



GstarCAD 2026 vs ZWCAD2026

GstarCAD 2026



GstarCAD

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GstarCAD 2026 VS ZWCAD 2026

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**, **PDF Import** and **Data Extraction** further enhance usability. Let's take a closer look at these exciting updates!

1. Comprehensive Evaluation

- **Rich Innovative Features:**

In terms of 2D drawing, GstarCAD 2026 is smooth and stable, fully compatible with various file formats including DWG, DXF, PDF, DGN, and DWF/DWFX. It offers a comprehensive set of features for layers, text, annotations, blocks, and printing. Additionally, it supports features like Drawing Lock, DWG Convert, Auto Merge, Batch Purge, Layout Merge, Layout by path, Pline Boolean, Quick Measure, Super Axonometric, Cross to break, Draw tables, and AutoXlstable, making it more aligned with users' actual usage scenarios and enhancing design efficiency. These features are not currently supported by ZWCAD 2026.

- **Powerful Solid Editing Features:**

GstarCAD 2026 provides plenty of 3D modeling and solid editing features, compatible with various 3D drawings such as 3DS, IFC, STP, IGS, and RVT. It also includes built-in architectural and BIM modules to fully meet users' design needs. ZWCAD 2026 does not support Polysolid, Section Plane, Convert to NURBS, Extract Edges, and other 3D functions, nor does it support opening IGS and RVT 3D drawings. Its BIM capabilities are also less comprehensive than those of GstarCAD 2026.

- **Leading Performance in Routine Operations:**

The performance of open, save, move, undo, and drawing recover in GstarCAD 2026 are basically the same level to ZWCAD 2026. Operations like regeneration, mirror, copy, and past have surpassed ZWCAD 2026, achieving international leading level, significantly improving design efficiency.

- **Complete Secondary Development Interfaces:**

GstarCAD 2026 supports multiple secondary development interfaces including GRX, .NET, LISP, and Python, ensuring the reliability and correctness of these interfaces, making secondary development and migration more efficient and cost-effective. ZWCAD 2026 does not currently support the Python interface.

● **Cross-Platform Usage:**

GstarCAD supports cross-platform compatibility, working on Windows, Linux, HarmonyOS (Chinese version), and MacOS. It maintains consistent operating habits and interaction design across different system versions, allowing users to switch devices seamlessly. In contrast, ZWCAD Professional version currently only supports Windows, and supports Linux for Chinese version, with no support for MacOS. Its HarmonyOS version is limited to the personal version, which does not support commercial use.

● **Efficient Cloud Collaboration:**

GstarCAD supports cloud collaboration, providing a new collaborative design model that transfers from traditional CAD to cloud-based CAD. Users can access drawings or design on PC, tablet, mobile, or web, enabling project collaboration anytime and anywhere, with real-time communication, collaboration, and sharing based on drawings, thus enhancing work efficiency a lot. ZWCAD 2026 does not have built-in collaboration features and it only supports uploading documents to the cloud. The collaborative functions of GstarCAD 2026 are more complete and convenient.

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 2026.

The chart below provides an overview of the the performance. We build an operation speed comparison of the basic features between GstarCAD and ZWCAD.

Operation Time Comparison between GstarCAD 2026 and ZWCAD 2026

Testing environment:

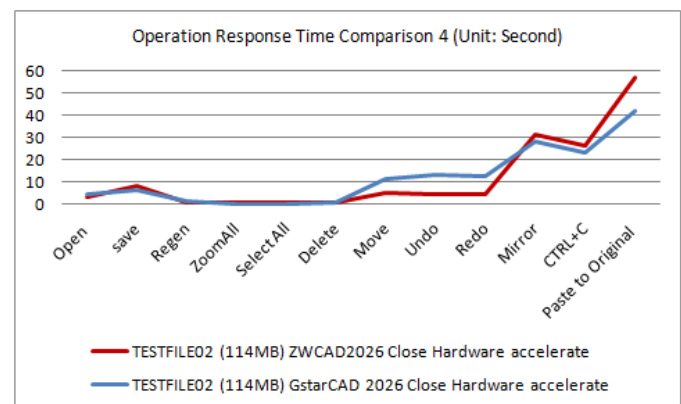
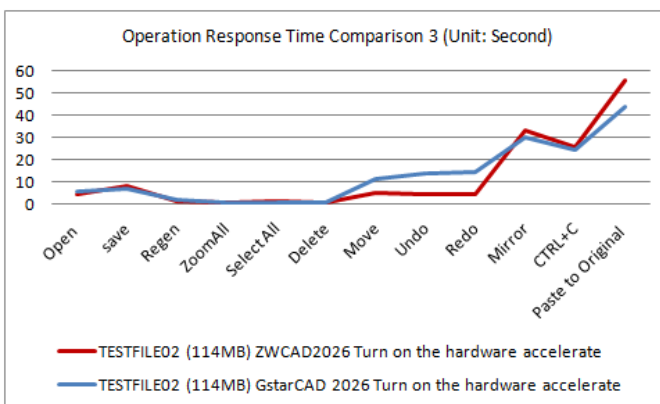
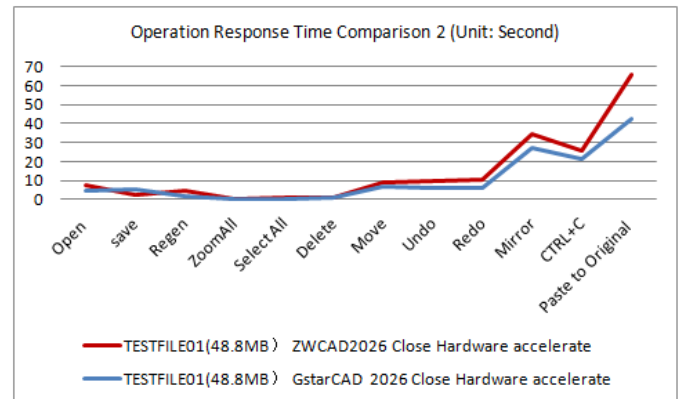
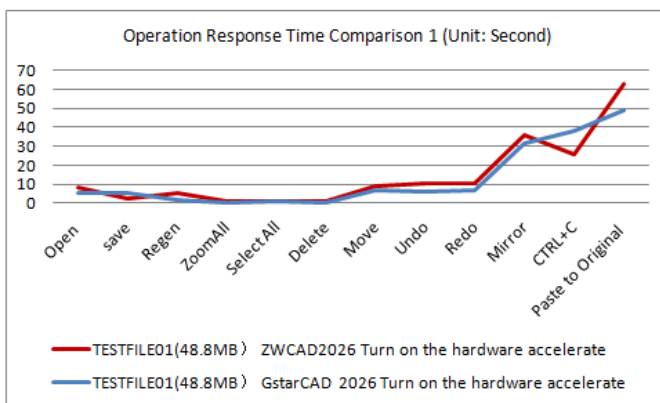
Computer Model	ASUS Desktop
Operating System	Windows 10 Professional 64-bit
Processor	Intel Core i5-10400@ 2.90GHz Hexa-core (14 nm)
Memory	16 GB (Kingston DDR4 3200MHz 16GB)
Graphic Card	Intel UHD Graphics 630 (128MB/ASUS)

The detailed test data is shown in the following table:

Test items	Test description (time unit: s)	TESTFILE01(48.8MB)				TESTFILE02 (114MB)			
		ZWCAD	GstarCAD	ZWCAD	GstarCAD	ZWCAD	GstarCAD	ZWCAD	GstarCAD

		Turn on the hardware accelerate	Turn on the hardware accelerate	Close Hardware accelerate	Close Hardware accelerate	Turn on the hardware accelerate	Turn on the hardware accelerate	Close Hardware accelerate	Close Hardware accelerate
Open	Click the Open button to execute the OPEN command. After selecting the drawing, click the Open button to count down the time until the drawing is fully opened.	8.17	4.99	7.35	4.65	4.33	5.79	3.32	4.44
save	Execute SAVEAS to modify the drawing file name. The time starts from clicking the Save button to the time required for the complete saving.	2.24	5.24	2.28	5.20	8.27	7.05	8.10	6.42
Regen	Enter RE, press Enter to start the timer, and the timer will end when the command line returns to normal.	5.10	1.77	4.87	1.98	1.15	1.90	0.70	1.34
Zoom All	After the objects are reduced, it will prompt to regenerate and then stop. Enter Z, press Enter, enter A, and press Enter to count down until the objects are fully displayed.	0.62	0.45	0.55	0.55	0.61	0.66	0.54	0.34
Select All	the time required for all objects to be highlighted and the cursor to return to normal	0.75	0.60	0.61	0.43	1.41	0.81	0.66	0.40
Delete	After selecting all the objects, enter E and press Enter to start the timer until all the objects disappear and the cursor returns to normal.	0.82	0.38	0.60	0.60	0.66	0.63	0.75	0.69
Move	Restart the software and open the drawing. After selecting all the objects, enter M, press Enter, and specify a base point and target point at will. The timer starts when you click the designated target point and ends when the movement is completed.	9.03	6.51	8.72	6.73	5.15	11.46	4.94	11.18
Undo	After moving the whole drawing, press U and press Enter to cancel.	10.27	6.40	9.91	6.37	4.54	14.22	4.31	13.48
Redo	After undoing the whole drawing move, enter REDO and press Enter to completely restore move operation that was just undone.	10.51	6.48	10.12	6.38	4.59	14.42	4.42	12.64
Mirror	After selecting all drawings, enter MI, press Enter, specify a mirror axis, and when prompted whether to delete the source object, enter Y and press Enter. The time required count until the drawing is completely shown.	35.65	31.42	34.45	27.48	33.22	30.39	31.75	28.24

CTRL +C	Restart the software, open the drawing, select all objects, press CTRL +C to start timing, The time count until the drawing is completely shown.	25.47	37.87	25.40	21.02	26.10	24.32	26.54	23.11
Paste to Original	After copying to the clipboard, open the drawing for the paste test, enter the PASTEORIG (paste to original coordinates) command, and press Enter to start. The time count until complete the paste command.	62.72	48.8	65.60	42.30	55.91	44.02	56.85	42.08



For mid- and low-end graphics cards, there is little difference in the performance of the two softwares in routine operations when hardware acceleration is turned on or off. In terms of opening, saving, moving, undoing and restoring performance, GstarCAD and ZWCAD each have their own advantages and disadvantages, which are greatly related to the drawings.

