull down list than those of ZWCAD. GstarCAD supports the options such as switching, creating, selecting, and publishing.



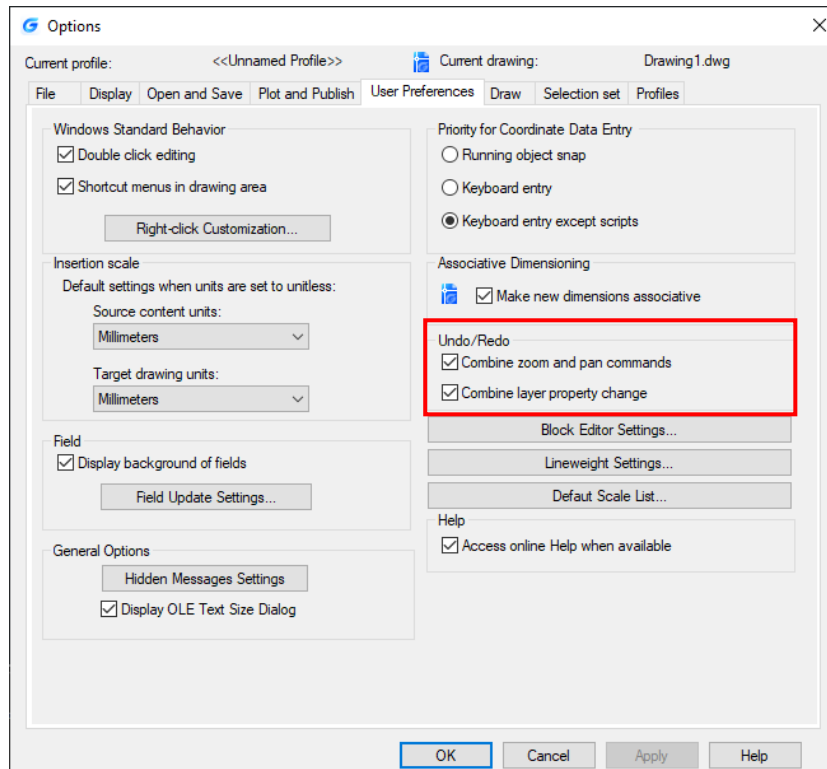
## 8. Lasso Selection

- You can directly specify the diagonal point when making a frame selection. The options of fence selection (F), window polygon selection (WP), and crossing polygon selection (CP) option have been added when making the frame selection in GstarCAD. You can switch to fence selection or polygon selection mode by entering the keywords.
- ZWCAD 2025 only supports specifying diagonal points when making the frame selection, there are no options to switch.



## 9. UNDO

- In GstarCAD 2025, continuous zooming, panning, and layer-related operations can be undone in one step, streamlining the workflow and reducing repetitive actions.
- ZWCAD 2025 does not support this feature yet.



**ZWSOFT**

All Documents > System Variables > U System Variables > UNDOCTL

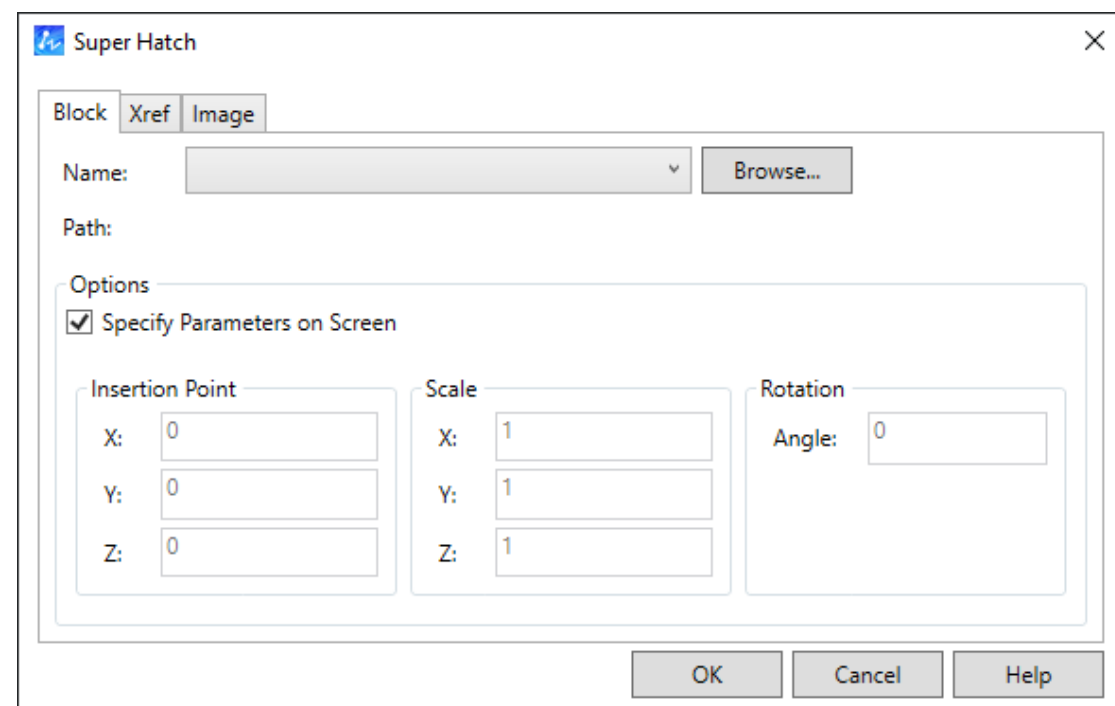
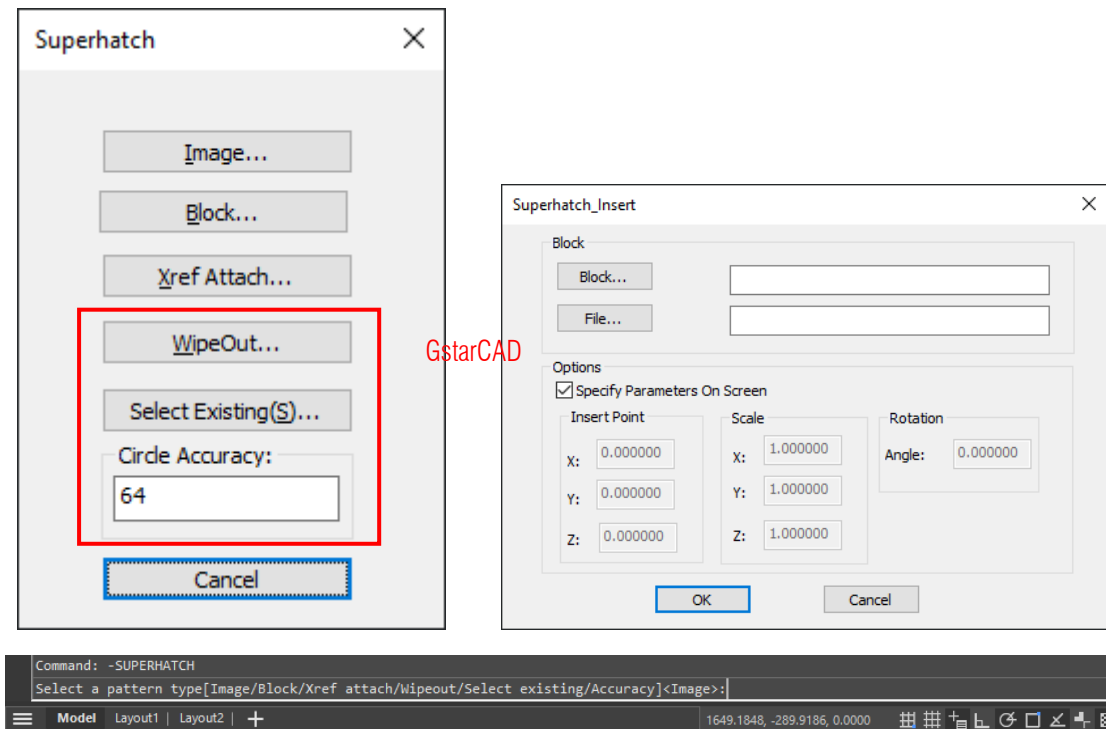
### UNDOCTL

Displays the state of the Auto, Control options of the UNDO command. The set sum of the following values:

Value	Setting
0	UNDO is off
1	UNDO is on
2	Only one command can be undone
4	Auto is on
8	A group is currently active
16	Group the PAN and ZOOM operations as a single action

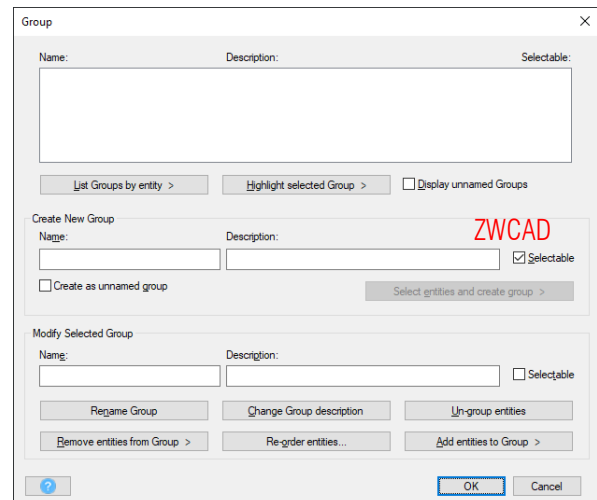
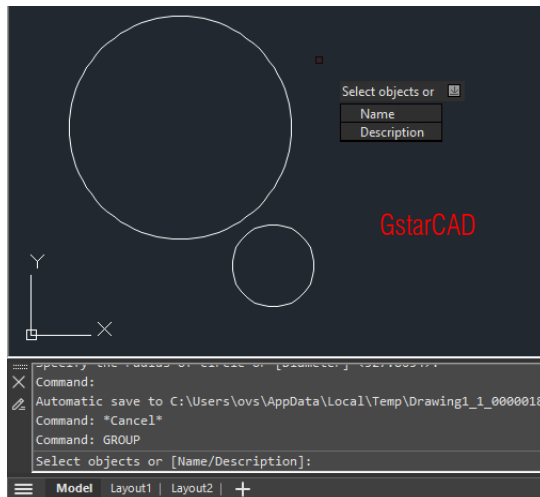
## 10. Super Hatch

- The Super Hatch in GstarCAD 2025 supports area coverage hatching (wipeout), hatching the existing blocks or entities, and setting of circle precision. ZWCAD 2025 does not have these options.
- GstarCAD 2025 supports the -SUPERHATCH command, but ZWCAD 2025 does not support it.



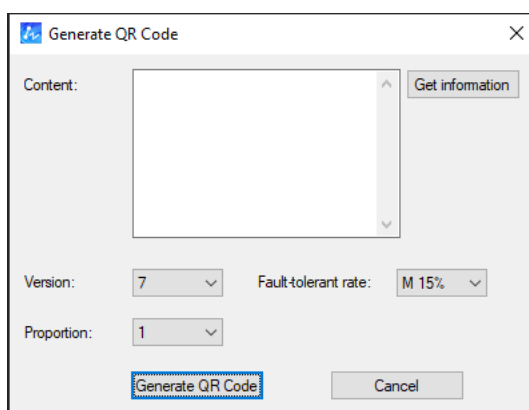
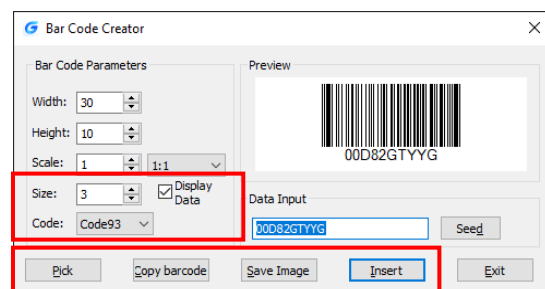
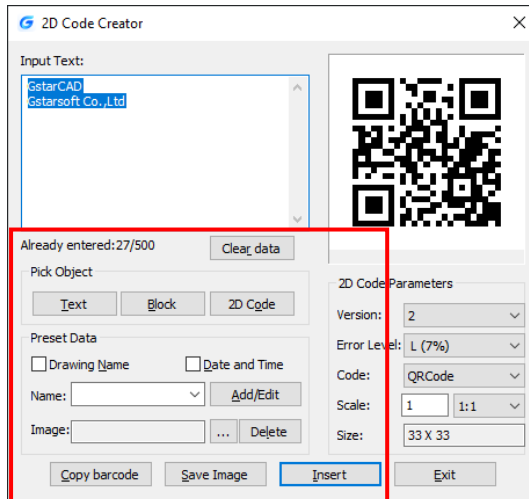
## 11. Group

- GstarCAD 2025 creates group directly in the command line window.
- ZWCAD 2025 displays the "Group" dialog box, which supports creating new groups and modifying selected groups.



