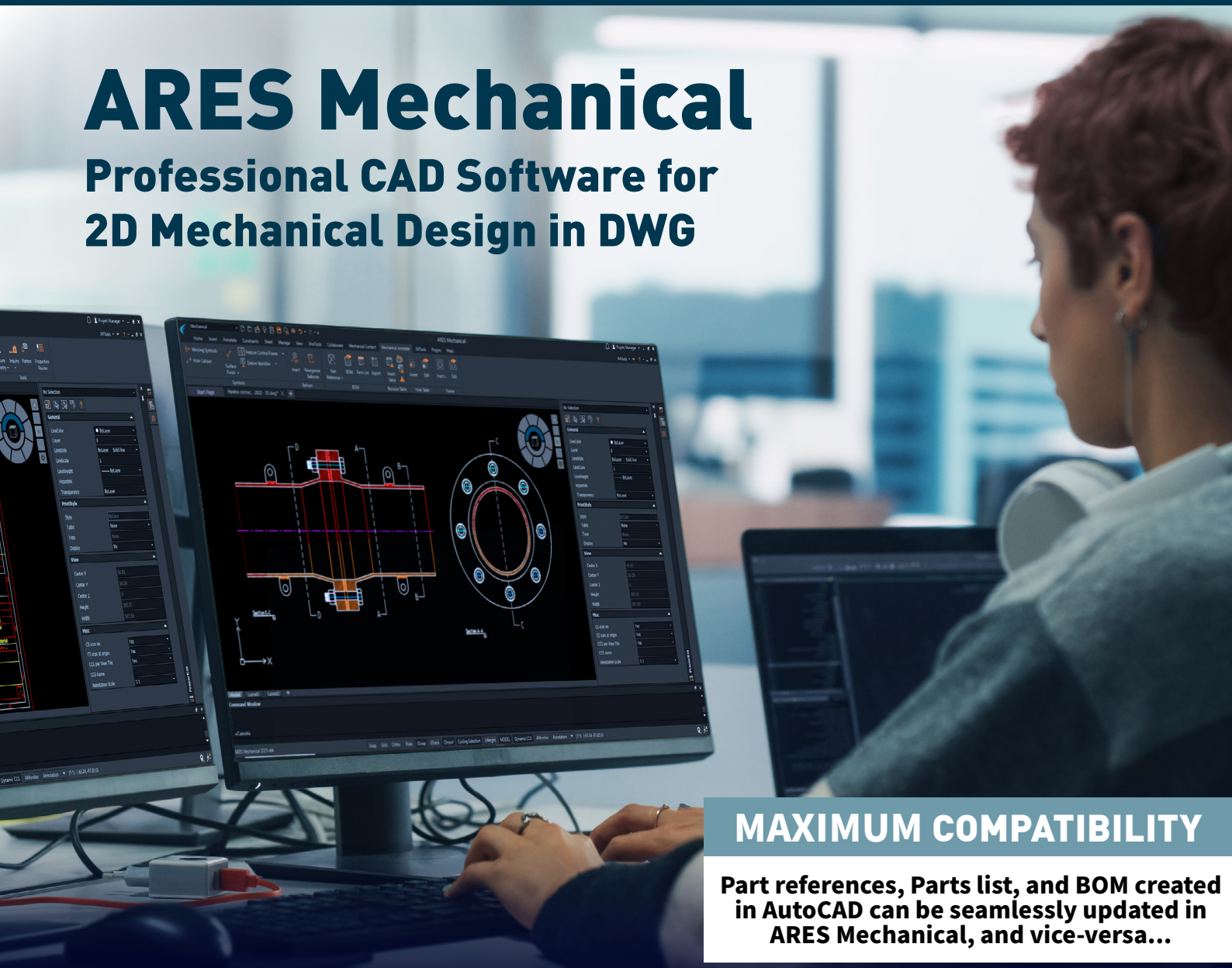
ARES Mechanical

Professional CAD Software for 2D Mechanical Design in DWG



MAXIMUM COMPATIBILITY

Part references, Parts list, and BOM created in AutoCAD can be seamlessly updated in ARES Mechanical, and vice-versa...

ARES Mechanical is a powerful CAD solution for Mechanical Designers and Engineers. The software incorporates tools for creating, editing, and viewing mechanical drawings productively and efficiently. It is an intuitive, customizable, comprehensive CAD solution. If you are searching for modern 2D Mechanical CAD software for your daily production needs, ARES Mechanical is the right solution for you.