In terms of regeneration, mirroring, copying, and pasting performance, GstarCAD is better than ZWCAD. Among them, the mirror line specified by ZWCAD is very laggy, which affects the use. In terms of zooming all, selecting all, and deleting performance, GstarCAD and ZWCAD are basically the same.

3. Features Comparison

GstarCAD 2026 offers more practical features according to user needs. With nearly a hundred more functions than ZWCAD 2026, GstarCAD has obvious advantages.

What's more, the interface and functional details of ZWCAD 2026 still have a big gap with GstarCAD 2026.

3.1. File Format Comparison

Compatibility		ZWCAD 2026		GstarCAD 2026	
		Import	Export	Import	Export
Files format	DWG R 14/2000/2004/2007/2010/2013/2018	√	√	√	√
	DXF R 12/2000/2004/2007/2010/2013/2018	√	√	√	√
	DWS	√	√	√	√
	DWT	√	√	√	√
	Sheet Set (*.dst)	√	√	√	√
	PDF	√	√	√	√
	DWF / DWFX	√	√	√	√
	DGN V7 /V8	√	√	√	× (GstarCAD for Linux supports)
	PLT / HPGL (*.plt, *.hpgl)	√	√	√	√
	Raster images (*.bmp, *.jpg, *.png, *.tif)	√	√	√	√
	SVG	×	√	√	√
	WMF (*.wmf, *.emf)	√	√	√	√
	ACIS (*.sat)	√	√	√	√
	3DS (*.3ds)	√	/	√	/
	STL (*.stl)	×	√	√	√
	Package PS (*.eps)	/	×	/	√
	DXX Extraction (*.dxx)	/	×	/	√
	SXF (*.sfc, *.p21) (official Japanese CAD data exchange standard)	√	√	×	×
	JWW (*.jww) (CAD drawing format widely used in Japan)	√	/	×	×
	IFC (*.ifc)	√	×	√	√
	STEP (*.ste, *.stp, *.step)	√	/	√	/
	IGES (*.igs, *.iges)	×	/	√	/

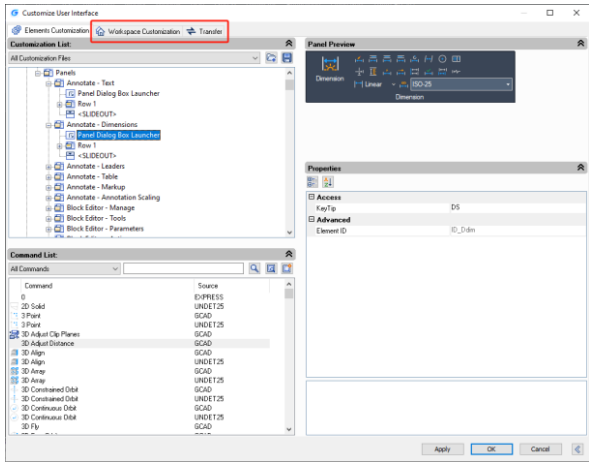
	RVT (* rvt)	×	/	✓	/
	dae 、 fbx 、 obj 、 ply	×	/	✓	/
Data files	Interface files (* . cui , * . cuix)	✓	✓	✓	✓
	Menu file (* .mnu)	✓	✓	✓	✓
	Alias files (* .pgp)	✓	✓	✓	✓
	Fill file (* .pat)	✓	✓	✓	✓
	Font files (* .shx)	✓	✓	✓	✓
	Shape file File)	✓	✓	✓	✓
	Linetype files (* .lin)	✓	✓	✓	✓
	Print style sheet files (* .ctb , * .stb)	✓	✓	✓	✓
	Print profiles (pc 5/ pc 3, pmp)	✓	✓	✓	✓

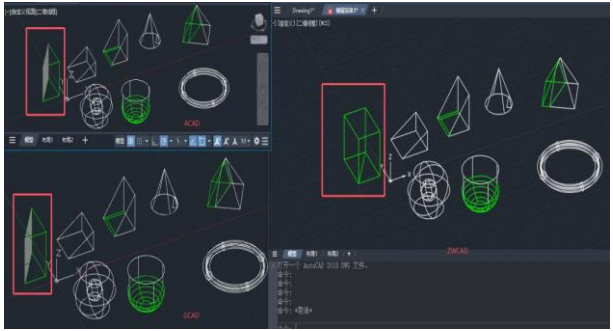
3.2. Secondary Development Interface Comparison

Interface Type		ZWCAD 2026	GstarCAD 2026
Class ARX (C + +)		✓	✓
Lisp	LISP	✓	✓
	DCL	✓	✓
	FAS	✓	✓
	VX	✓	✓
VBA		✓	✓
COM		✓	✓
.NET		✓	✓

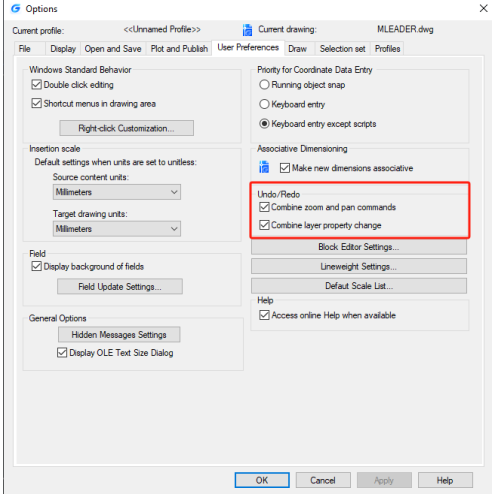
4. Important Features Comparison

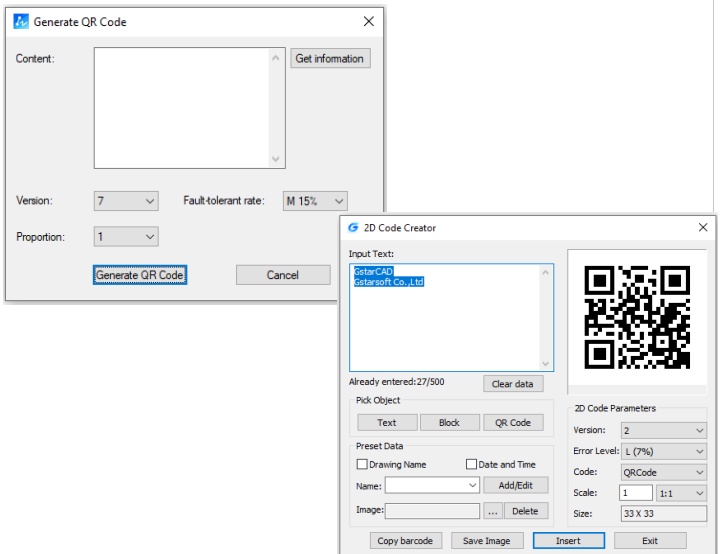
The basic functions of the two CAD software are basically the same. Here we only list some important functions and the special functions for reference. Among them, the advantages of GstarCAD are highlighted in green, and the advantages of ZWCAD are highlighted in yellow.

