# nanoCAD Mechanica

A new version of CAD application for mechanical engineers

nanoCAD Mechanica - a Mechanical Drawing Software based on the updated nanoCAD Plus 10 platform. It is an advanced application developed for mechanical engineers, designers and drafters, giving them with prospects in the field of automation of design and construction work in numerous areas of the manufacturing industry.



#### Main features

- nanoCAD Mechanica is based on updated version of nanoCAD
- User-friendly and familiar interface
- Classic set of commands necessary for high quality preparation of project documentation
- Library of standard and user-defined parts
- Built-in 3D modeling kernel

#### Wide range of design tools

- Support of multi-sheet drawings;
- Diverse methods and modes to construct graphic primitives and symbols (including orthogonal drawing, object snap, etc.);
- Managing the order of drawing and overlaying graphic objects;
- Standard and custom line types, types of hatches and font styles etc;

#### Library of standard and unified elements

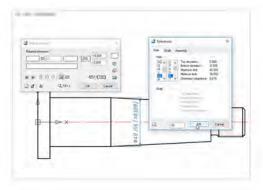
- Fasteners;
- Standard profiles;
- Graphic symbols for circuit elements;
- Technological sketches;
- Elements of machine accessories etc;

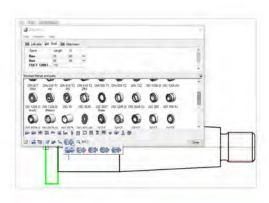
## Parameterized design and technological elements database

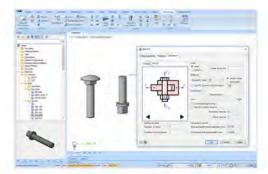
Design and technological database contains a large collection of parametric and object-dependent elements, including three-dimensional ones.

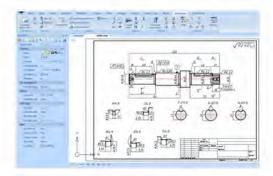
### Drawing elements according to engineering standards

- Installed ISO fonts and linetypes;
- Pre-installed ISO dimension style;
- Tolerance zones and tolerance deviations of dimensions, as well as fits;











#### Designing bolted and riveted joints

- Connecting packages of arbitrary thickness parts with bolts, screws and studs;
- Simplified types of fasteners in a joint;
- Patterns of bolted and riveted joints.

#### Calculations

- Calculation of geometric characteristics of section with respect to arbitrary axes;
- Design and calculation of sections (beams).

#### MechWizard built-in parameterizer

MechWizard makes available the following functions:

- Overlay of assembly and parametric dependencies on objects;
- •"Behavior training" of a standard part;
- Modifying existing database elements;
- Creating custom database elements.

### 3D solid modelling

- Standard tools for three-dimensional design: extrusion, rotation, pulling along path and along sections, chamfer and round;
- Tools to orient 3D geometry in space: 3D-Move, 3D-Rotate, 3D-Align;
- Operating geometry: planes, axes and points;