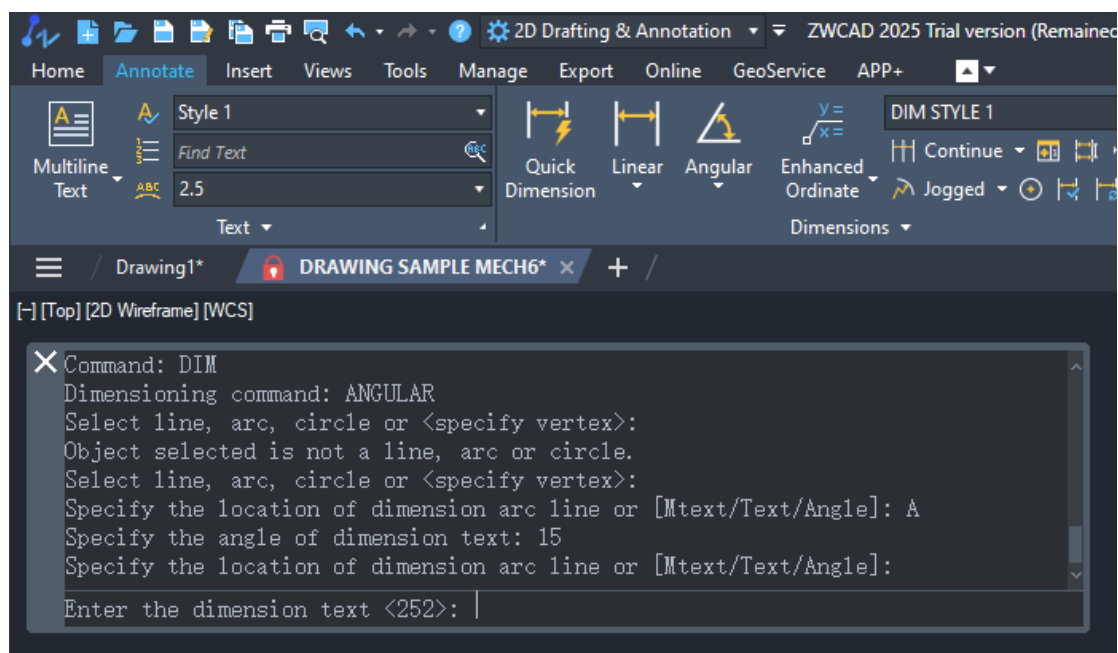
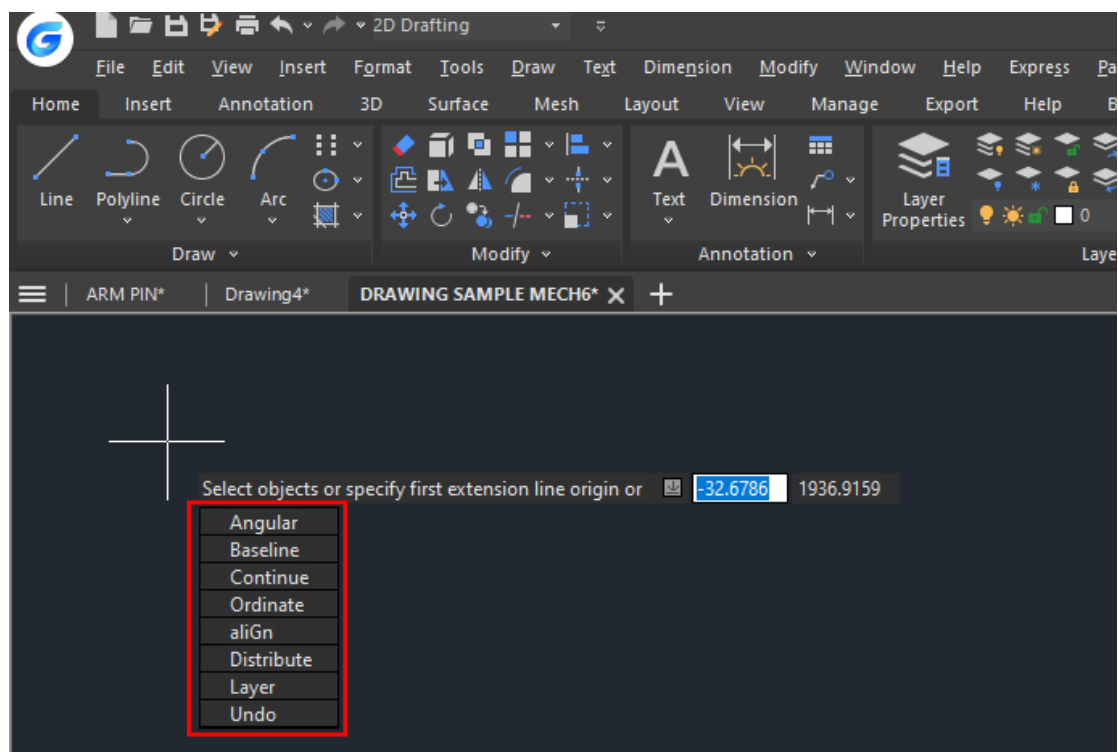
## 12. QR Code & Barcode

- GstarCAD 2025 supports the QR Code & Barcode functions such as picking from drawings, pre-defining fields, copying, and saving. ZWCAD 2025 does not currently support this.



### 13. Smart Dim

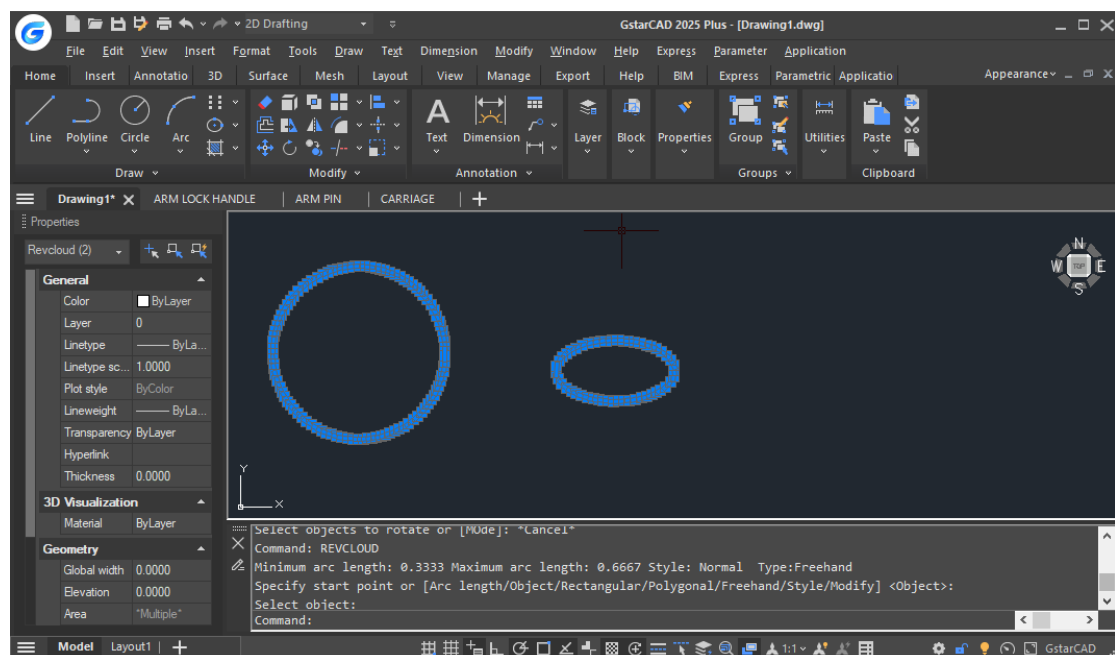
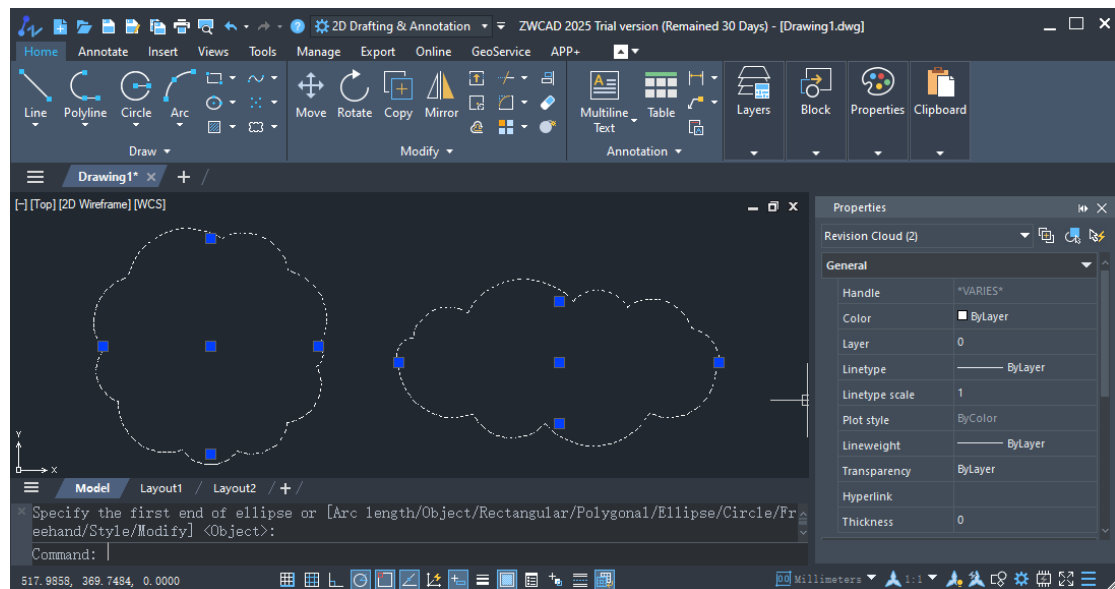
- In GstarCAD 2025, to create various types of dimensions, you no longer need to switch between different commands. Simply execute the DIM command, hover your mouse cursor over objects to see a dimension preview, click to confirm, and place the dimension. This streamlines the annotation process and enhances efficiency.
- ZWCAD 2025 doesn't support smart dimension, you need to execute the corresponding commands after executing DIM command.





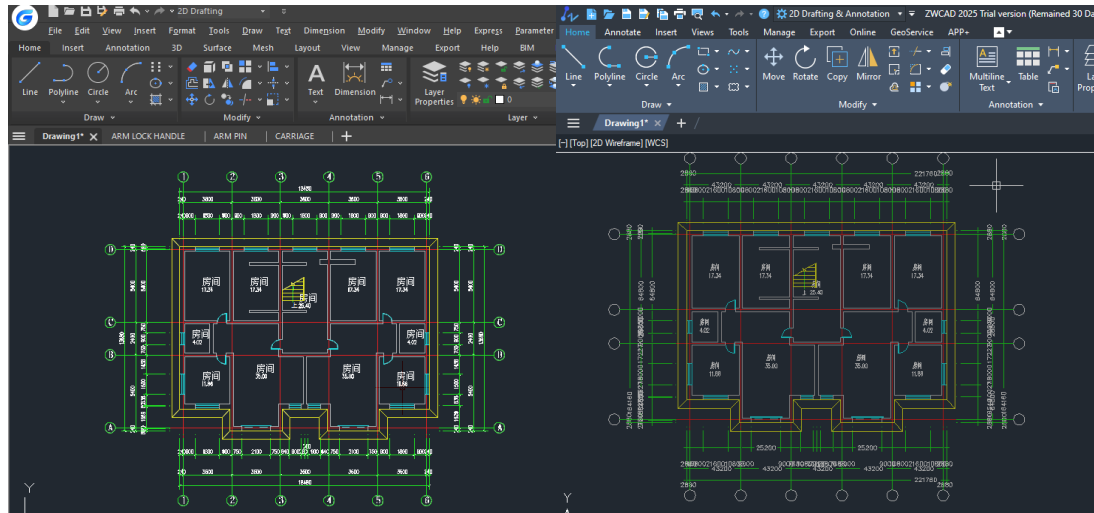
## 14. Revision Cloud

- ZWCAD 2025 supports elliptical revision cloud, and can retain the center grip when converting objects such as circle to cloud object.
- GstarCAD 2025 does not support this feature yet.



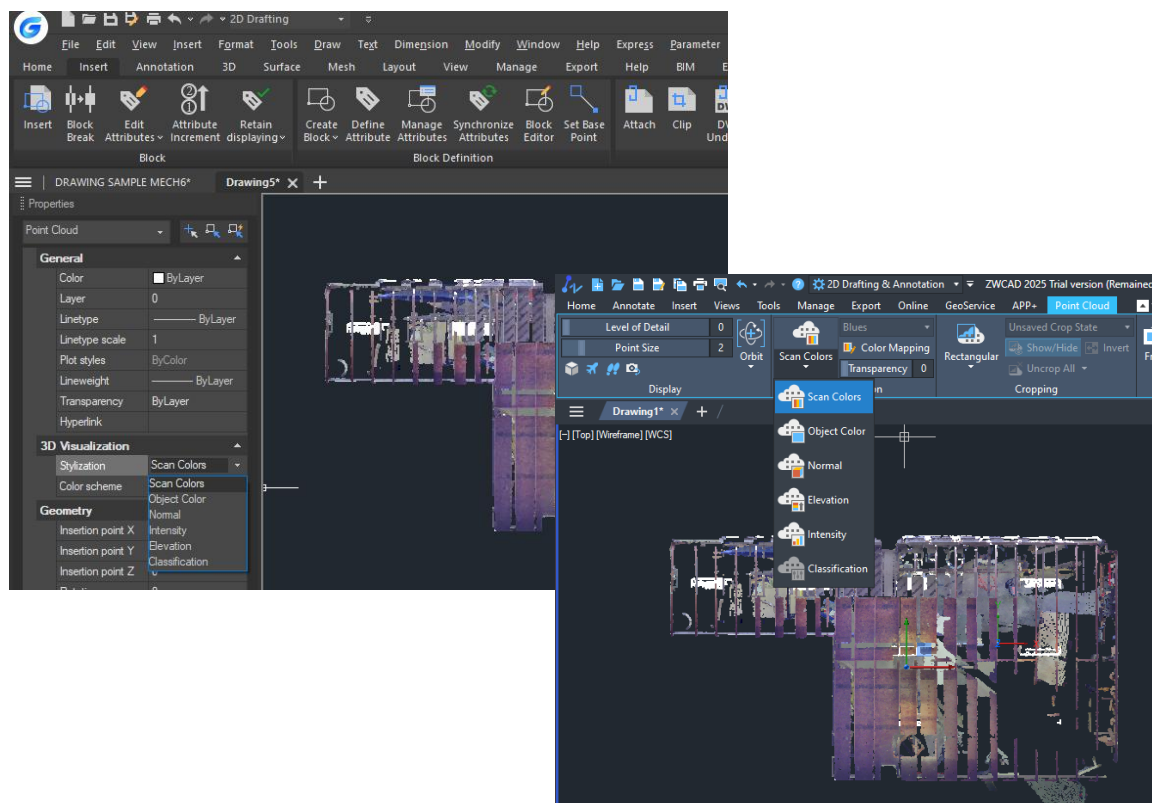
## 15. DGN Underlay

- The DGN underlay in GstarCAD 2025 can display correctly. The DGN underlay in ZWCAD 2025 will lose some information.