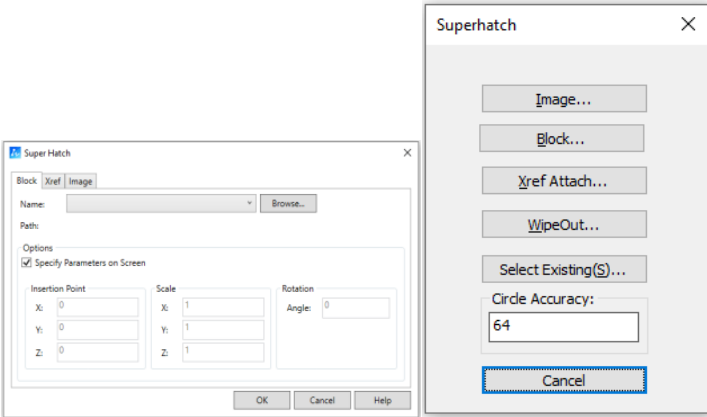
Features	ZWCAD	GstarCAD	Comparison
User Interface			
Workspace (2D Drafting, Classic Interface, 3D modling)	✓	✓	Functionality consistent
File tab bar	✓	✓	The functions are basically the same ● ZWCAD supports dragging files into independent windows ● GstarCAD file list menu options are richer, providing new, open, save, etc.
Layout tab bar	✓	✓	The functions are basically the same ● The position of GstarCAD layout labels is aligned with the status bar by default, and the drawing area has more space ● GstarCAD layout list menu options are richer, providing new, select, publish, etc.
Viewport scrollbar	✓	✓	/
Custom workspace, menu, Ribbon , Toolbar, shortcut keys	✓	✓	The functions are basically the same ● GstarCAD layout is more intuitive and operation is more convenient 
Configuration file migration	✓	✓	Functionality consistent

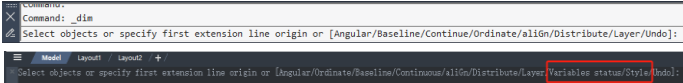
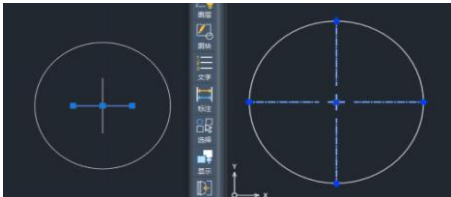
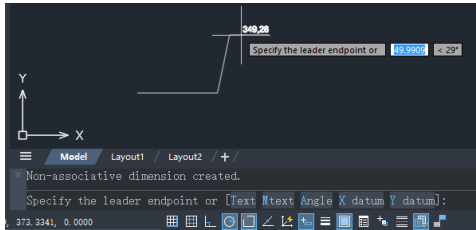
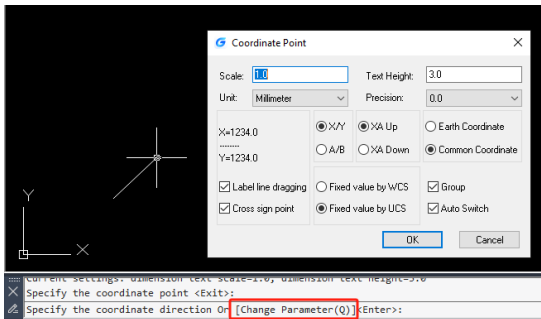
File			
Open (New, Open, Import)	√	√	● ZWCAD 's large memory mode and GstarCAD 's efficient memory management model support the processing of complex drawings ● For some 3D drawings in ZWCAD , the preview effect is inconsistent with the actual opening effect, and it is also different from ACAD , as shown below: 
Save (Save, Save as, Export)	√	√	Please refer to the file format compatibility
Etransmit, Send	√	√	Functionality consistent
Drawing Utilities, Audit, Recover, drawing recovery manager, Update block icons	√	√	Functionality consistent
DWG Compare	√	√	Functionality consistent ● The operation options are displayed in the Ribbon in ZWCAD ● The operation options are displayed on the toolbar in GstarCAD
Cloud Storage	√	√	● ZWCAD uses Baidu Cloud and Huawei Cloud ● GstarCAD uses GstarCAD Cloud storage
Drawing lock and unlock	√	√	Functionality consistent
Digital Signature	√	√	Functionality consistent.
Drawing Lock (All options)	×	√	/
DWG Convert (DWGCON VERT)	×	√	/
Drawing Unit (DWGUNIT S)	×	√	/
Drawing Merge	×	√	/
Batch purge	×	√	/

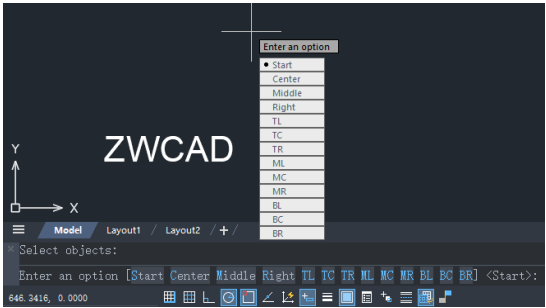
Print			
Print	√	√	The functions are basically the same ● GstarCAD supports multiple printing qualities, which is richer than ZWCAD ● GstarCAD supports viewing print and publish details (VIEWPLOTDETAILS), but ZWCAD does not support
Batch print/Smart batch print	√	√	The "Smart Batch Print" function of the old version of ZWCAD is basically the same as the "Batch Print" function of GstarCAD. ● The names of some functions in ZWCAD are misleading. For example, "Select Batch Drawings" actually means selecting multiple drawing frames in the current drawing, and "Highlight" means highlighting the drawing print order. Not as intuitive as GstarCAD . ● ZWCAD supports multi-file printing, but GstarCAD does not support it yet. ● ZWCAD 2026 has optimized smart batch print
Print PLT	√	√	"Batch Print" in ZWCAD and "Print PLT " in GstarCAD are basically the same.
Arrange Frame Automatically	√	√	The functions and operations are the same, but the effects are quite different ● ZWCAD does not support layout preview, and the effect of automatic layout is not ideal, and the drawing content cannot be seen. ● GstarCAD supports arrange frame preview, and the arrange frame effect is very nice
Publish	√	√	Functionality consistent
Auto Publish	×	√	/
Rapid Publish (PUBLISHRASTER)	√	×	/
Edit			
Frame selection, lasso selection, cycling selection	√	√	Functionality consistent
Fast Select	×	√	● ZWCAD 2026 enhanced the selection function. Chain selection and reverse selection are added, which are easy to operate and improve the selection efficiency. Two more commands are added based on the usage scenarios: Select Similar Objects and Enhance Selection. The operation is simpler and more friendly to new users . ● GstarCAD 's Fast select function is similar to chain selection, but it can only select adjacent objects on the left and right.
Chain selection, reverse selection	√	×	
Select all, fast Selct, filter Select/Graphic Search(FILTER), Get Selection Set	√	√	
Selection tools (such as Get Selection by Object	√	√	The functions are basically the same ● ZWCAD also supports Get selection by line type, Get selection byline type ratio/line width/character height/text alignment/text

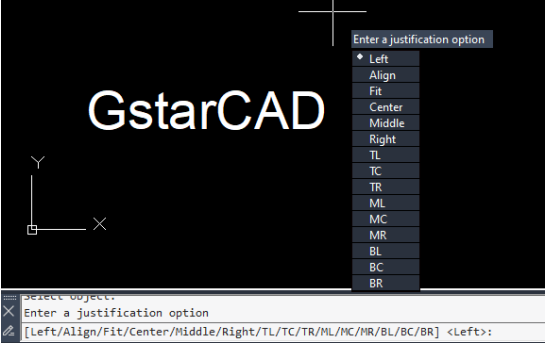
Type, Get Selection by Block Name,ect)			style/dimension style/ hatch pattern name GstarCAD also supports Get Selection by Layer, Get Selection by Color, Get Selection by Object/Layer, Get Selection by Object/Color, Get Selection by Layer/Color
Undo, redo, restore the delete Objects	✓	✓	The functions are basically the same GstarCAD supports merging zoom, pan and layer operations. After merging, multiple zooms and pans can be undone at once, and multiple consecutive layer operations can also be undone. Undo once, no need to repeat multiple times 
Cut, copy, Copy with base point, Paste, Paste as block, paste to the original Coordinates, Paste special	✓	✓	Functionality consistent GstarCAD doesn't support copy and paste settings
Copy link	×	✓	/
Find and Replace	✓	✓	Functionality consistent
Deleting Duplicate Objects (OVERKILL)	✓	✓	The functions are basically the same ZWCAD provides a separate command DELDUPL to delete overlapping lines (non- UI)
Delete Overlapping lines	✓	✓	GstarCAD 's delete duplicate objects and overlapping lines are both OVERKILL commands.
Layer draw order (LAYDRAW ORDER)	×	✓	/
Draworder by Color (CDORDER)	×	✓	/
Break Object (BREAKOBJ ECT)	×	✓	/
Move/Copy/Rotate (MOCORO)	×	✓	/

Extended Clip (CLIPIT)	×	√	/
Region Scale (DYJT / REGSCALE)	×	√	/
Layout by path (LAYOUTPATH)	×	√	/
Draw			
Hatch	√	√	The functions are basically the same ● ZWCAD puts the hatch option in the Ribbon area ● Hatch options in GstarCAD use the dialog box mode.
Rectangle	√	√	The functions are basically the same ● ZWCAD supports the creation of concentric rectangle and concentric polygons
Spline (Fit point, control vertices)	√	√	Functionality consistent
Revision Cloud	√	√	The functions are basically the same ● ZWCAD supports to create ellipse revision cloud and circle revision cloud, and can retain center grip after converting objects into revision cloud ● GstarCAD doesn't support ellipse revision cloud and circle revision cloud and couldn't keep the center grip
Divide by object, Divide by segment	√	√	Functionality consistent
Array	√	√	Functionality consistent
Hyperlink	√	√	GstarCAD has more functions, including support for selecting recently used files/web pages, right-clicking to copy the hyperlink, adding hyperlinks to my favorites, etc.
QR code, barcode code	√	√	GstarCAD supports more options than ZWCAD. 

