



Mechanica Module



nanoCAD **Mechanica** is a mechanical engineering tool with 2D drafting and 3D mechanical designing. It is based on an advanced parametric engine, and works with a large library of standard parts. It enables users to carry out fast development of high-quality mechanical engineering drawings and project documentation.



New in Mechanica Module

- ✓ Flange Properties
- ✓ New Types of 3D Thread
- ✓ Document properties window
- ✓ Assembly unit properties window

Features

Library of Standard and Complex Parts

- ✓ Search filter
- ✓ Fasteners
- ✓ Standard profiles
- ✓ Reamers
- ✓ Circuit elements symbols

Broad Range of Design Tools

- ✓ Supports multi-sheet drawings
- ✓ Constructs objects and symbols by a variety of methods, such as orthogonal drawing and using object snap
- ✓ Manages drawing order of overlaying objects
- ✓ Draws standard and custom line types, hatches, and fonts with styles

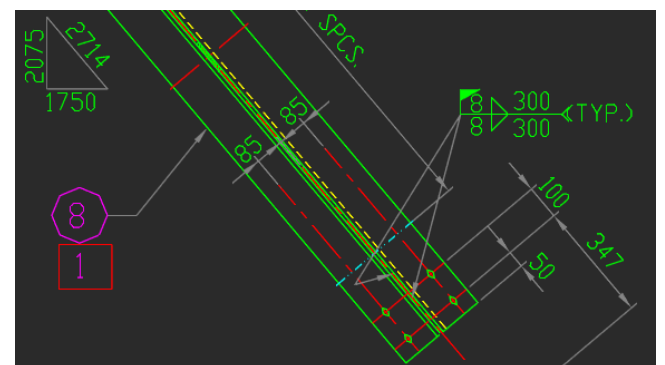
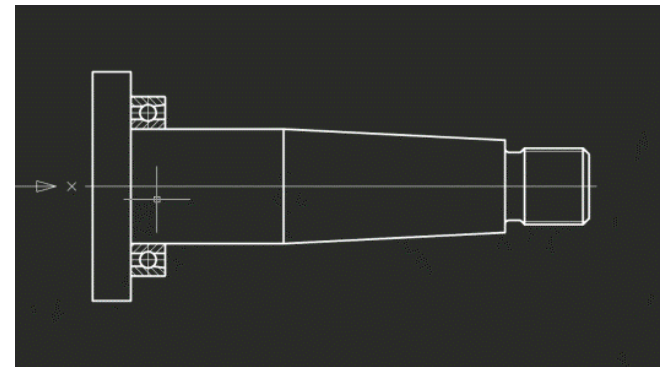
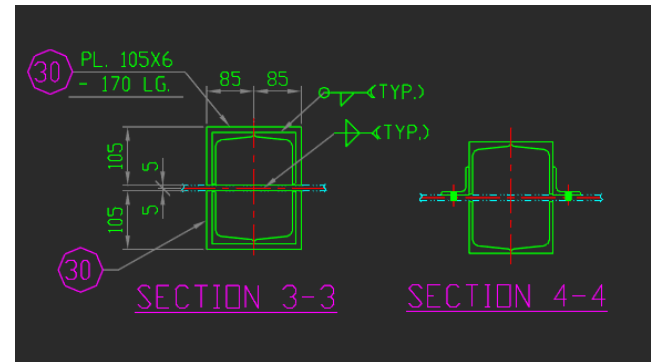
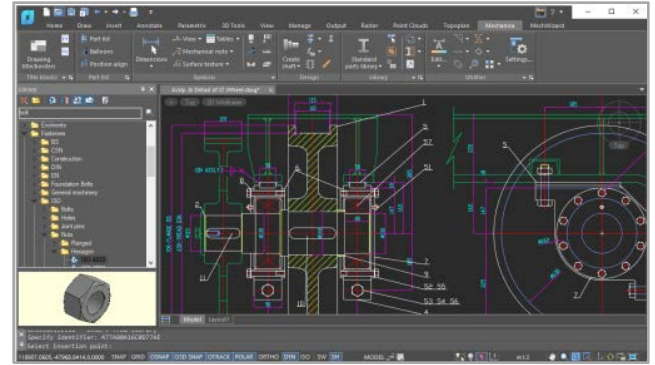
Parameterized Parts Database

Mechanica's parts database contains a vast collection of parametric and object-dependent elements, including three-dimensional ones. When you change the parameters of a part, all associated parts in the drawing also change automatically, according to their database values. This powerful tool generates design variations, which improve the design quality.

Standards-based Engineering Drawings

- ✓ ISO-standard fonts, line types, and dimension styles
- ✓ Tolerance zones and deviations for dimensions and fits
- ✓ Form and plane position tolerances
- ✓ Surface texture symbols
- ✓ Gradient symbols

- ✓ Specification by 3D model
- ✓ Specification positions
- ✓ Stamping
- ✓ Flanging



Designing Bolted and Riveted Joints

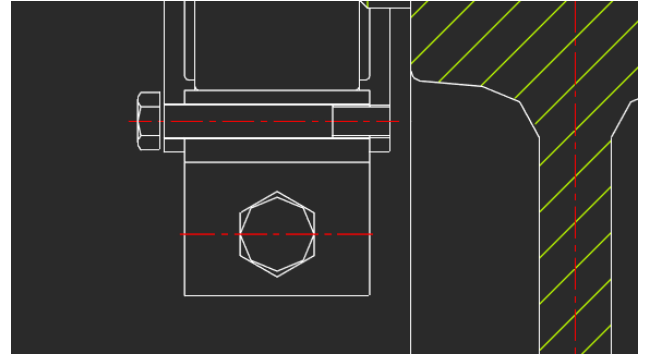
Mechanica offers flexibility in handling bolt and rivet functions:

- ✓ Connect groups of parts with arbitrary thickness using bolts, screws, or studs
- ✓ Connect parts of arbitrary thickness with rivets displayed in regular and high accuracy, made of hollow and semi-hollow rivets
- ✓ Display simplified fasteners in joints
- ✓ Generate patterns of bolts and rivets in joints

BOM Tools

Mechanica's BOM tools create bills of material of parts linked to drawings. BOM tables can contain the following items:

- ✓ Itemized specification numbers
- ✓ Electrical specifications
- ✓ Automatic receipt of specifications
- ✓ Custom specifications



BILL OF MATERIALS				
ERECTION MKD.	PART MARK	ITEM NO.	SECTION	LENGTH IN mm
A/CBR-1	1	1	L 130x130x12	2160
		2	PL 100x10	250
	2	3	L 110x110x12	3442
		4	PL 67.5x10	992
		37	PL 85x10	210
	1	5	L 130x130x12	2134
		2	PL 100x10	250