With **ARES Mechanical** you can:

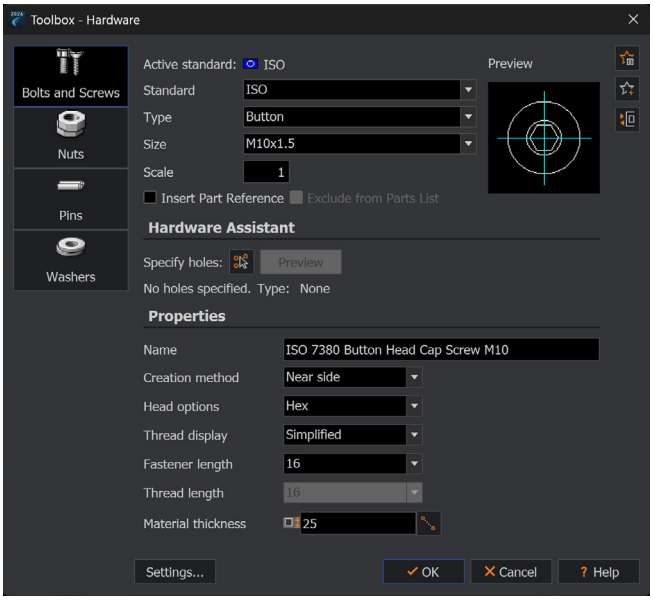
- Accurately read and edit part references, parts lists, BOMs, and other data created in AutoCAD Mechanical. Changes made in ARES are fully synchronized with AutoCAD Mechanical. ▶ WATCH VIDEO
- Work with international standards including JIS, ISO, ANSI, DIN, and BIS. ▶ WATCH VIDEO
- Insert standard components such as screws, bolts, and nuts from a customizable parts library.
- Leverage productivity tools such as power dimensions, fit tolerances, welding symbols, and construction lines.
- Automatically generate standardized BOMs and parts lists to streamline drawing creation. ▶ WATCH VIDEO
- Ensure broad compatibility with AutoCAD, including support for elements like welding symbols and tolerances.
- Work natively with AutoCAD Mechanical DWG files up to 2021 format.
- Visualize 3D models with STEP/IGES import and export. ▶ WATCH VIDEO
- Available in 6 languages:

ARES® Mechanical
MECHANICAL CAD

KEY FEATURES IN ARES MECHANICAL

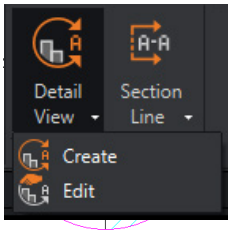
Machine Parts Library (Screws, Bolts, Nuts, etc.)

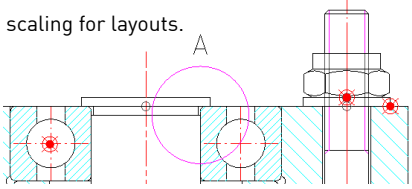
A comprehensive library of machine parts not only includes bolts, nuts, and screws, but also allows insertion of components like washers and tapped holes, complete with automatically generated part references.



Detail Views

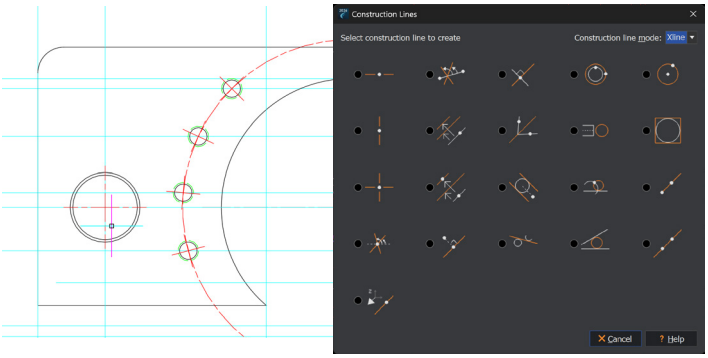
Define a detail view area by selecting a closed shape or setting a circular/rectangular boundary. Place detail views in model space or layouts with automatic zoom scaling for layouts.





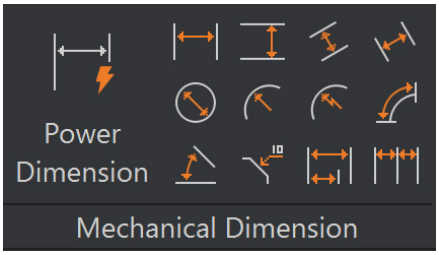
Construction Lines

Draw infinite-length construction lines (horizontal, vertical, or at any angle) to improve design consistency and visibility. Highly compatible with construction lines in AutoCAD Mechanical.