Super hatch	√	√	GstarCAD supports wipeout hatch, selecting the existing blocks or entities for hatch, and support for setting circle accuracy. 
Free scale (FREESCALE)	√	√	The enhanced scale (EXSCALE) function of ZWCAD is similar, but it does not support specifying base points, and is not as complete as that of GstarCAD .
Outline (OUTLINE)	×	√	/
Align tool (ALIGNTOOL)	×	√	/
Arrange tool (ARRANGETOOL)	×	√	/
Pline Boolean (GC_BOOL OP)	×	√	/
Spline to line (SPLINE2LINE) , Spline to polyline (SPTPL)	×	√	/
Line to Pline (LINE2PL)	×	√	The two functions are similar, but Line to Pline in GstarCAD 's has an additional option to set the precision.
Join Lines (JOINL)	√	×	
Smooth curve	√	×	/
Angle Bisector (_angdiv)	√	×	/
Generate complementary Arc (_arccmp)	√	×	/
Linetype between continuous and Dashed2	√	×	/

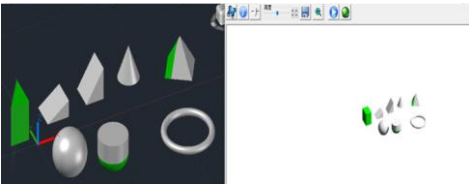
Dimension			
Smart Dimension (DIM)	√	√	The functions are basically the same ZWCAD has added "Variable Status" and "Style" branches 
Quick Dimension (QDIM)	√	√	Functionality consistent
Centerline	√	×	Centerline and center mark functions in GstarCAD are under development and are expected to be implemented in GstarCAD2027 (the current center mark function is limited)
Center mark/circle Heart mark	√	√	
Area table	√	√	The functions are basically the same ZWCAD supports drawing area and creating boundary sets
Export Coordinate (COEXPORT)	×	√	ZWCAD supports "Export to txt" option that can export the created point coordinates to txt, but it is not as flexible as this function of GstarCAD, and GstarCAD supports exporting to txt and xls formats
Coordinate Point (HCZZBD, DIMCORD)	×	√	ZWCAD supports "DIMORDINATE" command, which can also mark coordinate positions, but only X or Y coordinates. GstarCAD can directly display the XY coordinates of coordinate points and supports settings such as scale, unit, and precision.  
Change Z coordinate (changeZ)	×	√	ZWCAD supports "change Z value of Coordinate to 0" function, which is not as flexible as GstarCAD's "change Z coordinates"
Fast measure	×	√	/

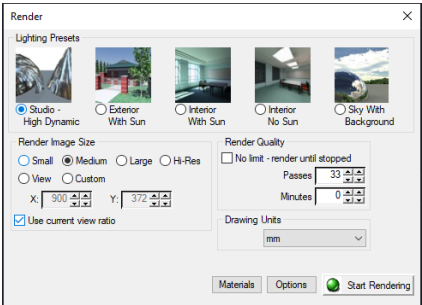
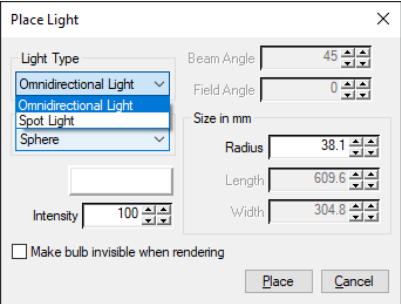
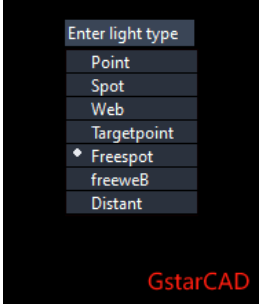
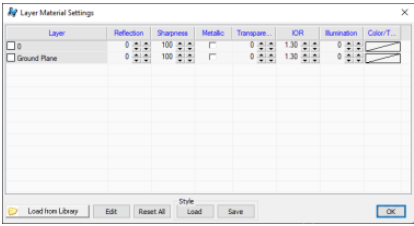
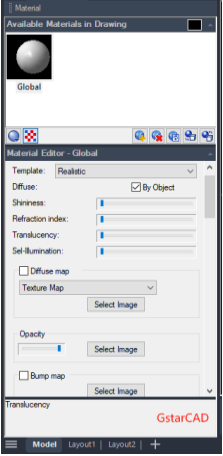
(RAPIDDIST)			
Change Dimension Text (CHGDIMXT), Change Dimstyle, Update Dimension, (DIMUPDATE)	×	√	/
Globle Attach Leader to Annotation, Detach Leaders from Annotation, Attach Leader to Annotation	×	√	/
Enhanced Ordinate dimension	√	×	/
Object dimension	√	×	/
Dimension Merge, Dimension Align,Dimension Text Dodge	√	×	/
Set as current dimension style, save as New style	√	×	These functions are all available in dimstyle in GstarCAD, but ZWCAD extracts them into separate commands and made some optimizations.
Reverse dim Text, chagne dim Text color, add or delete dim lines, Delete dimension	√	×	/
Size Drive	√	×	/
Text			
Scale Text (SCALETEXT)	×	√	/
Justify text (JUSTIFYTEXT)	√	√	ZWCAD supports"JUST" command, but the two branches are slightly different. 

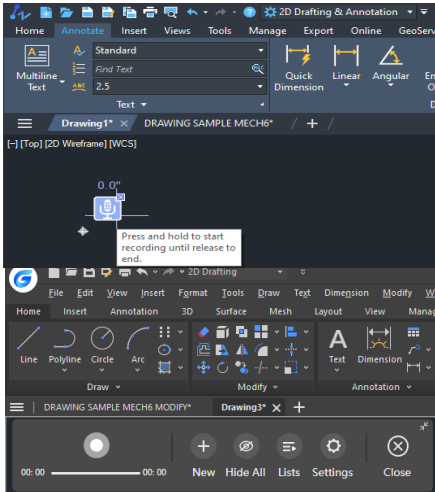
			
Text increment (GC_DZTEXT)	×	√	/
Statistical summation (KLL01)	×	√	/
Text Online (TextOnLine)	×	√	/
Text outline (EXPLODETEXT)	×	√	/
Enhanced text editor (MMTEXT)	×	√	/
Make Rtext (RTEXT), Change Rtext	×	√	/
Document Input	×	√	/
Change Text (CHANGETEXT)	×	√	/
Text Match (TEXTMATCH)	×	√	/
Change Text Style (CHGSTY)	×	√	/
Chinese Characters Split (TXTSPLIT)	×	√	/
Character Break (TXTBREAK)	×	√	/
Change One Character (CHGTX)	×	√	/
Change Text Height/ Text Width/Text Angle, /Text Position (TXTHEI, TXTWID, TXTANG, TXTPOS)	×	√	/
Delete Annotation (WZOFF)	×	√	/
Adjust Character (TTL2)	×	√	/

Glossary Storeroom(CHKCK)	×	√	/
Modify Text_Text Height/Width Factor/Angular/Obliquing Angle/Options (TXT40, TXT41, TXT50, TXT51, EDTXT)	×	√	/
Current Style, Change text height	√	×	These functions are available in the property panel. ZWCAD has made them into separate commands in advance.
Text Height Match	√	×	/
Convert Text to Pline	√	×	/
Convert Mtext to Text	√	×	/
Add Under line, Delete Under line	√	×	/
Layer			
Auto Layers (AUTOLAYER)	×	√	/
Isolate Layer to Current Viewport (LAYVPI)	×	√	/
Off Other Layers (LAYOFFOTHER)	×	√	/
Change Object Color in Same Layer (LAYCHGCOLOR)	×	√	/
Move Object in Same Layer(LAYMOVE)	×	√	/
Layer Browser (LAYERBROWSER)	√	×	/
Lock ALL Layer	√	×	/
Unlock non-selected layer, Lock Other	√	√	/
Unlock All Layers	√	√	/
Block			
Dynamic Block/Block parameters (BEDIT,	√	√	Functionality consistent

BPARAMETER. BACTION			
Block Authoring Palette	×	√	/
Block Table (BTABLE)	×	√	/
Attribute increment (ATTINC)	×	√	/
List Xref/Block Properties (XLIST)	×	√	/
Trim to Nested Objects (BTRIM)	×	√	/
Extend to block entities (BEXTEND)	×	√	/
Extend to Nested Objects (BLOCKTOXREF)	×	√	/
External Reference Relocate (CHGXREFPATH)	×	√	/
Modify block name/Rename Blocks	√	√	The functions are basically the same When selecting a block object for editing, you can rename it . • ZWCAD regards modifying block names as a separate command. You can modify this block, part of the block, or all blocks with the same name.
Blockscale (BSCALE)	√	×	/
Change Attribute Values (GATTE)	√	×	/
Reference			
DWG underlay, external reference	√	√	Functionality consistent
DWF underlay, PDF underlay	√	√	Functionality consistent
DGN Underlay	√	√	When inserting DGN underlay into ZWCAD, some information will be lost 

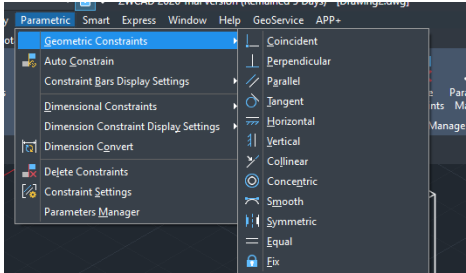
Raster image	✓	✓	The functions are the same, supporting all image files such as bmp , jpg , gif , tif , pcx , tga , png , ecw , jp 2 , j2k , cal , etc.
OLE	✓	✓	Functionality consistent
Point Cloud	✓	✓	● ZWCAD only provides basic functions such as point cloud display, trim, and section line extraction. ● GstarCAD supports undet point cloud tools with richer functions. 
View			
Redo, regen, pan, and zoom	✓	✓	Functionality consistent
Maximize and minimize the viewport (VPMAX, VPMIN)	✓	✓	Functionality consistent
Visual style, Shaded	✓	✓	Functionality consistent
Navigation View Cube (NAVCUBE)	✓	✓	GstarCAD supports navicube settings and other options 
3D Orbit View	✓	✓	ZWCAD does not support orbit viewing along the X-axis, Y-axis, and Z-axis (3DXORBIT , 3DYORBIT , 3DZORBIT)
Rendering	✓	✓	ZWCAD supports some rendering settings, but GstarCAD has better rendering effects and displays them on the current drawing, which can be viewed in real time . 