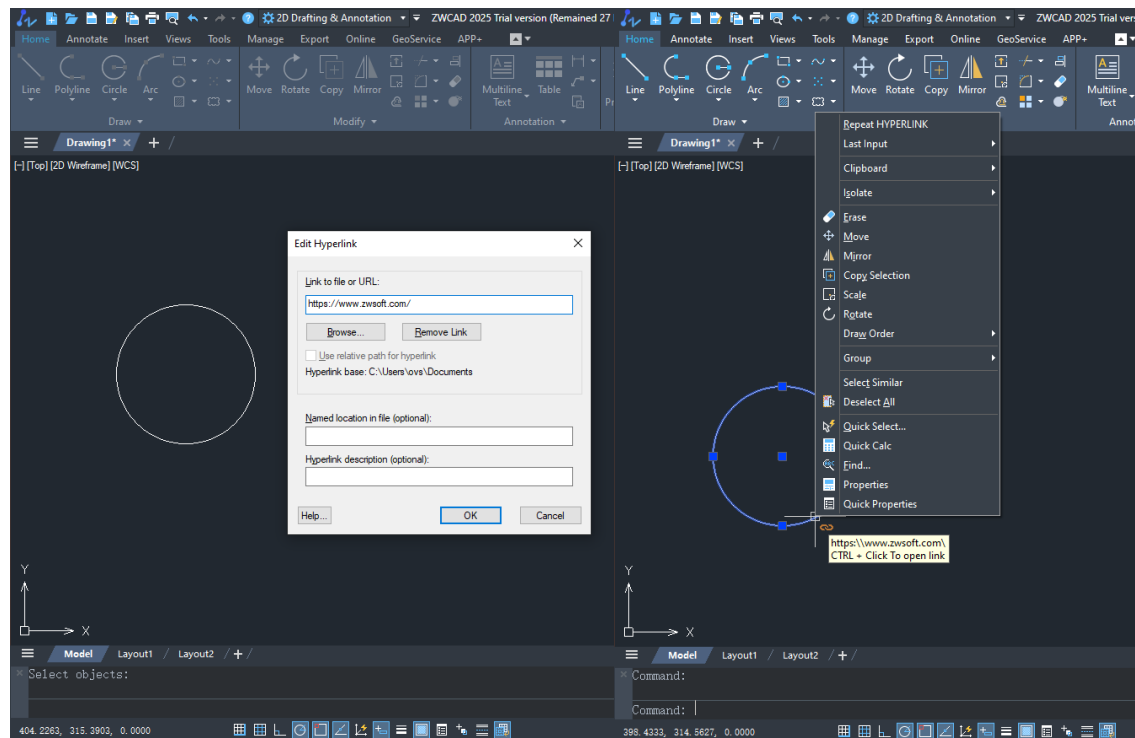
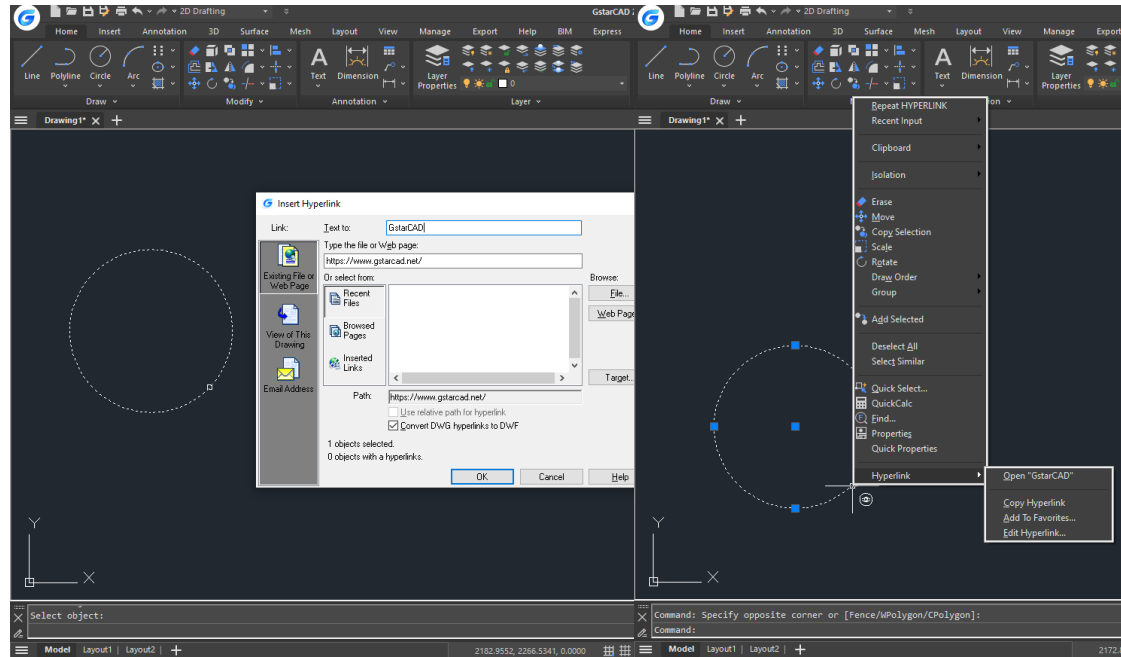
## 16. Point Cloud

- ZWCAD 2025 supports point cloud point cloud panel, which makes operation more convenient. ZWCAD provide more complete functions such as scan color and cropping. But is there a bug for the point cloud in ZWCAD. After checking Hide/Show on the Point Cloud Manager panel, the point cloud object can no longer be selected.



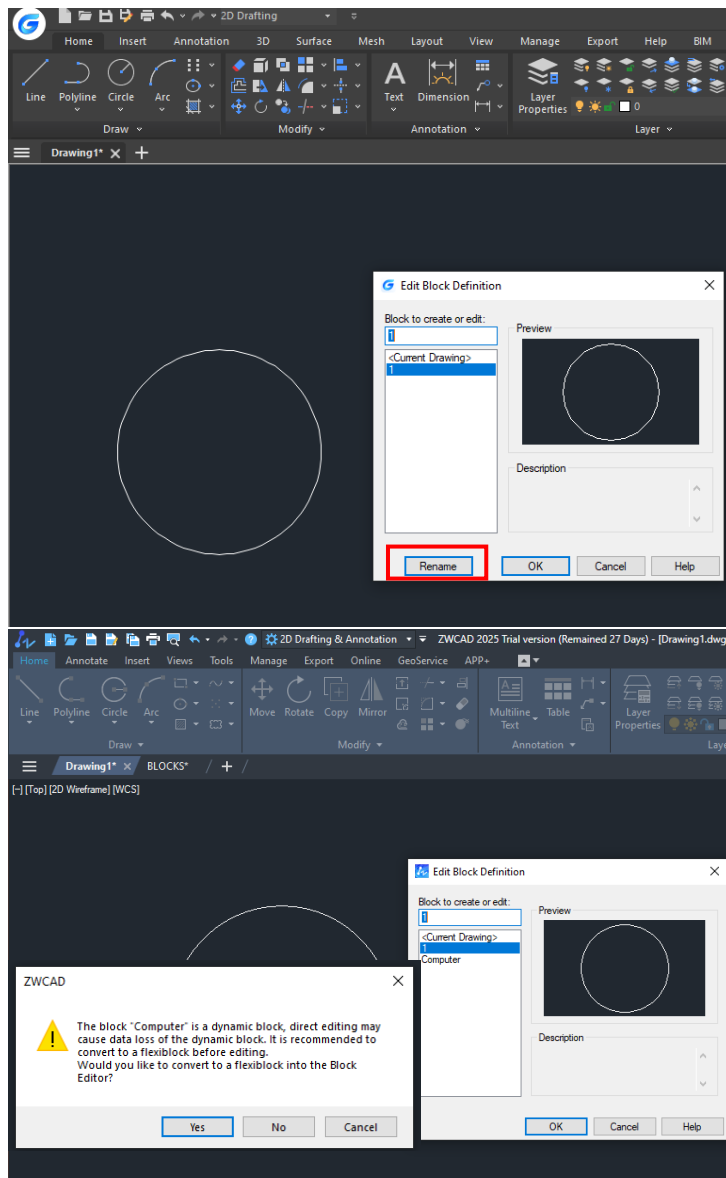
## 17. Hyperlink

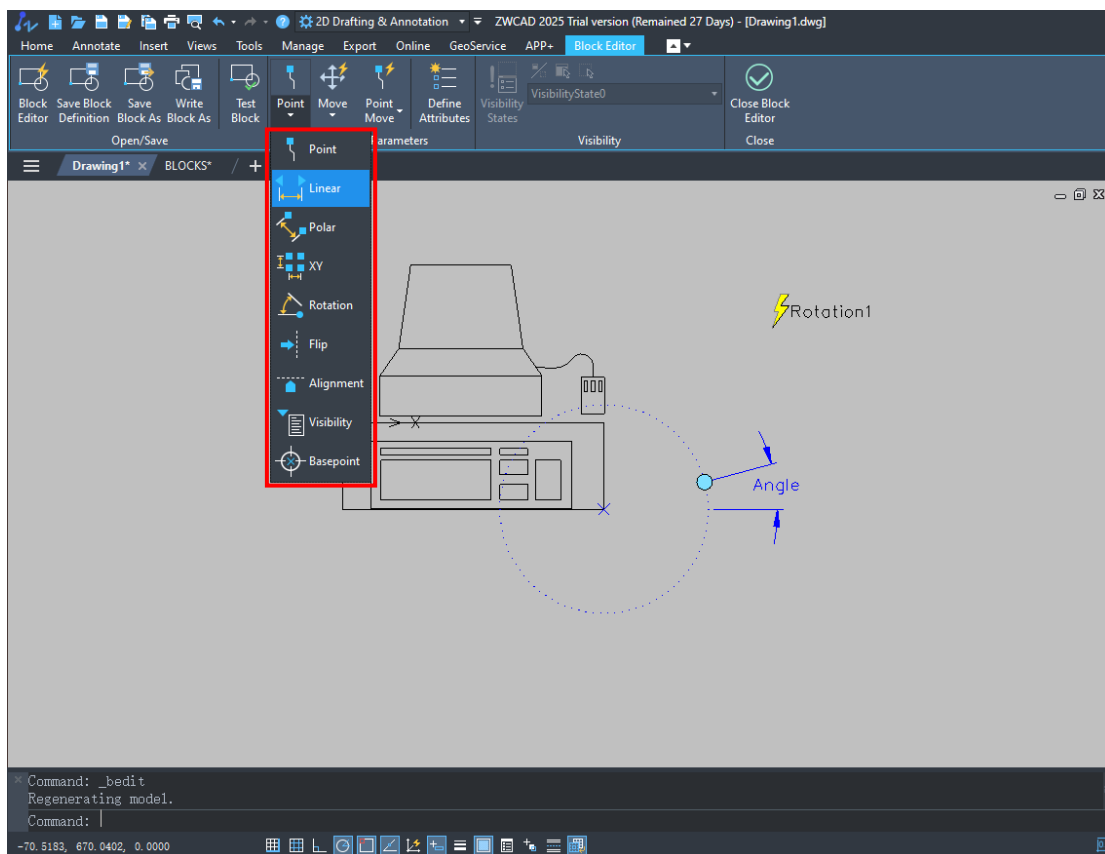
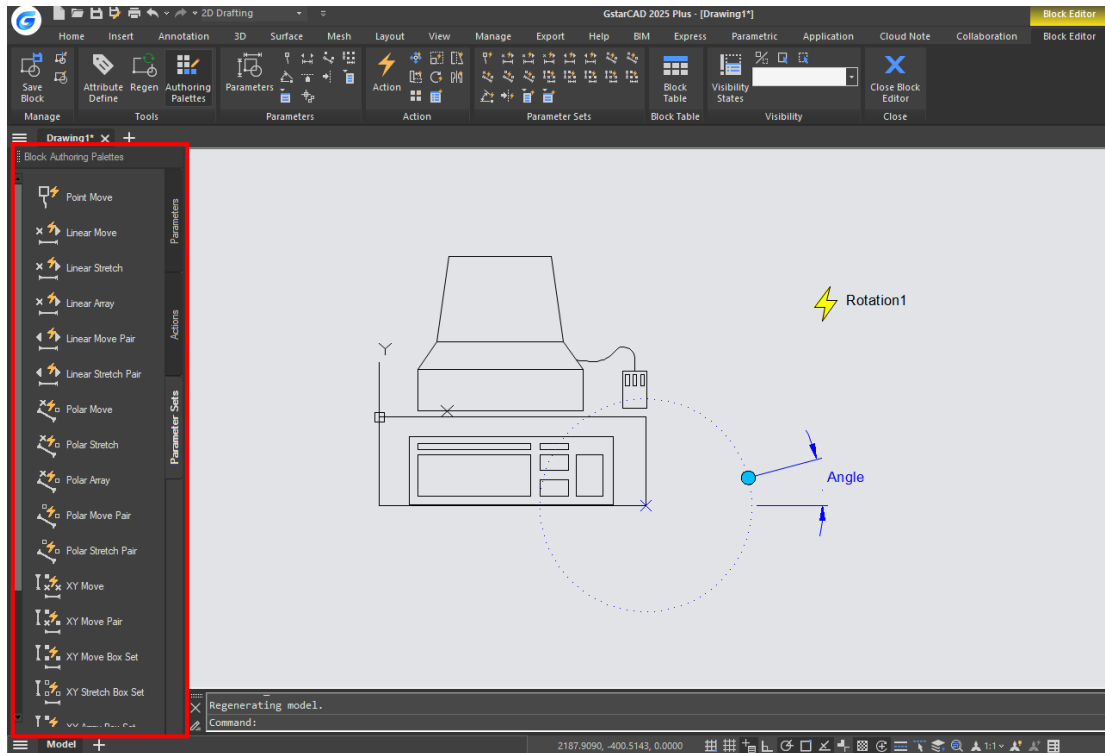
- When setting up hyperlinks, GstarCAD 2025 supports selecting recently used files/web pages, views in the current drawing, etc.
- GstarCAD 2025 also supports right-click functions such as copying hyperlinks and adding hyperlinks to favorites. ZWCAD 2025 does not support these features yet.