Power Dimension and Placement

AM_POWERDIMENSION automatically determines the optimal dimension type (linear, radial, angular, etc.) based on selected geometry. Place dimensions with a single click. Works similarly to AutoCAD Mechanical's Power Dimension for faster and more accurate annotation.



Power Dimensioning Contextual Ribbon Tab

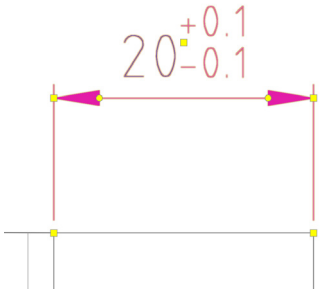
Selecting a dimension brings up a contextual ribbon for immediate access to key options like fit tolerance type, inpection type, styles, and overrides. Improves editing efficiency with a UI similar to AutoCAD Mechanical.

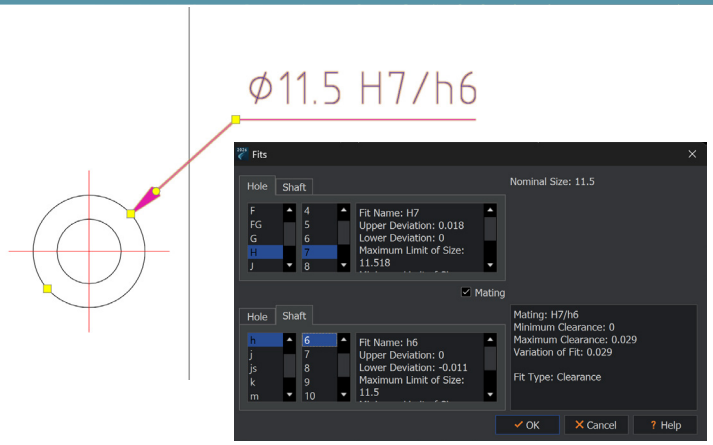
Mechanical Drawing: JMTools

Includes commands for chained dimensioning (horizontal + parallel), frequently used mechanical dimensions, editing tools, measurement utilities, and Excel export. This ARES exclusive boosts productivity n mechanical drafting.

Tolerance Support

Add upper/lower or symmetric tolerances to any dimension. Fully customizable units, symbols, and display styles help ensure precision and consistency, as well as compatibility with AutoCAD Mechanical.



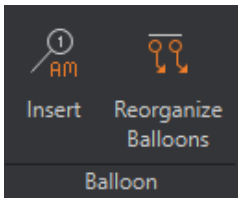


Fit Tolerances for Holes and Shafts

Apply fit tolerances easily by selecting grades from ANSI/ISO-based tolerance tables. Automatically calculates permissible deviation for shaft–hole combinations. Familiar workflow for AutoCAD Mechanical users.

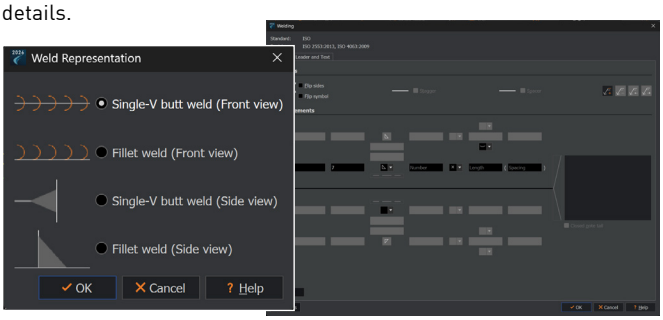
Balloon Annotations

The Balloon tool in ARES Mechanical supports part references and can be used on content created in both AutoCAD Mechanical and ARES Mechanical.



Welding Symbols and Weld Representation

The Welding Symbols feature simplifies technical drawings by adding welding symbols according to industry standards, and is compatible with AutoCAD Mechanical. The Weld Representation tool enables users to create and customise fillet welds and single-V butt welds on various entities. This tool supports front and side views of welds, offering precise control and flexibility in defining welding details.



Parts List

A parts list is derived from a bill of materials (BOM), and users can create a parts list and place it in the graphical area. In the Parts List dialog box, you can modify the layout of the parts list and change the appearance of its data by sorting. You can edit a value in the cell, change an item number, merge rows, and use column splitting.

ARES AI Assist (A3)

A3 is a pre-trained artificial intelligence system (like ChatGPT) designed to assist ARES users by explaining and locating features, translating text, answering questions and more. A3 knows about mechanical drawings and ARES Mechanical. It is here to help you with our features.