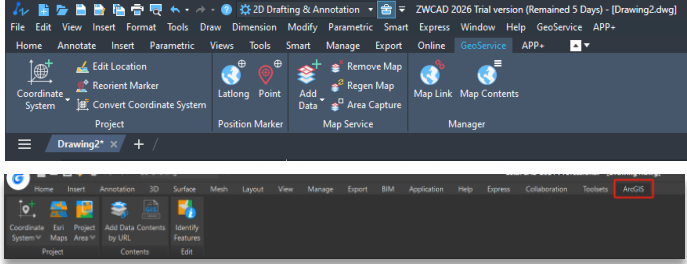
			
Light	✓	✓	GstarCAD has richer functions and more light source types  
Material	✓	✓	GstarCAD material panel has richer functions and is more user-friendly. It can flexibly adjust the reflectivity, refractive index, and transparency, and supports selecting images as texture maps. Transparency map or bump map, etc.  
Viewport Scale (VPSCALE)	×	✓	/
Viewport Sync (VPSYNC)	×	✓	/
Layout Merge (LAYOUTMERGE)	×	✓	/
Camera, 3DSwivel, 3Dwalk, 3DFly (3D DISTAN CE,	✓	×	/

3DSWIVEL, 3DWALK, 3DFLY			
3D			
3D Modeling (Box, etc. Extrude, Revolve, Sweep, Loft, Section, Interference, Profile, Flatshot	✓	✓	GstarCAD has more functions, such as Polysolid, section plane, live section, add jog, create Section
3D operation 3D rotate, 3D Array, 3D mirror, 3D Move, 3D align)	✓	✓	GstarCAD has more functions, such as 3DMOVE
3D Solid Editing	✓	✓	GstarCAD has more functions, such as extract edges, Fillet Edge, Chamfer Edge, Imprint
Surface	✓	✓	GstarCAD has more functions, such as supporting offset face, Create NURBS, convert to NURBS, show/hide/add/delete control vertices
Mesh	✓	✓	● GstarCAD supports convert to solid, convert to surface, and convert to mesh ● ZWCAD supports smoothing objects (increasing/decreasing smoothness) and optimize meshes
Region	✓	✓	Functionality consistent
Mass Properties	✓	✓	Functionality consistent
Tools			
Voice Manager/Smart Voice (VOICEMANAGER /SMARTVOICE)	✓	✓	The functions are basically the same ● ZWCAD has poor interactive guidance ● GstarCAD supports voice panel, which makes operation more convenient 

Mouse gestures/Smart Mouse (MOUSEGESTURES/SMARTMOUSE)	√	√	The functions are basically the same. ● ZWCAD supports adding gestures to other commands ● GstarCAD supports setting gesture line color
3D Mouse (3DCONNECTION)	√	√	/
Isolate	√	√	The functions are basically the same ZWCAD supports display/hide by color
Measure	√	√	● GstarCAD supports measure distance, radius, angle, area, total area, total length, volume. The functions are richer. ● ZWCAD supports measure distance, radius, angle, area, and total area. In addition, ZWCAD has also made separate measure commands for the total length of straight lines, the total length of arcs, and the sum of areas.
Data extraction	√	√	Functionality consistent
Data Link	√	√	Functionality consistent
Attribute extraction	√	√	Functionality consistent
Visual LISP Editor	√	√	Functionality consistent
Visual Basic Editor	√	√	Functionality consistent
Group	√	√	The functions are basically the same ● ZWCAD provides a dialog box. ● GstarCAD is operated in the command line.
Object Snap	√	√	The functions are basically the same GstarCAD supports snap divided segments, and ZWCAD supports snap the point cloud nodes.
Polar Tracking	√	√	Functionality consistent
Dynamic Input	√	√	Functionality consistent
Symmetric Draw	√	√	Functionality consistent
Table export (BGDC), CAD table to Excel (GC_CTE)	√	√	GstarCAD can export as excel or wps table (Chinese version)

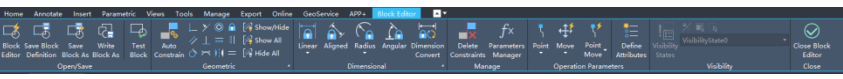
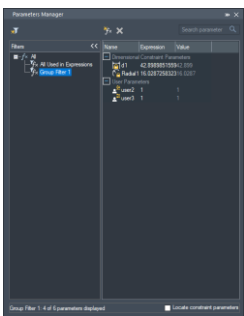
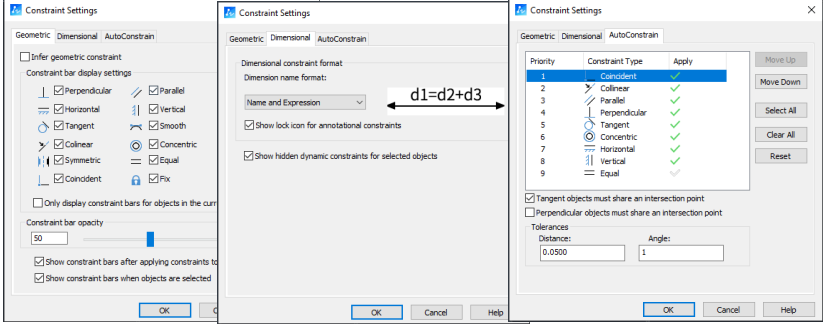
Magnifier (MAGNIFIER)	×	√	/
Graphic compare (OCMP)	×	√	/
Draw table (BGE)	×	√	/
AutoXIsTable (AutoXLSTabl e)	×	√	/
Make shapes (MKSHAPE)	×	√	/
System Variable Monitor (SYSVARMONITOR)	×	√	/
Drawing scale (SASCL)	×	√	/
Rotate cursor (RTCUR)	×	√	/
Draw Axonometric Line (SALPL)	×	√	/
Visual extension (ETT)	×	√	/
Normal Connect, Flex Connect (GXFILT, GXFSS)	×	√	/
Super Fillet (SFILLET)	×	√	/
Modify Lineweight (LCW)	×	√	/
Cross to Break, Control Break Width (CBK)	×	√	/
Modify Text	×	√	/
Supper Axonometric (SUPERAXON)	×	√	/
Application Manager (APPMANAGER)	×	√	/
CAD Standards (STANDARDS) (Configuration Standard, standard	√	×	/

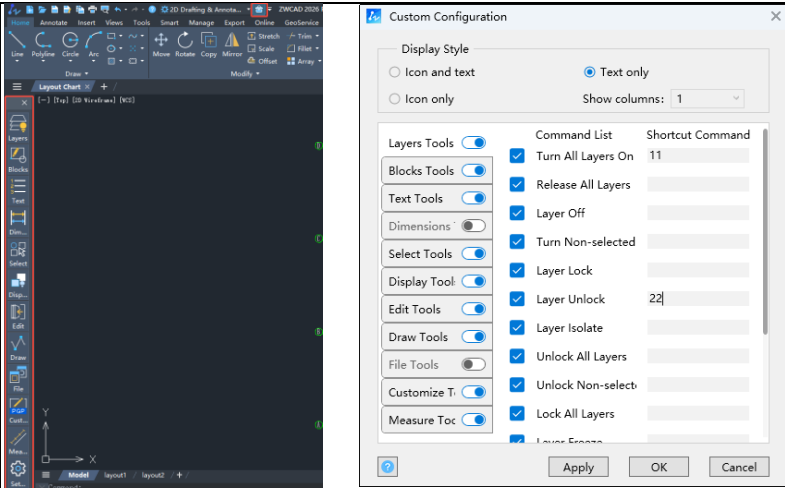
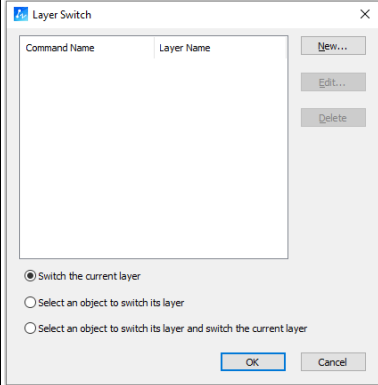
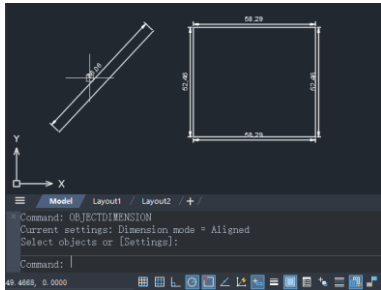
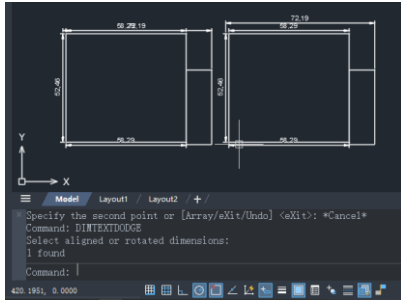
check)			
Scale List	√	×	/
Extended Plan	√	×	/
Delete Hatch	√	×	/
SXF Conversion (DWG2SXF,SXF2DWG, SXFIN, SXFOUT)	√	×	/
Size Driven (SIZEDRIVE)	√	×	/
Smart match, batch block, Object Count, similarsearch	√	×	/
Raster Image Vectorization	√	×	/
Parameter Constraints			
Geometric constraint	√	√	● ZWCAD supports "Auto Constraint " ● ZWCAD supports geometric constraints and dimension constraints in dynamic blocks
Dimensional constraint	√	√	
Automatic constraint	√	×	/
Infer Constraint	√	×	/
Parameters Manager	√	√	Functionality consistent
GIS			
Online map, Marking system, position mark	√	×	● ZWCAD has upgraded the original ArcGIS module to geographic location, and its functions are basically the same as AutoCAD .