## 18. Dynamic Blocks/FlexiBlocks

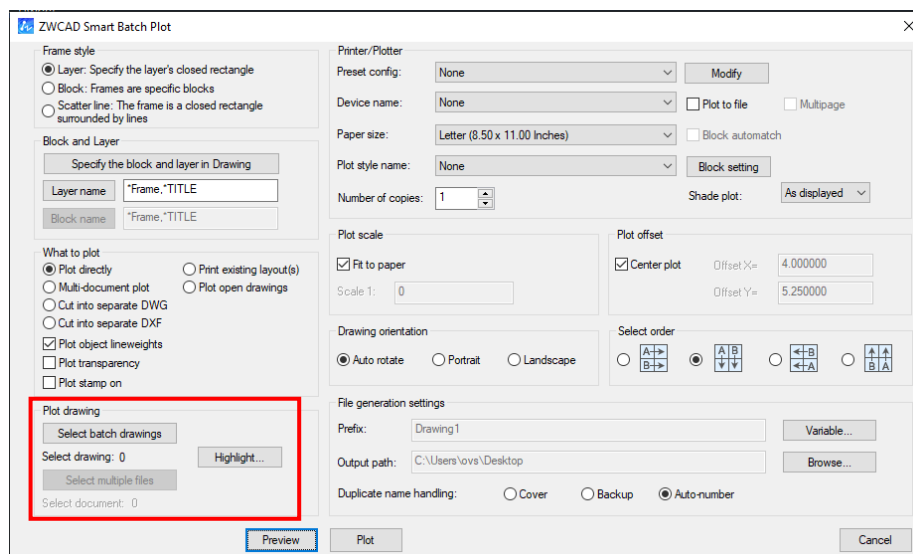
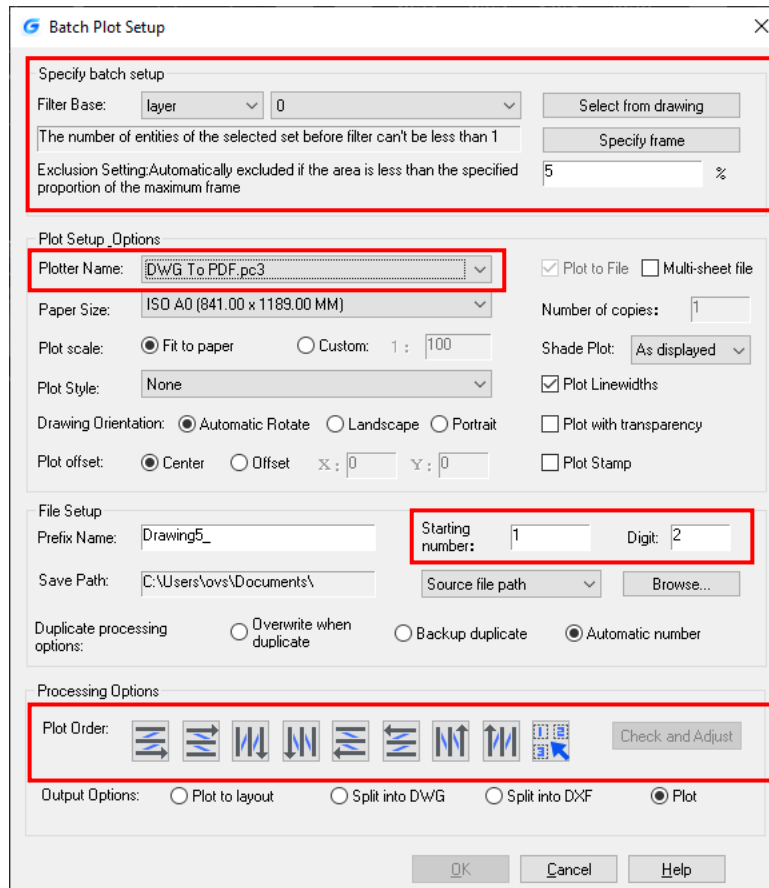
- In the Block Editor dialog box, GstarCAD 2025 supports Rename Block option. ZWCAD 2025 does not support this option yet.
- GstarCAD 2025 supports Query Parameters, Query Actions and Query Parameter sets. ZWCAD 2025 does not support these features yet.
- GstarCAD 2025 supports Block Table. ZWCAD 2025 does not support this feature yet.
- GstarCAD 2025 supports Block Authoring Palettes, which makes operation more convenient. ZWCAD 2025 does not support this feature yet.
- When editing a dynamic block in ZWCAD 2025, you need to convert the dynamic block into a flexiblock before editing it.
- ZWCAD 2025 supports test block. GstarCAD 2025 does not support this feature yet.





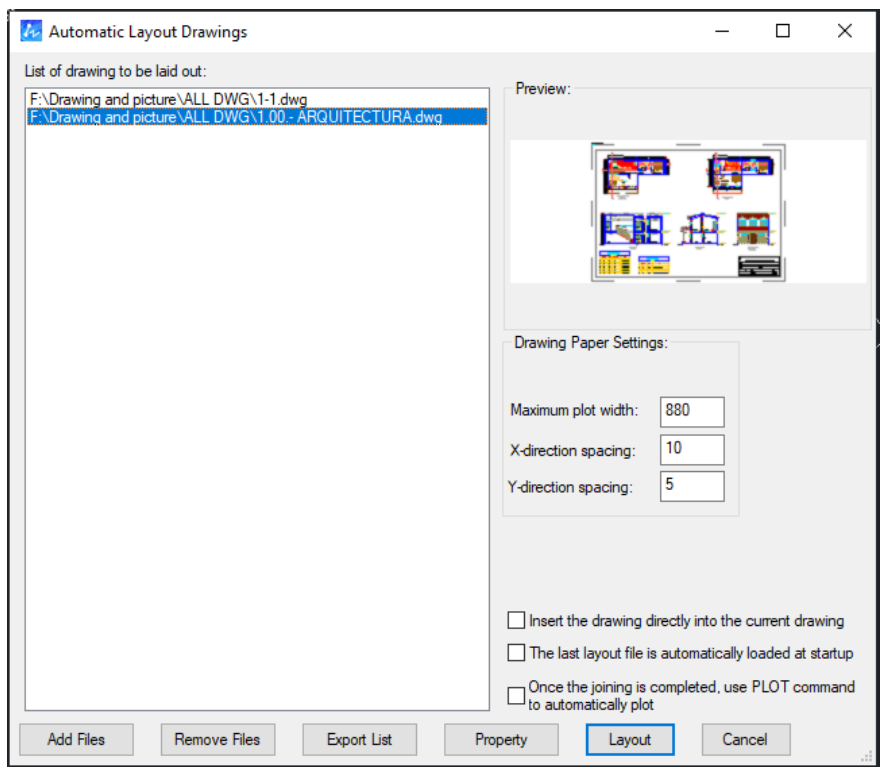
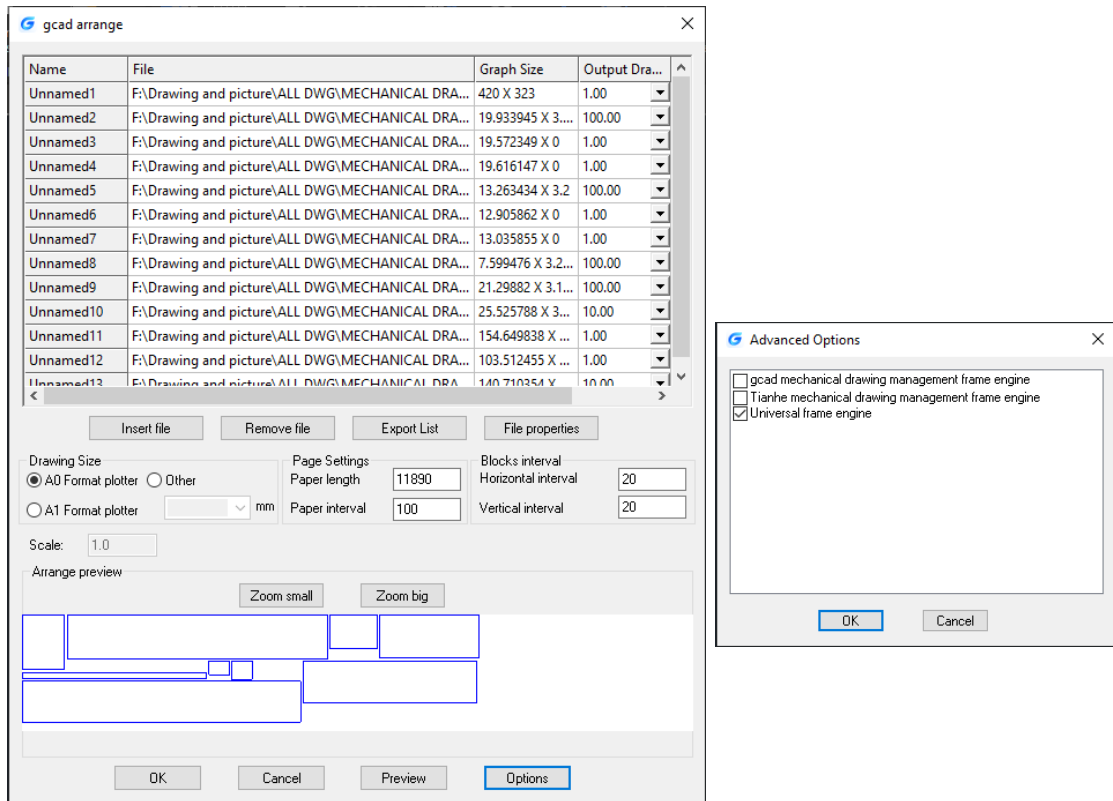
## 19. Batch Plot/Smart Print

- GstarCAD 2025 Batch Plot supports filtering by blocks, layers, polylines, and external reference frames; supports multiple frame selections, traversal of printing models and layout spaces, and can exclude frames with abnormal areas; supports setting the default printing device; can set the starting number; supports various of Plot Orders; supports Check and Adjust functions, can delete filtered error frames etc., The functions are richer than that of ZWCAD 2025



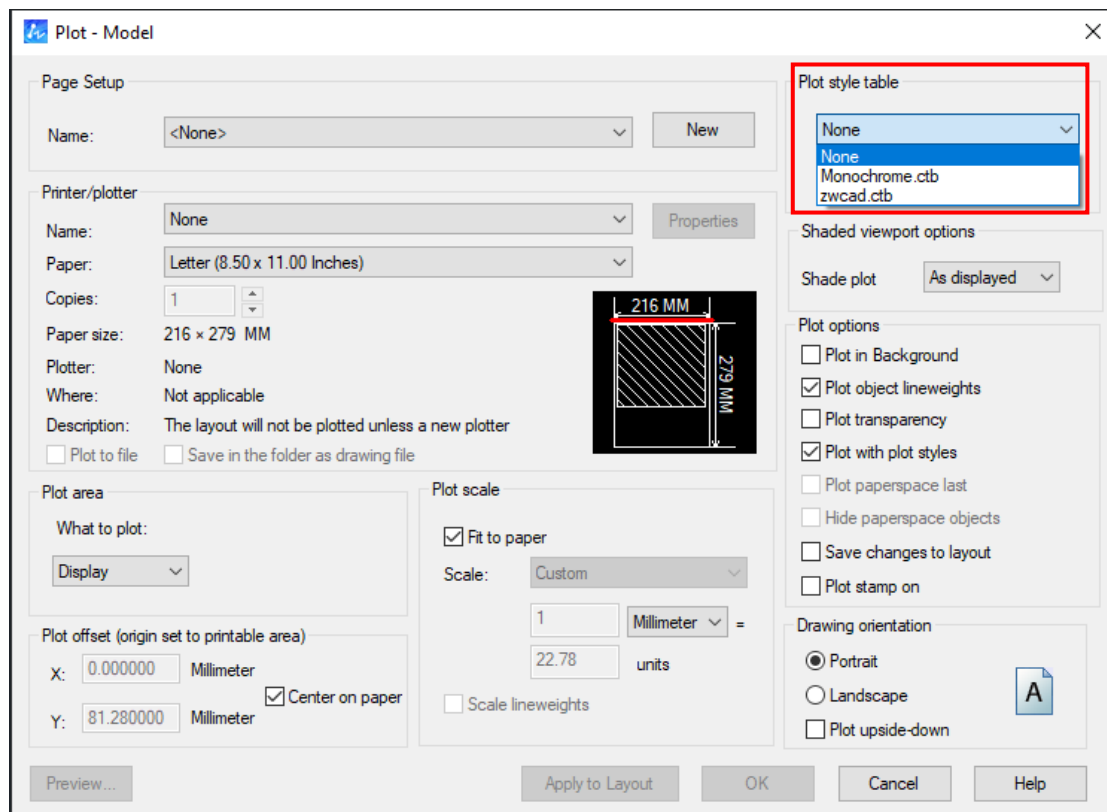
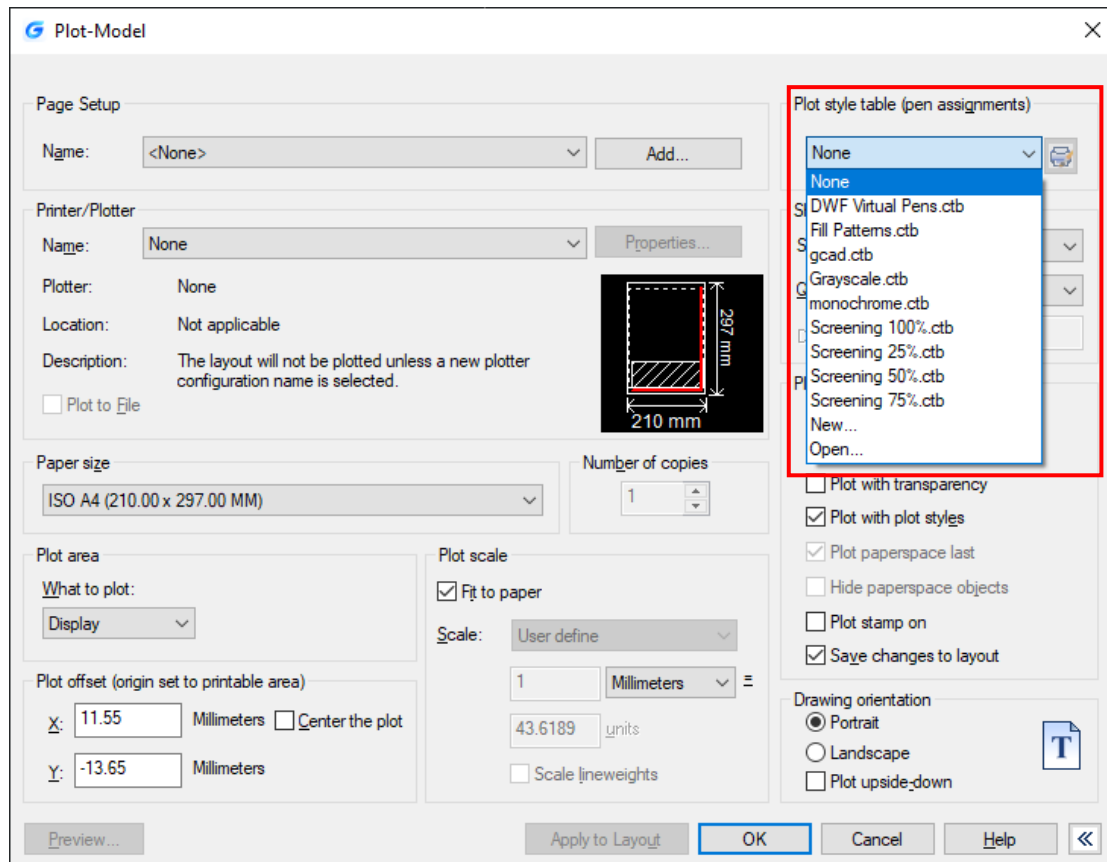
## 20. Arrange Frame Automatically

GstarCAD 2025 supports Arrange Frame Automatically setting drawing size and drawing frame, and also can preview the layout. ZWCAD 2025 does not support this feature yet.