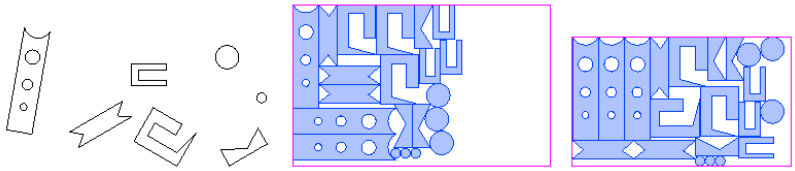
Bill of Materials (BOM)

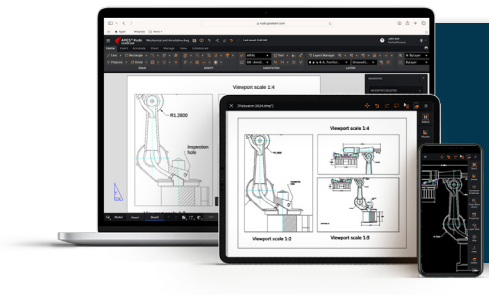
A drawing can have multiple bills of materials (BOMs), but the main BOM contains information about all the parts and assemblies in a drawing. Users can manage BOMs and BOM data defined in the drawing in in the BOM dialog box. Users can import and export the BOM data to ".csv" files.

Nesting Manager

The Nesting Manager takes a series of flat patterns of parts to be cut out of sheets and works out the best pattern, or „nest," to combine as many parts as possible on the material with the least amount of waste.

- Complex parts
- Multiple quantities
- Custom sheet size
- Built-in functionality
- Compare the results





CLOUD CAD & MOBILE CAD:

If you buy ARES Mechanical with a Trinity license, your subscription will also include the Trinity collaboration features in ARES Mechanical, ARES Touch (for Android and iOS), and ARES Kudo (online CAD).

EXPLORE ARES KUDO

EXPLORE ARES TOUCH

FREE TRIAL

ARES® Mechanical
MECHANICAL CAD

For Windows only (64-bit)
Download NOW

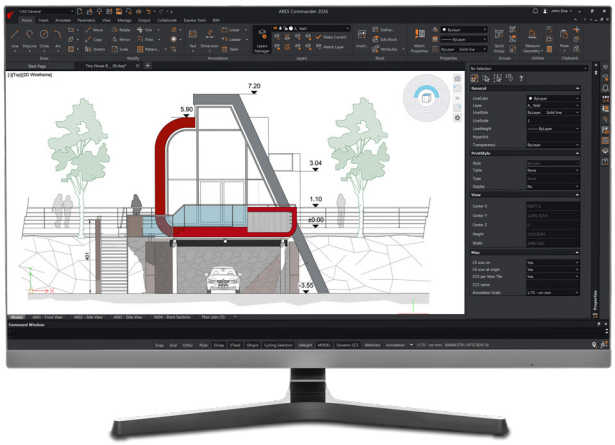
www.graebert.com/getaresmechanicalforwin64

A professional **Mechanical** CAD solution powered by ARES® Commander, including all the drafting tools you need

ARES Mechanical is powered by ARES Commander, Graebert's popular DWG-based multi-platform CAD solution, trusted by millions of CAD professionals. With ARES Mechanical you have access to all the CAD functionalities and commands of ARES Commander:

- **A full DWG-based CAD application** with hundreds of CAD features
- **Familiar user interface** for any CAD user
- **Add, modify or delete information** using the drafting tools
- **Create or modify any DWG drawing** — without the need to use ARES Mechanical's toolbox

EXPLORE ARES COMMANDER



WATCH HERE OUR VIDEOS ABOUT ARES MECHANICAL

Explore Graebert Software Products!

Watch more CAD product videos, feature demos, and tutorials on

youtube.com/GraebertTV

Visit Graebert on:

facebook
facebook.com/arescadsoftware

linkedin
linkedin.com/company/graebert-gmbh

x (twitter)
x.com/graebertcad

blog
graebert.com/blog

Gräbert

ARES®, ARES® Commander, ARES® Touch, ARES® Map, ARES® Kudo, ARES® Mechanical, ARES® Electrical and SiteMaster™ are trademarks or registered trademarks of Graebert GmbH. All other trademarks and registered trademarks are property of their respective owners.

Copyright 2025 Graebert GmbH. All rights reserved.

Order Desk +49 (0) 30 896 903 89
sales@graebert.com

Support Desk support@graebert.com