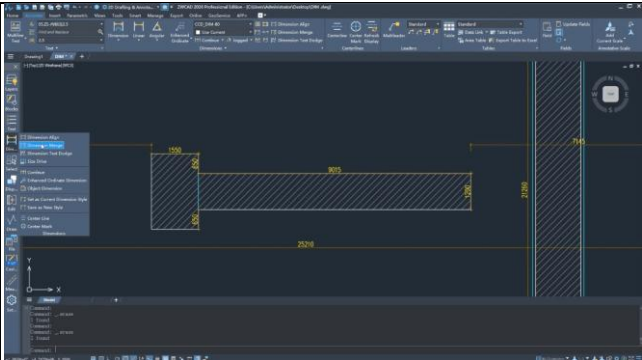
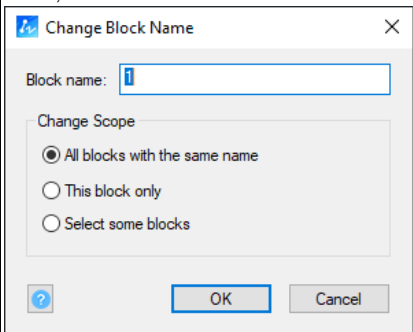
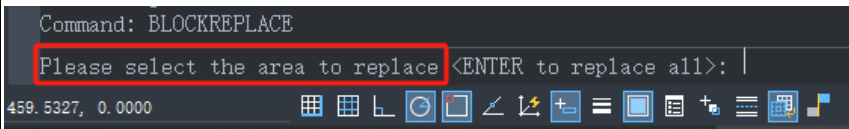
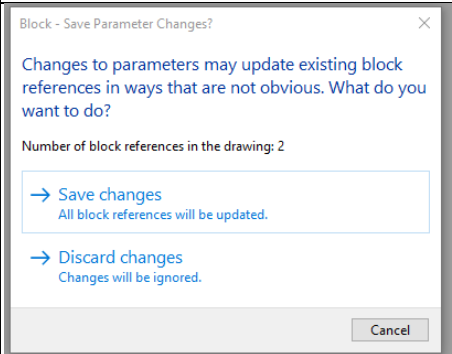
			GstarCAD 2026 does not support geographic location yet, but provides an additional plug-in ArcGIS. GstarCAD for Linux supports this feature, but the coordinate system relatively less than ZWCAD. 
BIM			
BIM Structural Panel	√	√	- GstarCAD supports displaying BIM information in the property panel and supports editing. ZWCAD property panel still displays as a block reference object and does not support displaying BIM information - GstarCAD supports moving, copying, etc. operations directly by selecting a certain entity, but ZWCAD does not support - The right-click menu of the GstarCAD structure panel supports operations such as display, isolation, zoom, expand all, collapse all, select, and highlight on a single entity. ZWCAD does not support - GstarCAD supports configuration the structure panel, such as group/sort, display/skip, options, etc., but ZWCAD does not support
Collaboration			
Cloud Storage	√	√	ZWCAD uses Baidu Cloud and Huawei Cloud GstarCAD uses GstarCAD Cloud storage
365	×	√	The combination of GstarCAD 365 and GstarCAD supports cross-terminal, multi-professional, and multi-scenario CAD collaborative design and project management, and provides cloud applications such as lightweight viewing, cloud storage, cloud annotation, instant messaging, and drawing management. Function. Currently, ZWCAD 2026 does not have a built-in collaboration function, but only has the function of saving documents to the cloud.

5. New Features Comparison

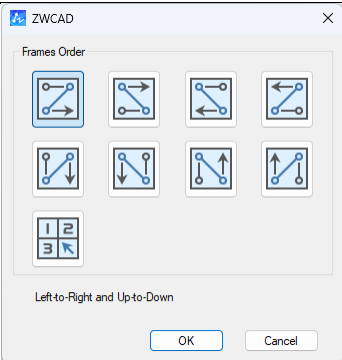
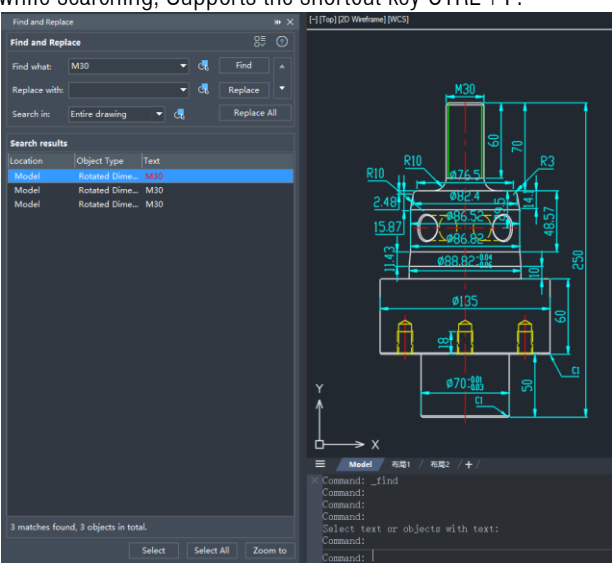
5.1. ZWCAD 2026 New Features

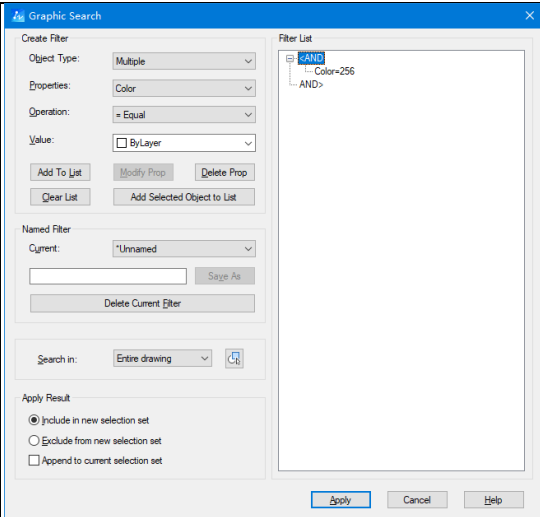
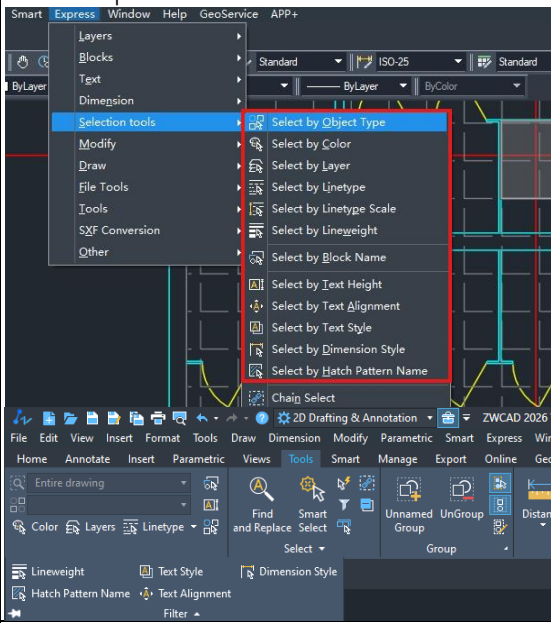
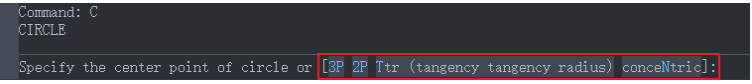
Features	Description	GstarCAD Supports	Comparison
Geometric Constraint		✓	GstarCAD does not support "Autoconstraint"
Dimension Constraint		✓	/
Constraint for dynamic Block		×	/
Parameters Manager		✓	Functionality consistent
Constraint Settings		✓	GstarCAD does not currently support the infer geometric constraint and auto constraint tab