## 21. Print Style Table

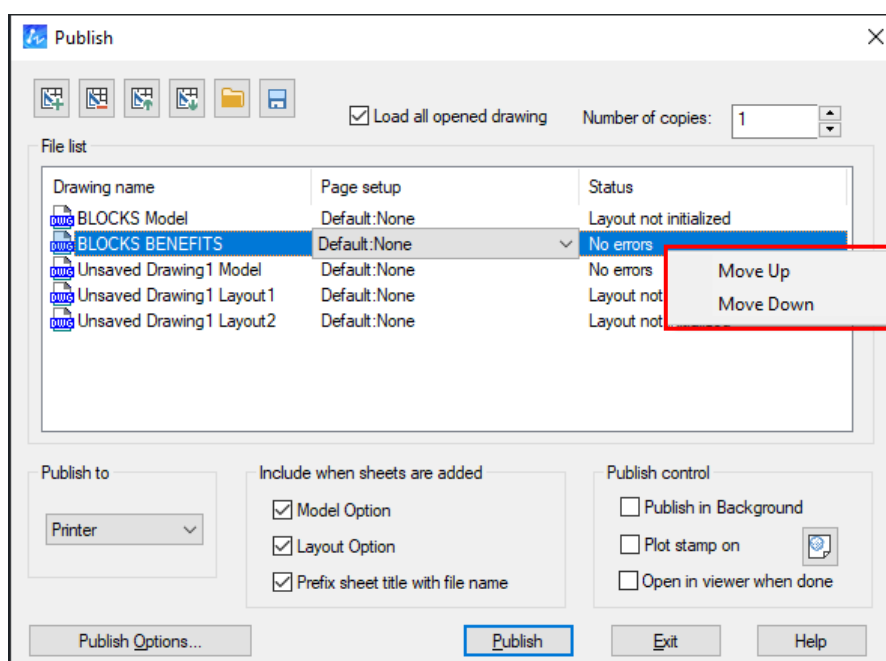
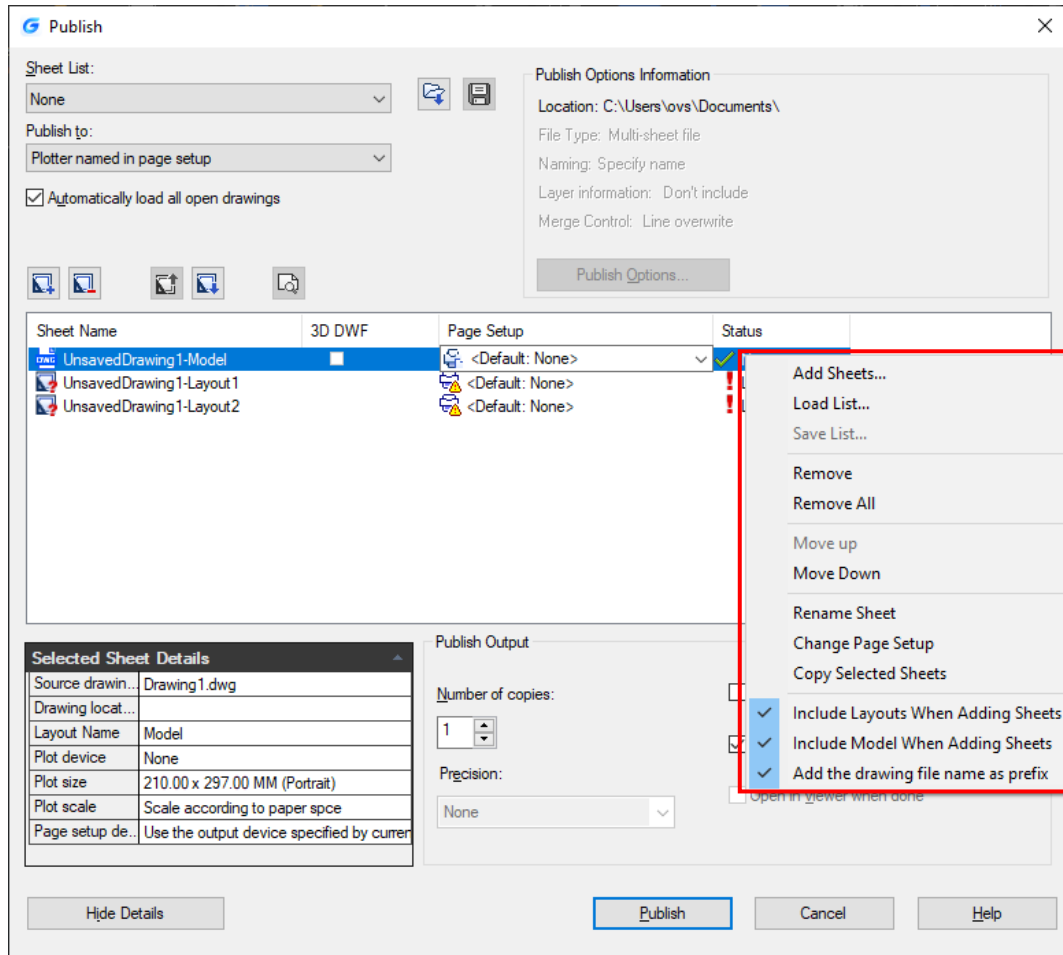
- GstarCAD 2025 provides a variety of available print style list by default to meet user scenarios.

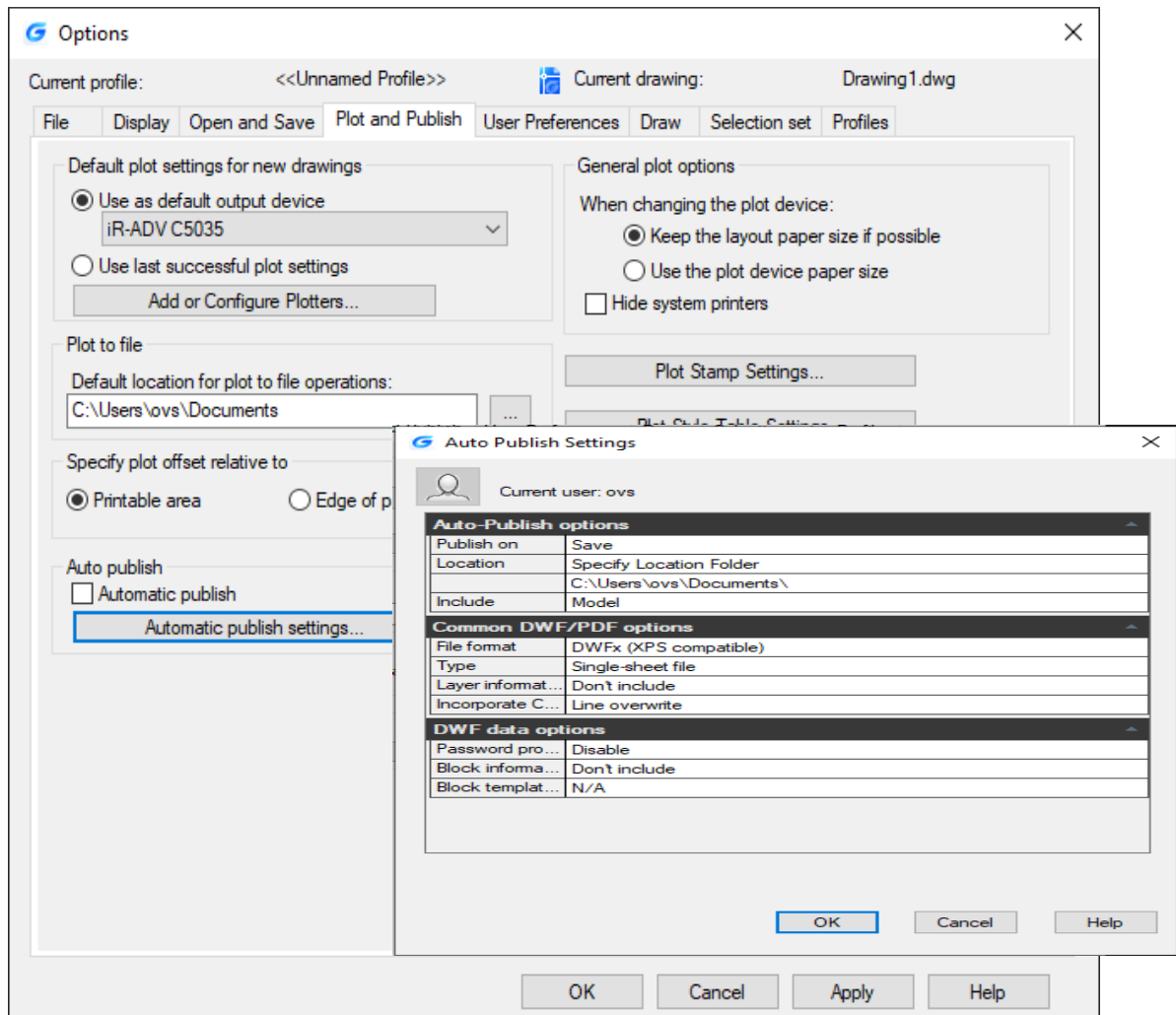




## 22. Publish, Auto-publish

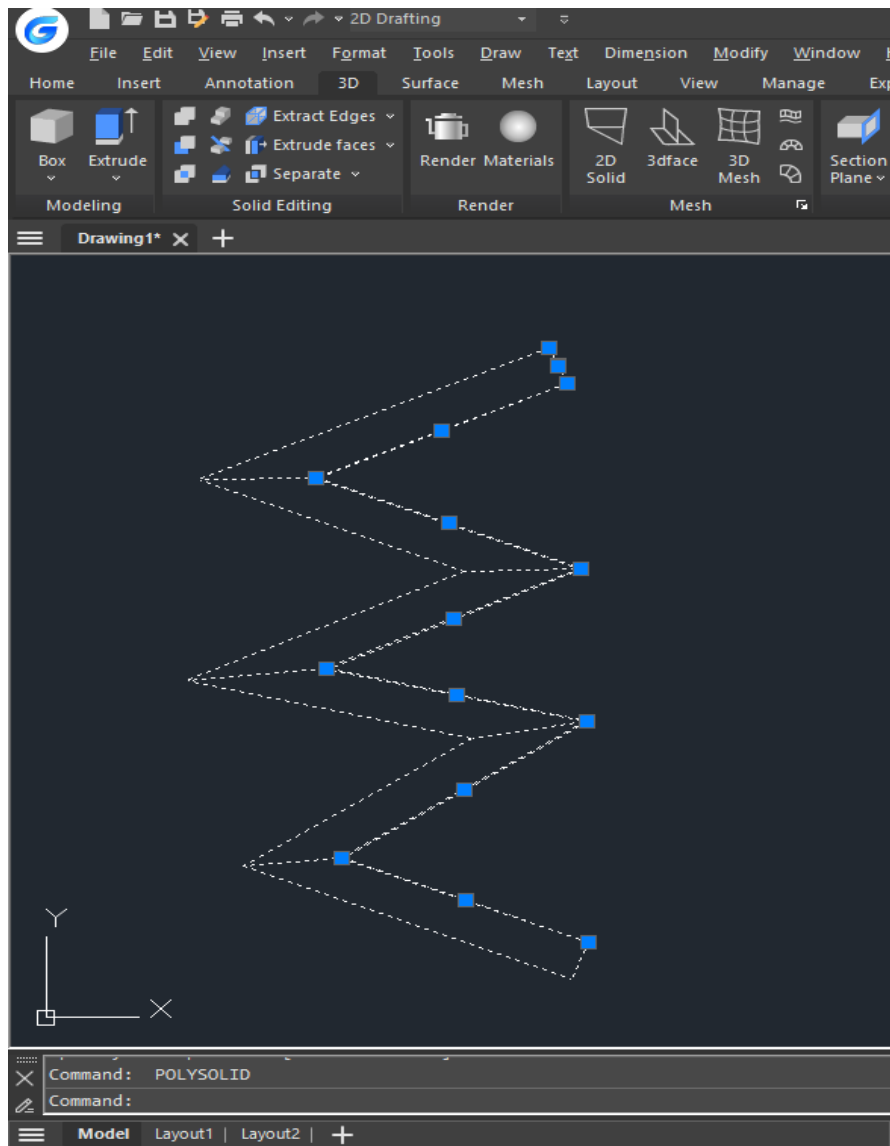
- GstarCAD 2025 displays drawing details, and richer functions in the right-click menu in Publish.
- GstarCAD 2025 supports the automatic publishing function. ZWCAD 2025 does not support it yet.





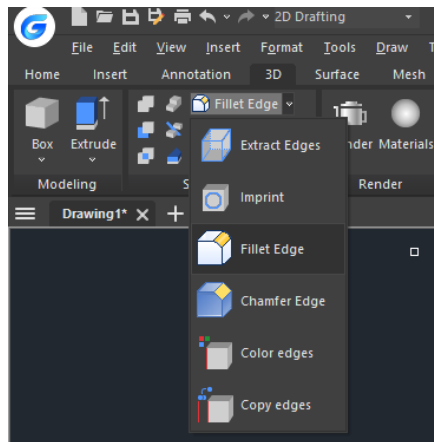
### 23. 3D Modeling

- GstarCAD 2025 supports the creation of polysolid. ZWCAD 2025 does not support this feature yet.