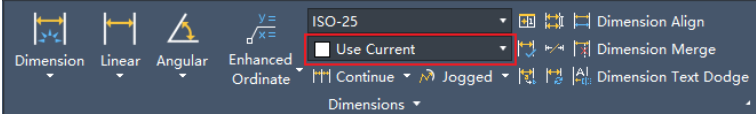
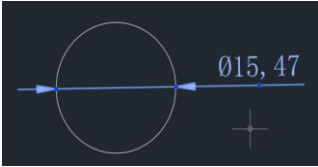
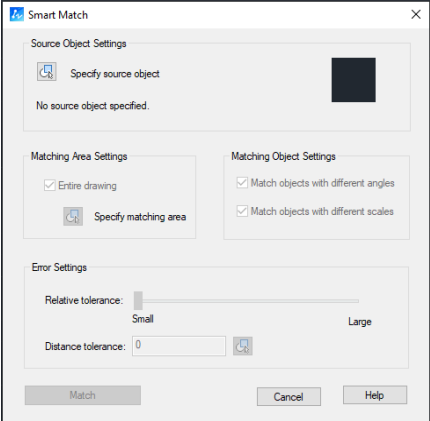
ZWCAD Toolbox		×	/
Layer Switch	Easily switch the current layer through custom commands 	×	/
Object Dimension	Automatically dimensions of all selected objects in batches (only for lines, polylines, 3D polylines, regions , wipeout) 	×	/
Dimension Text Dodge	Automatically adjust the position of the text in the selected dimension to avoid overlapping. 	×	/
Dimension Merge	Merge dimensions with the same dimension line direction and dimension type, and creates a new dimension within the extension lines of selected dimensions.	×	/

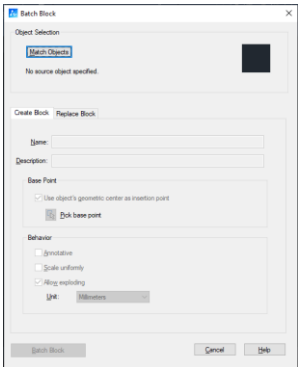
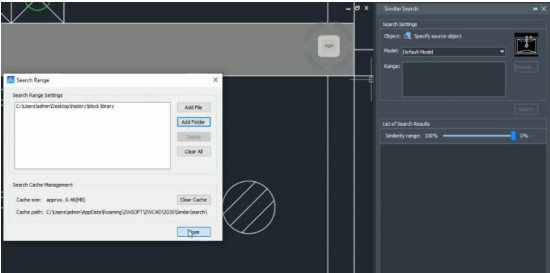
			
Block Attribute Edit	Quickly edit the value of the attribute block. Press Ctrl and double-click an attribute to display the in-place editor.	×	/
Change BLOCK name	Quickly change the names of all blocks with the same name, currently selected block, or some blocks. 	✓	GstarCAD supports Rename Block function when editing a block, which is similar to the function.
Save as Block in place Edit	You can apply block changes to new blocks without affecting old blocks, define the new block name and base point, or directly apply changes to old blocks without changing the block name after modifying the base point.	×	/
Block Replace		✓	The functions are basically the same. GstarCAD also provides a panel, while ZWCAD only supports the command Line Operation
Dynamic Block		✓	GstarCAD and AutoCAD dynamic blocks are bidirectionally compatible
Automatic matching paper size	Automatic matching paper size	✓	GstarCAD supports blocks, layers, polylines, straight lines, and specified Select frame to

	Frame Recognition Mode: Supports both 'Universal mode' and 'Conditional mode' to recognize frames. Single Document Auto-search: Supports multiple pointing or boxing of frames. Multi-document Batch Search: In multi-document printing scenarios, realize the customization of the finding range of picture frames, and support specifying the finding conditions of picture frames and the finding range of models/layouts in drawings. Frames Library Management: Support specifying the print settings and naming methods of commonly used block-referenced picture frames.	identify the drawing frame. However, ZWCAD classifies these methods into "General mode" and "conditional mode" The function of "drawing frame library management" is not currently supported by GstarCAD
Intelligent Plot Settings	New Options Enhance Black and White Print, Print Layout Improvements are added. Enriched Frame Sorting, provide 9 kinds of frame sorting methods.	

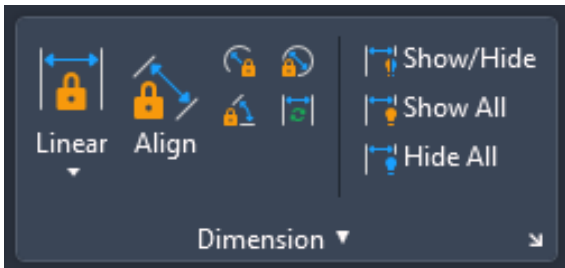
	 Multiple Naming Conventions Add Naming Method dialog box is added to provide diversified naming styles. Easy Catalog Generation Reuse drawing naming information to extend the ease of use of the smart plot function.		
Print Quality	New Print Quality option is added.	√	GstarCAD supports more printing qualities
PC3 Compatible	Supports direct reading of files saved by other companies PC 3 print configuration files; supports directly reading the pmp file configuration files; implementation Mutual compatibility	√	Same functions (ZW's own is PC 5)
FIND function optimization	Text search supports panel based operations, allowing for editing of search content while searching; Supports the shortcut key CTRL + F. 	√	Functionality consistent
FILTER function is optimized	The FILTER dialog is separated from the FIND dialog, and the dialog design and operation process are more streamlined.	√	Functionality consistent

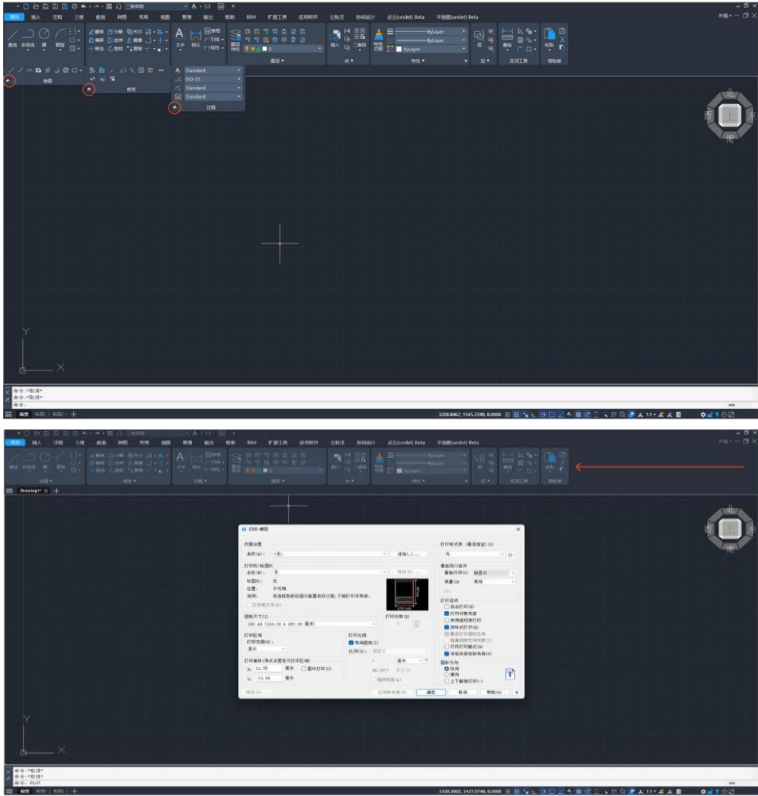
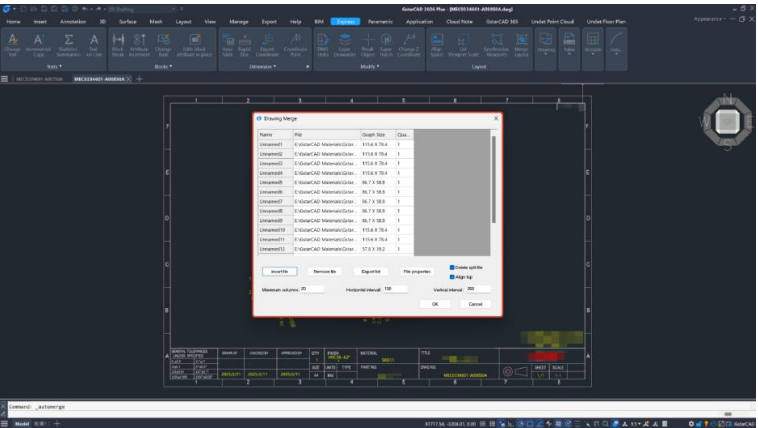
			
SMARTSEL function is optimized	Filter primitive objects support panel operation, and users can perform compound filtering based on object types and attributes.	√	GstarCAD 's "Selection Tool" is similar, but there is no panel
selecting objects for filtering in the drawing area	By clicking on objects in the drawing area, directly filter objects with the same attributes such as layer, color, line type, block name, etc. Support selecting menus and ribbon panels. 	√	The functions are basically the same. GstarCAD provides selection tools menu, but no Ribbon panel
Add Chain Selection function	Through the chain selection function, the connected loose wires can be quickly selected in batches.	×	GstarCAD 's Fast select is similar, but can only select adjacent objects.
Command line keyword click	During command execution, you can click a keyword on the command line to activate the command branch. 	×	GstarCAD Linux version support
Smart Dimension	The revamped DIM command supports intelligent recognition of selected objects and continuously creates dimension types that best fit the current context within the same command flow.	√	ZWCAD has added "Variable Status" and "Style" branches

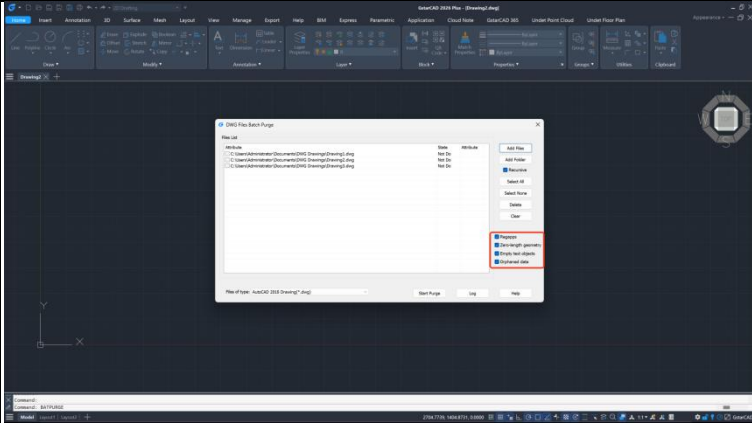
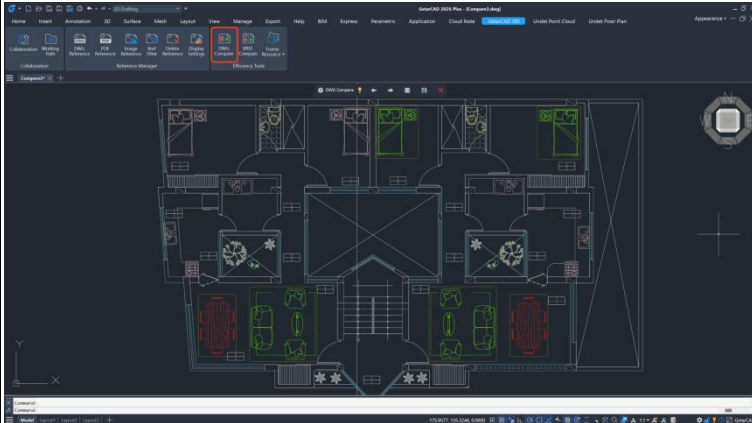
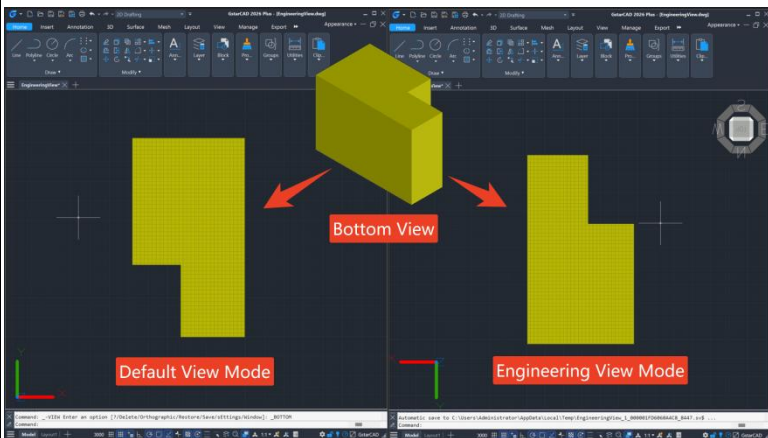
Support Setting Dim Layers	Support users to individually specify layers for dimensions, which can be set through the Ribbon menu or the system variable DIMLAYER. 	√	GstarCAD supports setting Dimension layers through DIMLAYER command, but no Ribbon Menu
Dimension Grip Menu	Implement dimension text pinch menu and dimension clip size line pinch menu, simplify dimension text editing operations, and provide simple and fast entry points for baseline dimension, continuous dimension, flipping arrows, and other operations. 	√	Functionality consistent
Centerlines and Center Marks	Add Centerline and Center Mark functions, supporting the creation of associated centerlines for selected line objects or center marks for selected circles or arcs, and the ability to adjust the appearance of centerlines/center marks.	×	Under development, it is expected to be available in GstarCAD 26 SP 1 or 2027
Display Optimization	Resolve the issue of highlighting overlapping objects when selected When objects overlap completely or partially, select the object and highlight the bottom shape. Enhance the highlighting effect By adjusting the highlight color, increasing contrast, and optimizing edge anti-aliasing. Combining hardware acceleration and rendering optimization techniques, the smoothness and accuracy of highlight display are further improved.	√	GstarCAD also optimized the display.
Hardware acceleration	Solve the problem that hardware acceleration cannot be turned on or displayed under certain graphics cards and hardware environments	√	√
3D Performance Optimization	Added system variable ENABLEGRAPHICSCACHE, when the number of 3D entity meshes exceeds 10 million, the 3D entity mesh data is written to disk cache, which speeds up the time for reopening the drawing.	√	√
Smart Match	Automatically identify identical shapes and support batch editing to improve drawing editing efficiency, reducing manual effort significantly. 	×	/

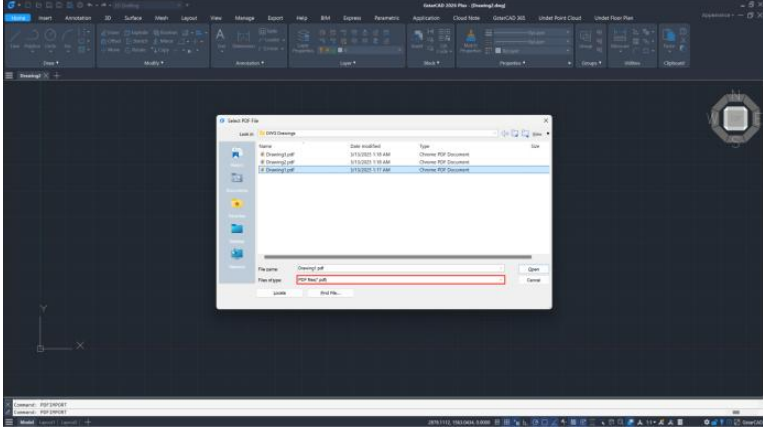
Batch Block	BATCHBLOCK command, convert the matching objects to block reference according for the block definition settings. 	×	/
Similar Search	Search for similar blocks in local files based on a specified graphic, simplifying the reuse of historical block data and saving time. 	×	/
Coordinate System Compatibility	Improve the compatibility of coordinate system and realize read compatibility of 900+ coordinate system in ZWCAD. Support the use of geographic location to attach RCS formatted point clouds. Add location marker entities to support adding location markers in drawings, which include geometric location, geographic location, textual description, and other information.	×	GstarCAD for Linux supports location marker, but has few coordinate systems and does not support Attaching a point cloud
Improved Compatibility of FAS/VLX Plugins	Upgraded LISP binary instruction set, enhanced ZWCAD's parsing ability for FAS binary code, and improved compatibility with FAS/VLX files. Compatible with LISP encryption schemes based on FAS binary code, providing stronger underlying support for LISP developers to protect source code security Support loading and using more FAS/VLX plugins	✓	Functionality consistent

5.2. GstarCAD 2026 New Features

New Features/Improvements		ZWCAD Supports	Comparison
Performance Improvements	Multi-reference drawing opening (without clipping) optimization	/	/
	EXTEND command (Fence/Crossing) optimization		
	TRIM command (Fence/Crossing) optimization		
	Clipped blocks & Xrefs optimization		
	Block editing preview optimization		
	MIRROR operation optimization		
	Block creation/explosion optimization		
	Hatch performance optimization		
Parametric Constraints		√	The functions are the same
Interface Improvements	Visual Refresh: New visual styles for dark and light themes	√	The functions are basically the same
	New SVG Icons: Redesigned color schemes and proportions, with 1500+ icons redrawn in SVG for clear and smooth display at any scale.	/	
	Application Access Menu: Optimize the main menu button display effect Support click to print, send to first level menu directly Optimize recent document display logic	√	
	Ribbon Added fixed display of expanded sub-panels Optimize the disabling effect of ribbon Optimize the print preview panel	√	

			
	Status Bar Optimize selection effect	✓	
Drawing Merge	You can now batch analyze, split, and merge drawings via Xrefs with customizable layout settings, view entity properties, and export the drawing list to a .lst file. 	×	/
Dimension coordinate(DIMCORD)	The DIMCORD command now features leader lines instead of polylines, so moving a text block automatically carries its leader with it, making label placement more intuitive. The updated “Parameters” dialog also lets you adjust scale and text height, and includes new Group and Auto Switch options for greater flexibility and ease of use.	×	/

			
DWG Compare	This feature compares a specified drawing with the current drawing, using revision clouds to highlight the differences. It allows users to configure comparison settings, import objects from the compared drawing, and export and bind the results into new snapshot drawings for future reference. 	✓	The functions are basically the same
Engineering Projection (ENGINEERINGVIEWMODE)	You can now use the ENGINEERINGVIEWMODE variable to switch the bottom view from ACAD's default to a true engineering projection for improved accuracy. 	×	/

PDF Import Improvement	The PDF import engine has been upgraded to the modern, actively maintained PDFium library—boosting import speed, enhancing raster image rendering (transparency, clarity, color accuracy), improving text recognition and decoding (same-line text recognized as MText for easier editing), and delivering crisper hatch displays. 	√	• ZWCAD provides import progress bar
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6. 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 sap 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 (LAYFRZOTHER)	Freezes other layers except the layer where the selected object is 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	Selects entities by entity type and layer.

(GETENTLAYSEL)	
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.
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Besides developing plenty of innovative features, GstarCAD has improved the basic operations in order to simplify the operation steps. For example, 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.

7. Conclusion

Through the above comparison, we can make the following conclusions: GstarCAD 2026 is far advantageous in terms of compatibility, functionality, user experience and so on. Compared with ZWCAD 2026, GstarCAD is a better choice.



GstarCAD 2026

<https://www.gstarcad.net>

Gstarsoft