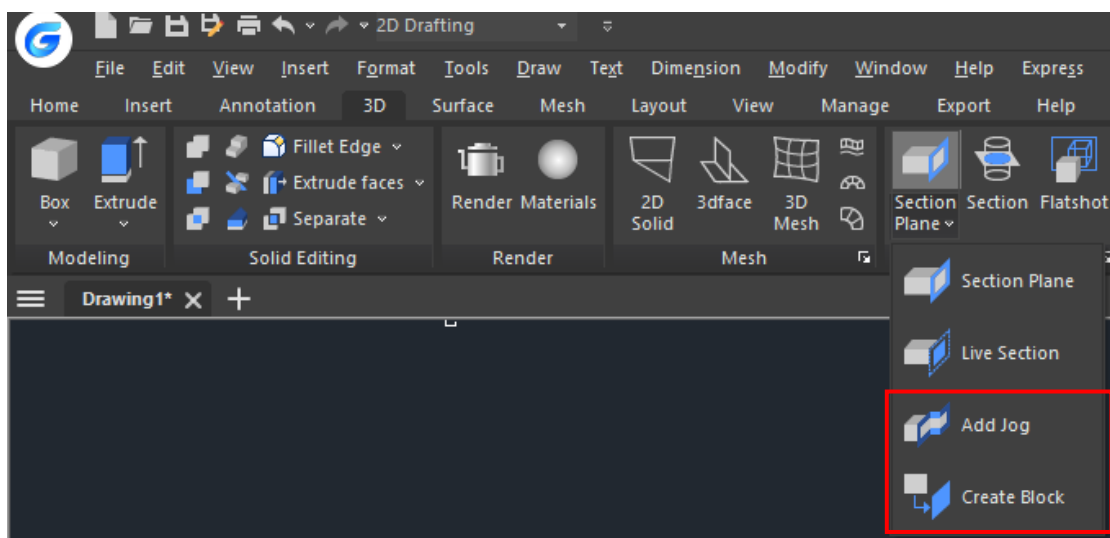


## 24. 3D Editing

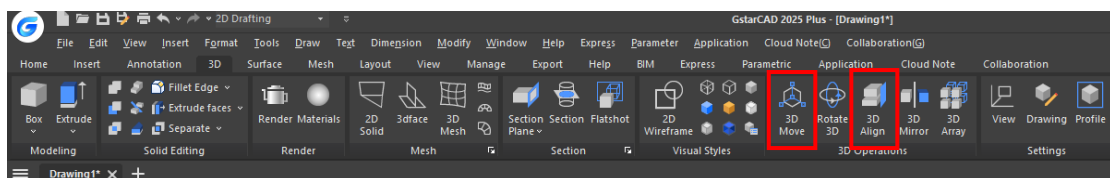
- GstarCAD 2025 supports Thicken, Extract Edges, Chamfer Edge, and Fillet Edge. ZWCAD 2025 does not support this feature yet.



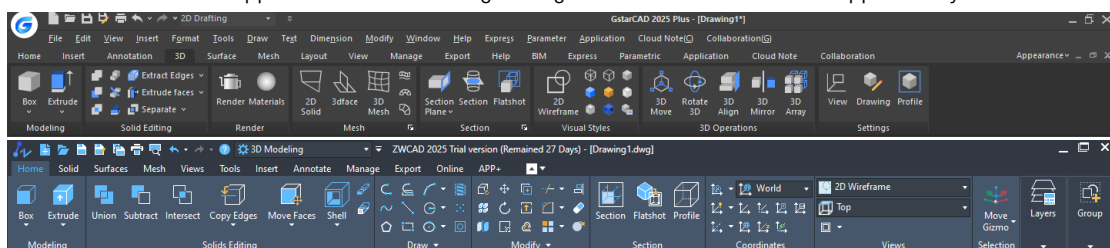
- GstarCAD 2025 supports Adding Jog, and Create Block for the section. ZWCAD 2025 does not support these features yet.



- GstarCAD 2025 supports 3D Move and 3D Align. ZWCAD 2025 does not support this feature yet.

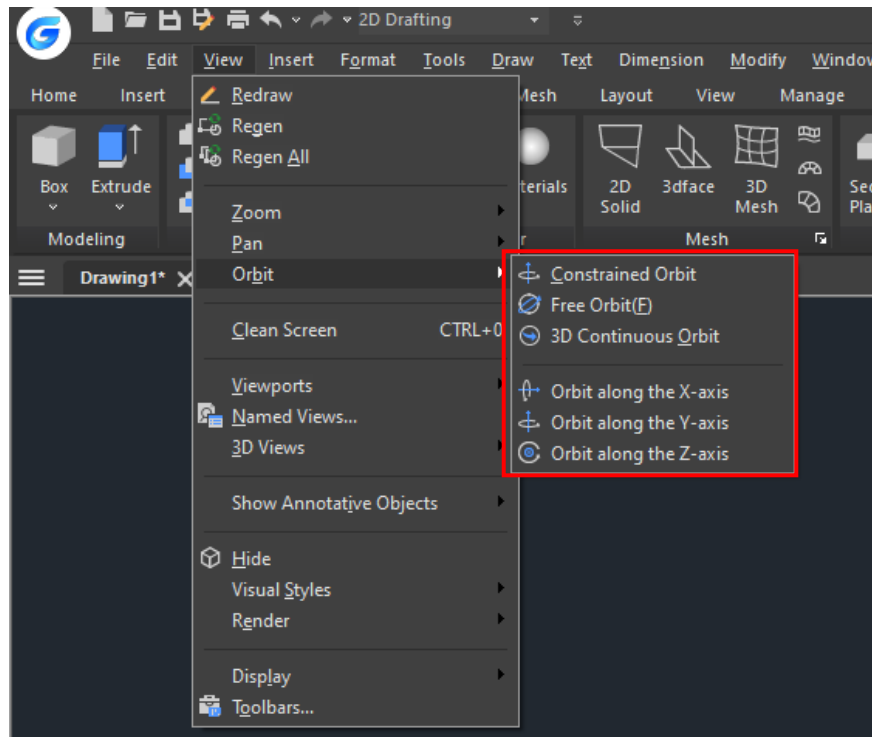


- GstarCAD 2025 supports View and Drawing settings. ZWCAD 2025 does not support this yet.



## 25. 3D Orbit

- GstarCAD 2025 supports Orbit along the X-axis (3DXORBIT), Orbit along the Y-axis (3DYORBIT), and Orbit along the X-axis (3DZORBIT). ZWCAD 2025 does not support these features yet.

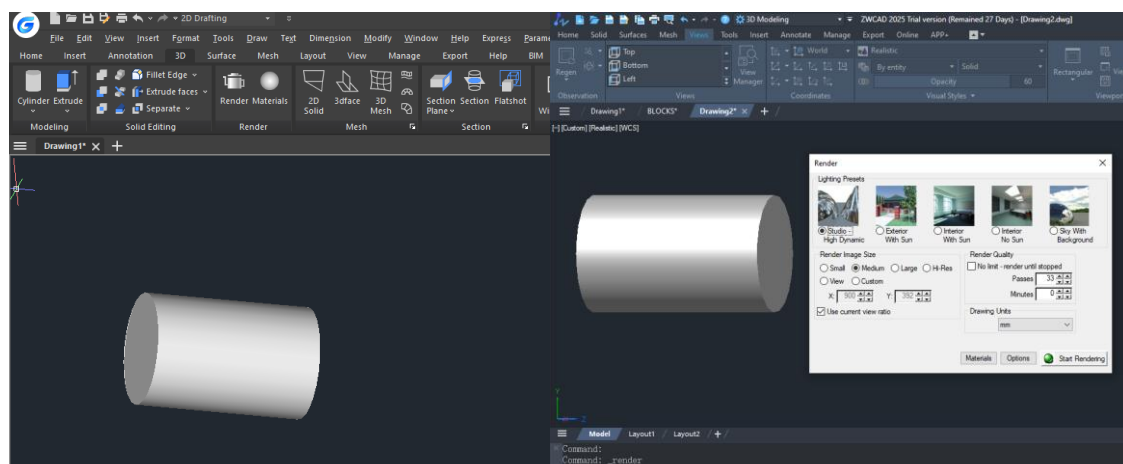


## 26. Visual style

For some computer models, after switching the visual styles in ZWCAD 2025, the drawing area is blank and the cursor moves slowly.

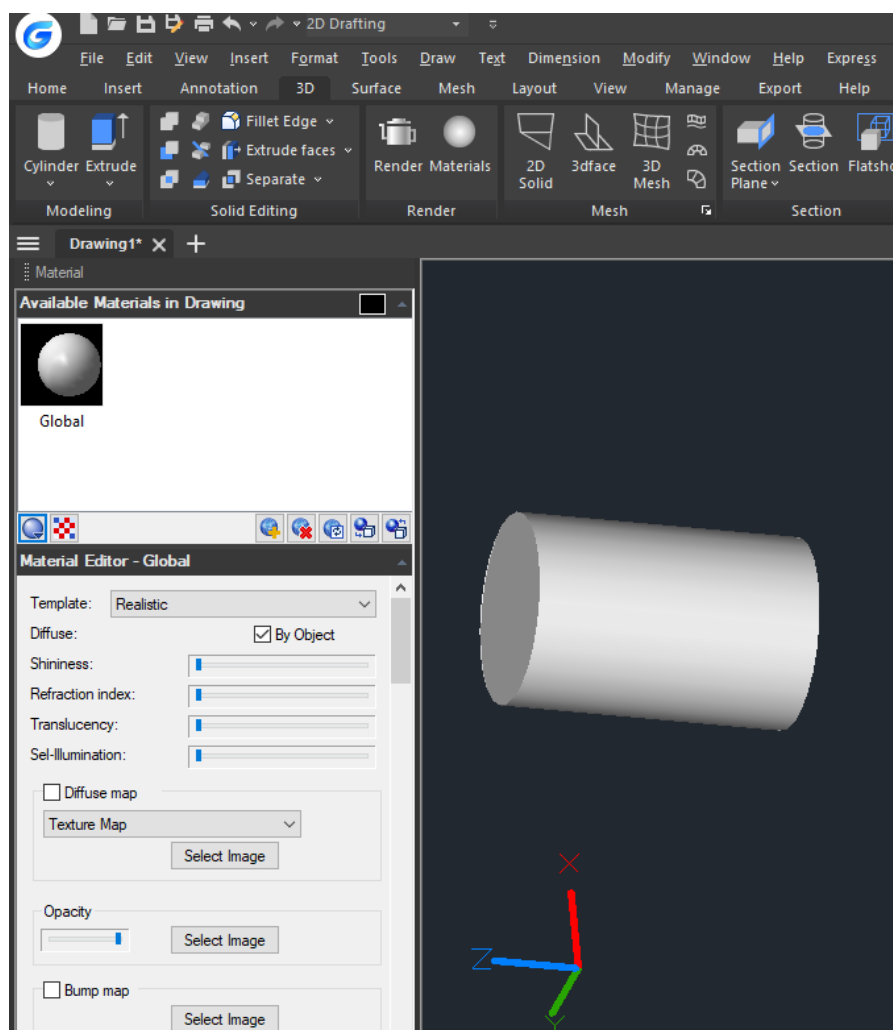
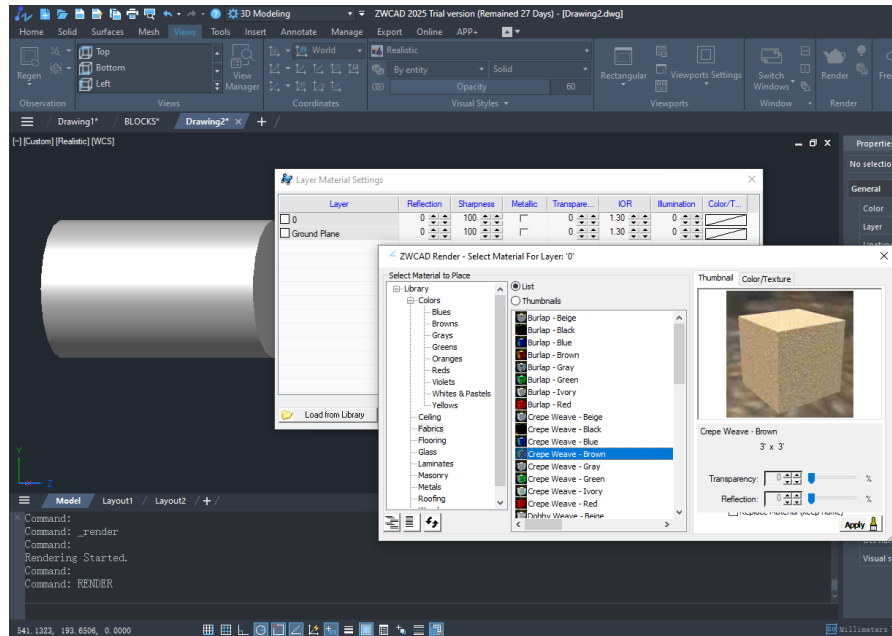
## 27. Render

- The Render dialog box of ZWCAD 2025 supports the settings of lighting, shadows and quality, etc. GstarCAD 2025 renders directly without dialog box settings.



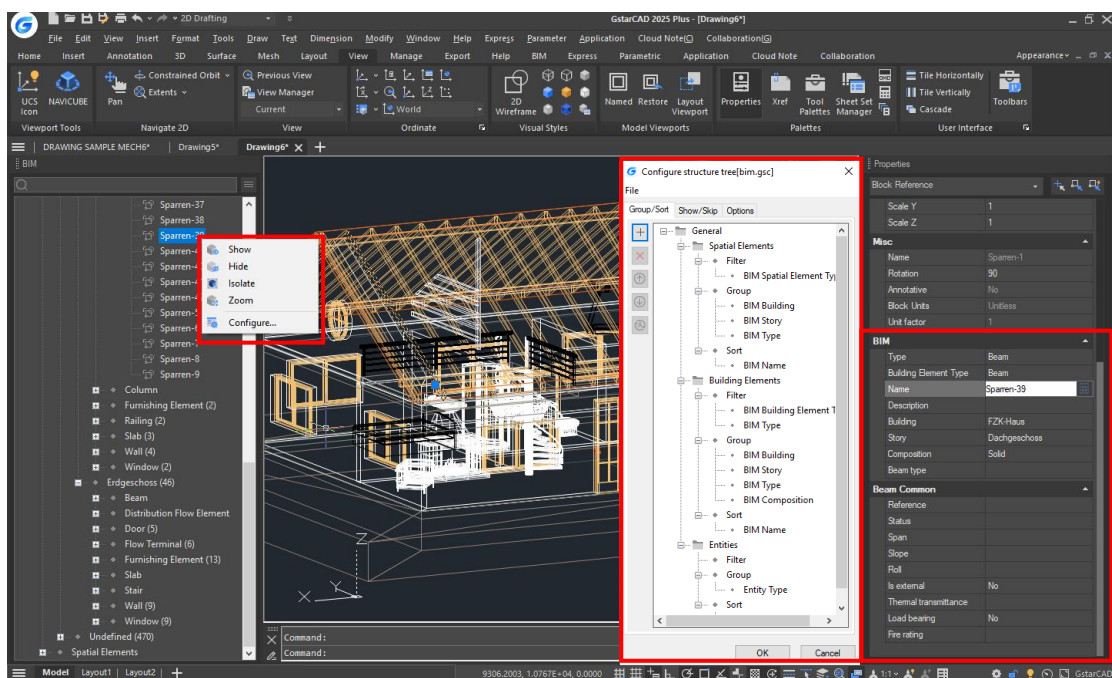
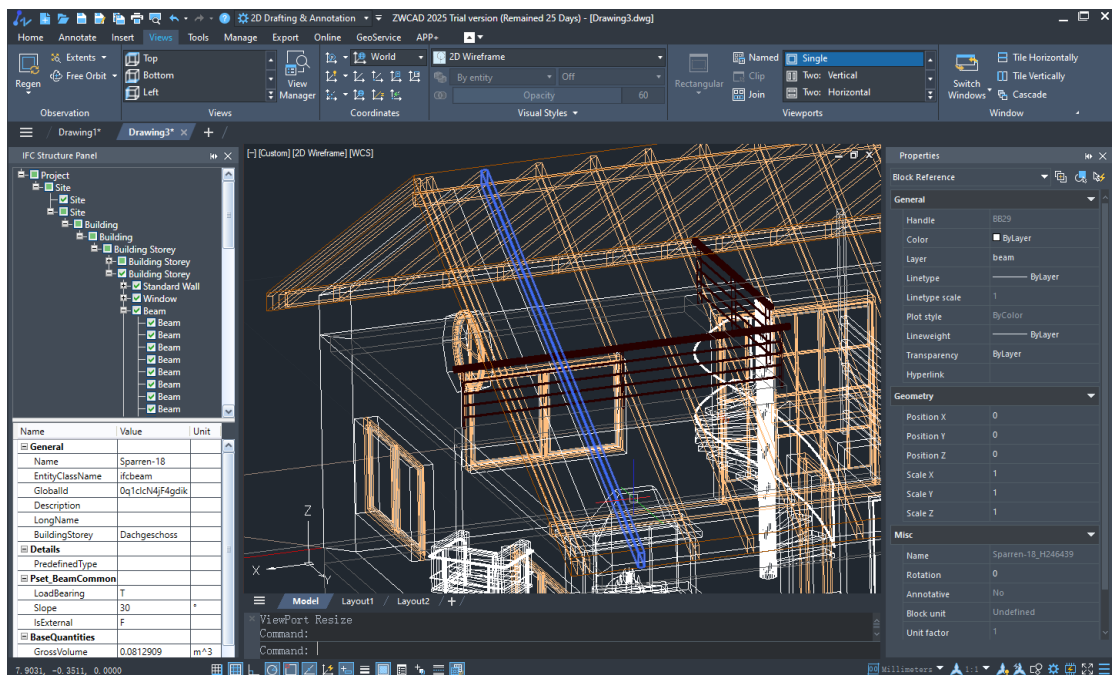
## 28. Material

- GstarCAD 2025 can flexibly adjust the shininess, refractive index, and translucency, and supports the selection of images as texture map, opacity map, or bump map, etc.



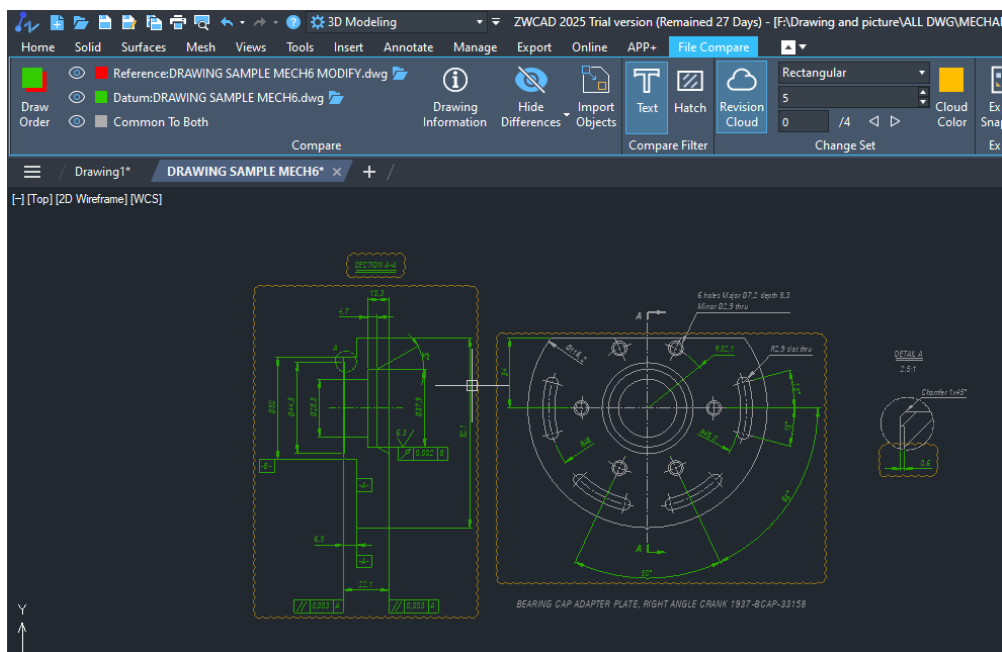
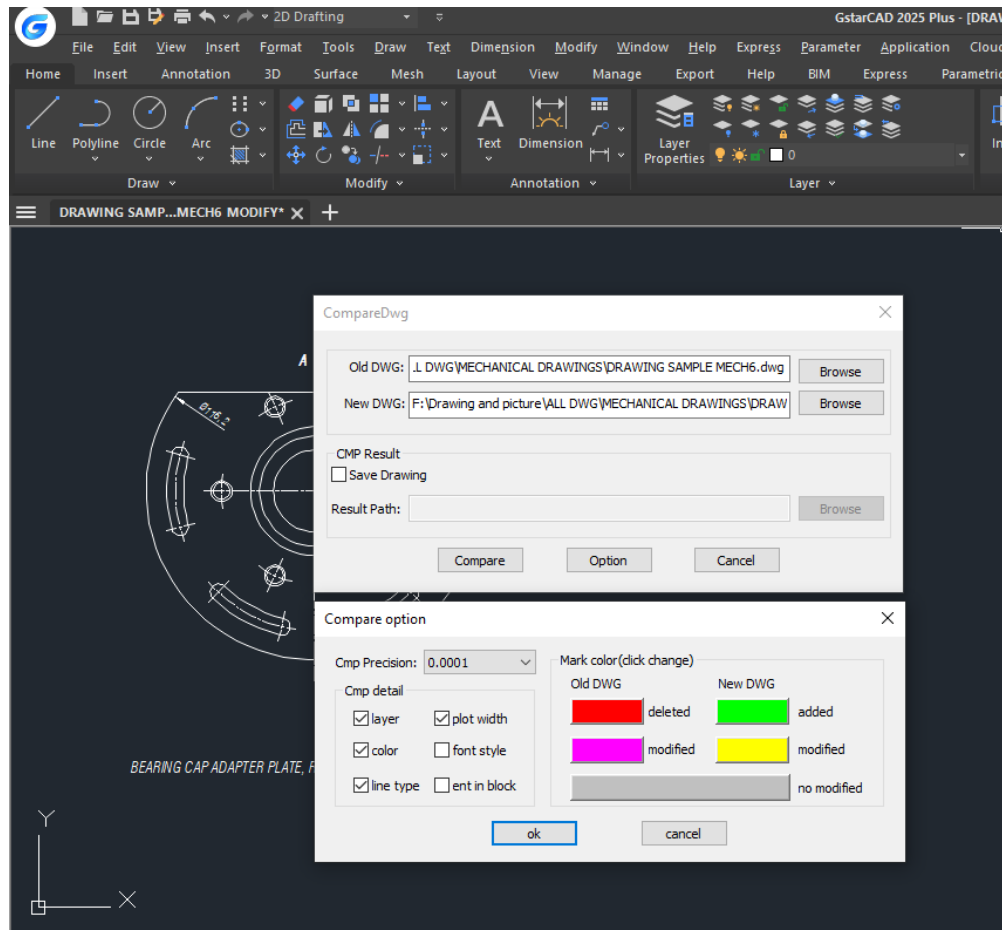
## 29. IFC Import & BIM Structure Panel

- GstarCAD 2025 supports importing IFC files, it can display BIM building information in the property panel and support editing. ZWCAD 2025 does not support this.
- GstarCAD 2025 supports right click menu such as Display, Isolation, Zoom, Expand all, Collapse all, Select, and highlight on a single entity in STRUCTUREPANEL. ZWCAD 2025 does not support this.
- GstarCAD 2025 supports Configuration Structure tree panel, such as Group/Sort, Show/Skip, Options, etc. ZWCAD 2025 does not support this.



### 30. Drawing Compare

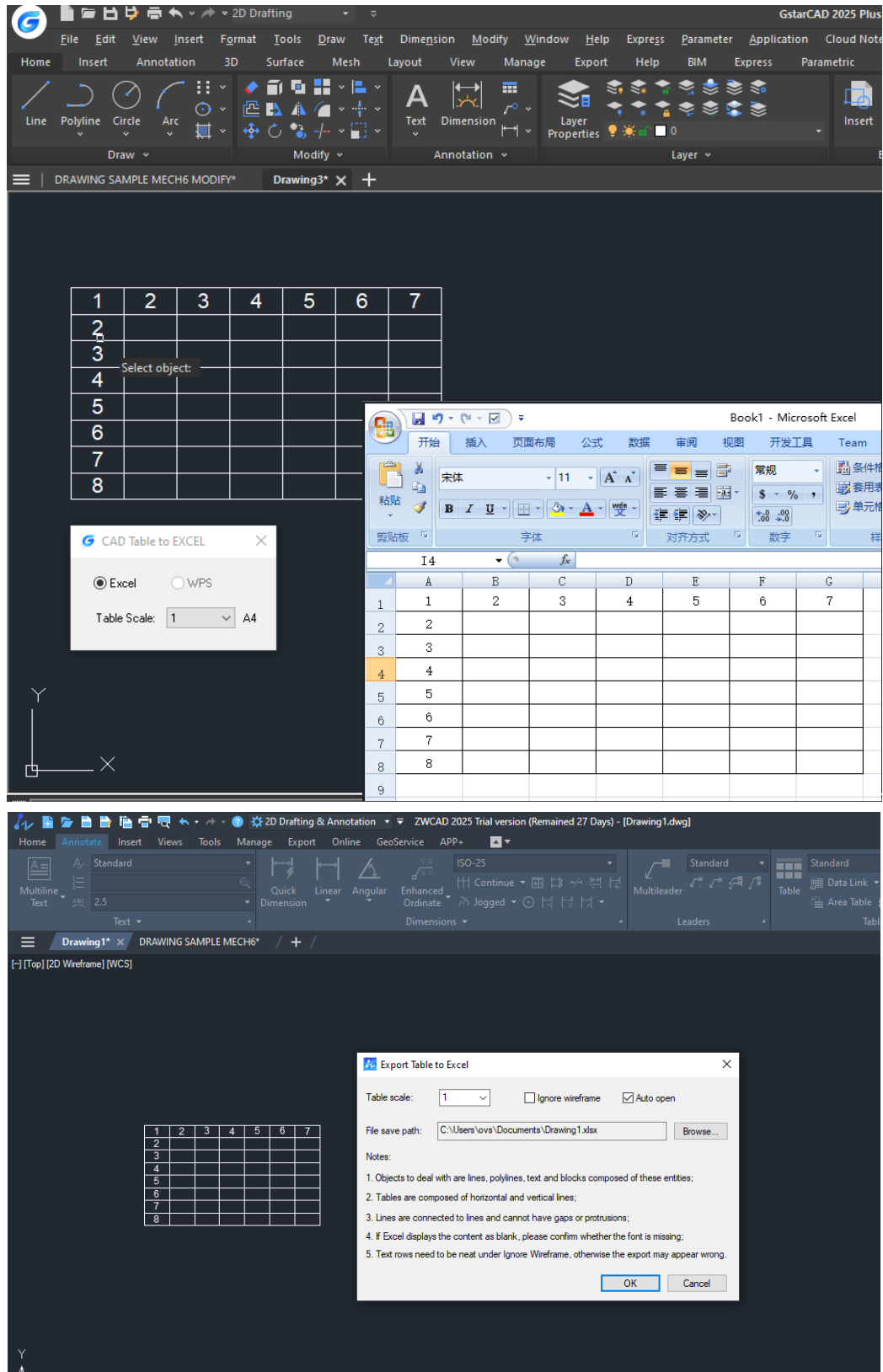
- GstarCAD 2025 marks the comparison results with different colors on the old and new drawings, while ZWCAD 2025 marks the comparison results with cloud lines on the same drawing.





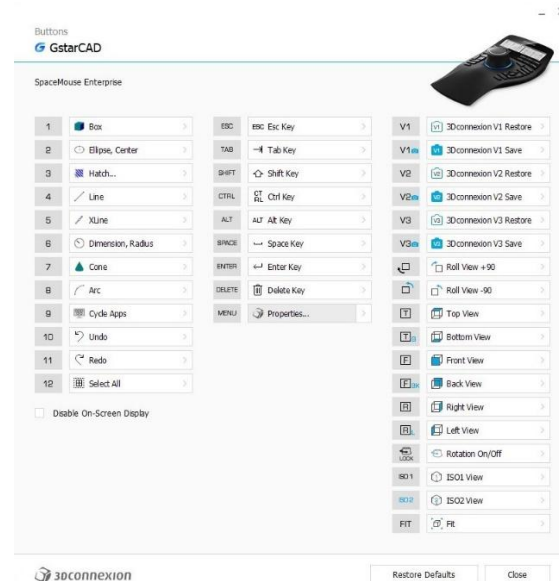
### 31. (CAD table to EXCEL)

- GstarCAD 2025 supports exporting hand-drawn tables (tables consisting of lines and text) as EXCEL or WPS tables. ZWCAD 2025 automatically opens as WPS tables by default, does not support switching Excel and WPS during export, and prompts an error.



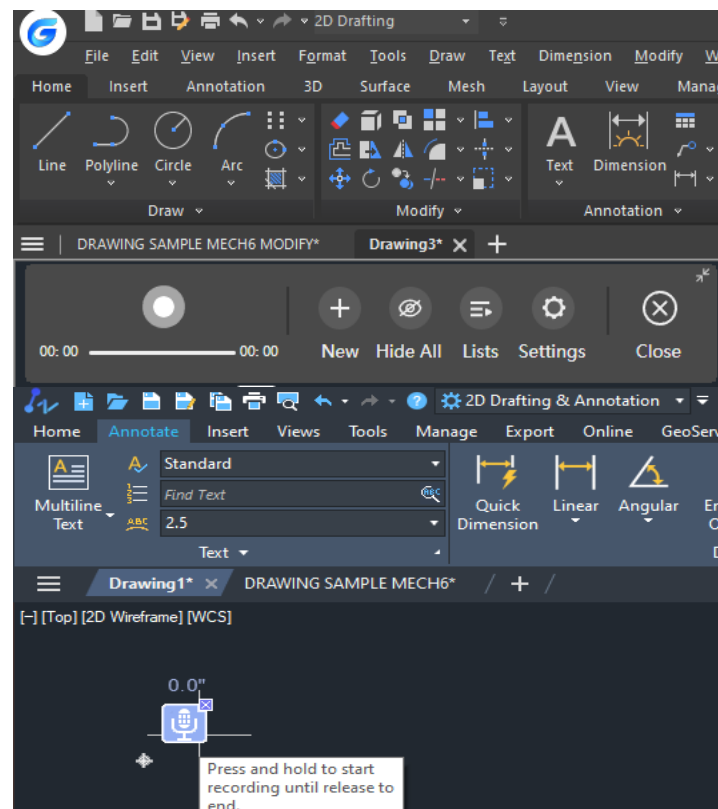
### 32. 3D Mouse Device Adaption

- Both of the two softwares support 3D Mouse. ZWCAD 2025 has added the relevant configuration files to the plug-in library of the 3dconnexion official driver, which can be automatically loaded when the software is running. GstarCAD 2025 has not yet added its official driver (it is currently being developed).



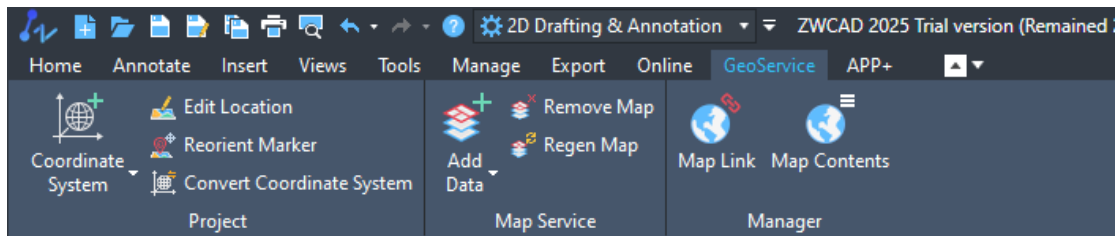
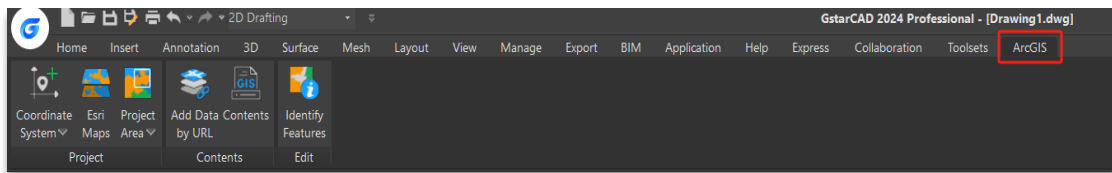
### 33. Voice Annotation/Smart Voice

- You can now add voice annotations to drawings in GstarCAD 2025, enhancing clarity. Through the Voice Manager panel, you can easily create, record, play, and manage voice annotations.
- The operations of recording and playing voice in ZWCAD 2025 are based on the transformation of two icon styles to guide the process in the workspace. The interaction method of the whole process is single, and there are only icon style changes and text prompts when the mouse hovers, which has poor guidance.



### 34. ArcGIS

- GstarCAD provides ArcGIS plug-ins and has more functions than ZWCAD. Some functions of ZWCAD are not perfect yet, and some functions only have buttons but no actual effect.
- ArcGIS for GstarCAD 2024 has achieved bidirectional compatibility with ArcGIS for AutoCAD, ArcGIS for GstarCAD 2025 will be launched soon. ZWCAD ArcGIS is not compatible with ArcGIS for AutoCAD.



### 35. Geographic location (GEO)

The GEO in GstarCAD is expected to be available in version 25 SP1. ZWCAD 2025 upgrades the ArcGIS module to geographic location, but there are serious problems.

## 5. GstarCAD Innovative Features

GstarCAD has customized a large number of unique functions according to user needs.

The innovative features of GstarCAD:

### GstarCAD Innovative Features

Features	Description
Align Tool (ALIGNTOOL)	Allows you to align the selected objects along the X or Y axis coordinates.
ACAD Tool Palettes Import Tool	Import AutoCAD© customized Tool palettes in the WINDOWS Start menu easily.
Area Sum (AREASUM)	Displays the current closed region value and area sum sequence in command line.
Area Table (AREATABLE)	Dimensions and counts the area of an enclosed object and exports the result to a table in the current drawing area.
Arrange Tool (ARRANGETOOL)	Aligns multiple objects left, right, top, bottom, center, vertical or laterally.
Attribute Increment (ATTINC)	Attributes values increment automatically or manually according to specified method.
Auto Layer (AUTOLAYER)	Customizes and predefines the associated layer of a command to streamline drafting workflow.
AUTOXLSTABLE	Allows to insert excel, and static block quantity, area and length and auto update the data according to the changes of the object.
Barcode (BARCODE)	Allows inserting the barcode to objects to corresponding paper documents and electronic drawing file.
Batch Print(BP)	Batch prints the drawing frames by pages.
Batch Purge (BATPURGE)	Batch purges the redundant blocks, layers, linetype, dimensions and text, etc in drawings.
Block Break (BLOCKBREAK)	Allows you to wipeout or break an object that is overlapped by a reference block.

Break Object (BREAKOBJECT)	Breaks the intersected lines and allows you to set the gap value.
CAD table to EXCEL (GC_CTE)	Converts sheets, composed by line/Spline and text/Mtext in CAD, to EXCEL.
Change Base (CHANGEBASE)	Modifies the base point position of the block.
Change Text (CHANGETEXT)	Modifies several texts simultaneously.
CIRCLE(C) Parameter	CIRCLE(C) parameter; Draws multiple concentric circles with one radius.
Collaboration	The GstarCAD Collaboration Tool is an embedded plugin available for GstarCAD platform aimed to help CAD designers work together among a single referenced drawing file at the same time, control drawing revisions and manage medium, big or complex projects with ease and reliability, reducing communication barriers across different industries.
Define Layout Viewport from Model Space(M2LVPORT)	Creates a viewport on layout space by selecting objects in the model space.
Dimension Coordinate (DIMCORD)	Marks X, Y coordinate values of the point.
Distance from Endpoint Snap	Allows to snap a certain distance from any endpoint of objects and the distance value can be modified at status bar at any time.
Divide Segments Snap	Allows snap the divided segment points of objects and the divided segment number can be modified at any time.
Export Coordinate (COEXPORT)	Exports the coordinate of the picking point to txt or xls files.
FILLET(I) Invert Parameter	Creates a reverse fillet by this option.
Frame Automatically (FRAMEAR)	Automatically searches for the frame, calculates according to the frame size, and arranges multiple drawings on a large-format drawing reasonably.
Free Scale (FREESCALE)	Scales an object without restrictions under three modes; Non-Uniform, Rectangle and Free.
Freeze Other Layer	Freezes other layers except the layer where the selected object is

(LAYFRZOTHER)	located.
Graphic Compare (OCMP)	Compares graphic of two groups of objects or two files.
GstarCAD tools (12 functions)	Allows you to quickly draw the industry drawings with GstarCAD tools
Import HPGL/2 (IMPORTHPGL)	Imports a PLT files.
Get Selection by Block Name (GETBLKSEL)	Multi-selects objects with the same name in specified area.
Get Selection by Object Type (GETENTSEL)	Multi-selects objects with the same entity type in specified area.
Get Selection by Layer (GETLAYSEL)	Selects all the objects in specified layer and specified region at one time.
Get Selection by Color (GETCOLSEL)	Quick selects the objects with the same color.
Get Selection by Object/Layer (GETENTLAYSEL)	Selects entities by entity type and layer.
Get Selection by Object/Color (GETENTCOLSEL)	Selects entities by entity type and color.
Get Selection by Layer/Color (GETLAYCOLSEL)	Selects entities by color and layer.
Dimension Coordinate Position (HCZZBD)	Dimensions the coordinate position.
Layer Draw Order (LAYDRAWORDER)	Changes the order of the layers by bringing to front or sending to back.
Lock Other Layers (LAYLCKOTHER)	Locks other layers except the layer where the selected object is located.
Layer Unlock All (LAYULKALL)	Unlocks all layers.
Off Other Layers (LAYOFFOTHER)	Turns off other layers except the layer where the selected object is located.

Magnifier (MAGNIFIER)	Views a specific area of your drawing as a magnifier with the capability of snap points without performing zoom in/out on big drawings.
OFFSET(B) Both Sides	Offsets to both side, no need to operate twice.
Outline (OUTLINE)	Generates the outline by clicking the closed region.
Pline Boolean (GC_BOOLOP)	Operates the closed pline with union, intersection and subtraction.
Print PLT(PRINTPLT)	Prints the generated PLT file.
QR Code(QRCODE)	Extracts data or inputs data to generate QRcode which can be scanned by mobile device to obtain data.
Rapid Distance (RAPIDDIST)	Measures distance and angle between 2D objects along X, Y axis rapidly by moving mouse.
RECTANGLE(O) Parameter	RECTANGLE(O) parameter, Draws an rotate rectangle with (O)option
Region Scale (REGSCALE)	Selects a region of a drawing to be cut and copied to a new location.
ROTATE(Multiple)Parameter	Copies many objects with different rotate angles, or draw circles array.
Shortcut Customization (CUSTACC)	Customizes the shortcut key.
Spline to Pline (Sptpl)	Converts spline to polyline according to the accuracy (number of segments of the arc) that the user assigns.
Statistics Summation (KLL01)	Sums up the selected text or Mtext.
Symmetric Draw	Directly draws symmetrical shapes, it can omit the operation of the mirror.
Text Incremental Copy (GC_dztext)	Accomplishes kinds of incremental methods for text.
Text Align (TEXTALIGN)	Aligns text along X or Y coordinates, or along a line of specific direction.

Text Match (TEXTMATCH)	Matches both text and Mtext attributes in the current drawing, avoiding select and edit text attributes one by one.
Text Online (TEXTONLINE)	Distributes the text uniformly along a selected spline, polyline or arc. It can also create text online quickly for multiple curves.
Total Length (MEASUREGEOM)	Inquire total length of the selected lines.
WIPEOUT (supports circle and arc)	Generates wipeout by clicking circle or a pline object contains arcs.
.....	

Besides developing plenty of innovative features, GstarCAD has improved the basic operations in order to simplify the operation steps. For example, Adds the angle parameter to line and spline, when drawing an object, you can not only set the value between object and X axis, but also set the angle parameter between the selected line and the previous line; Adds the concentric circle and rotated rectangle; Adds multiple copies in rotate command, realize the copy rotate and circle array; Adds divided by segment and distance from endpoint, layout by path, etc. to accomplish the liner array. Supports invert fillet option in fillet command which is welcomed by designers.

The innovative features enhance your drawing efficiency greatly.

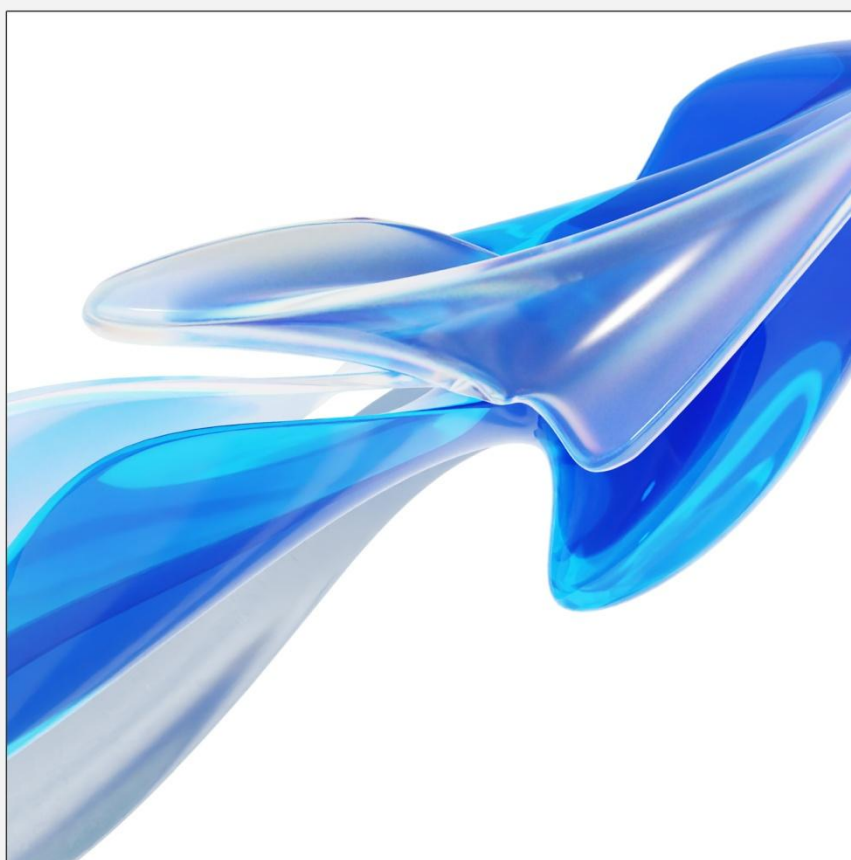


## 6. Conclusion

Through the above comparison, we can make the following conclusions: GstarCAD 2025 is far advantageous in terms of compatibility, functionality, user experience and so on. Compared with ZWCAD 2025, GstarCAD is a better choice.



**GstarCAD 2025**



■ <https://www.gstarcad.net/>