

# nanoCAD Plus & nanoCAD Pro

## Smart Drafting, Smarter Designs

### nanoCAD Plus Benefits



#### Native DWG Format

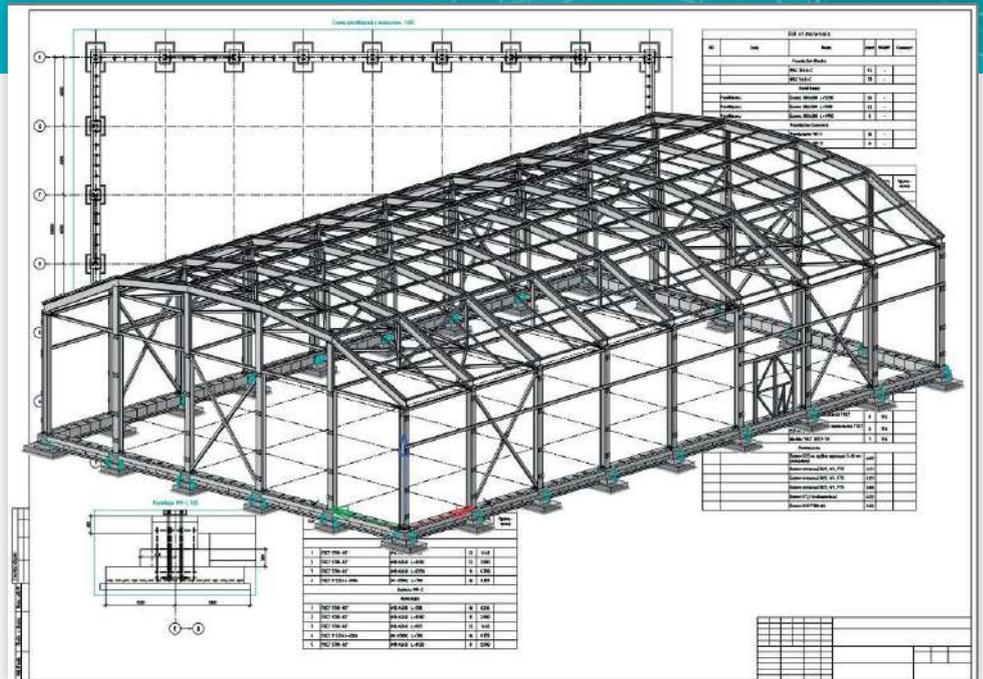
The nanoCAD platform supports all active versions of DWG, the world's most popular CAD format, all the way back to DWG R11 and right up to today's DWG 2018. This means that nanoCAD directly opens and saves files in this format without loss of data and can be integrated with external software that also supports the format. In addition, nanoCAD supports technologies developed around this format, including sheets, object styles, services like purge, audit, and recover, and dynamic blocks.

#### Powerful Documentation Tools

The prime function of nanoCAD is to assist teams in developing and issuing design documentation. This means that you will find in nanoCAD the full set of tools for drawing, modeling, editing, and publishing many kinds documents - drawings, tables, models, text, and so on. Differences in similar looking drawings are compared easily through color coding. As nanoCAD is not specific to any sector, it is equally effective in mechanical engineering, oil & gas, construction, land management, telecom, education, and home use.

#### Standard User Interface

nanoCAD features the CAD interface well-known to users that allows them to start working with the platform in a day or less. There are icon ribbons, regular and shortcut menus, and commands with options with which users are already familiar. This means that users quickly get into the swing of things, without the additional time and cost usually needed for training or a long-term introduction. At the same time, managers can easily find professionals already familiar with DWG editing programs. Users will appreciate the time-saving interfaces of real-time undo/redo, dynamic input, object tracking, and on-screen viewing controls.



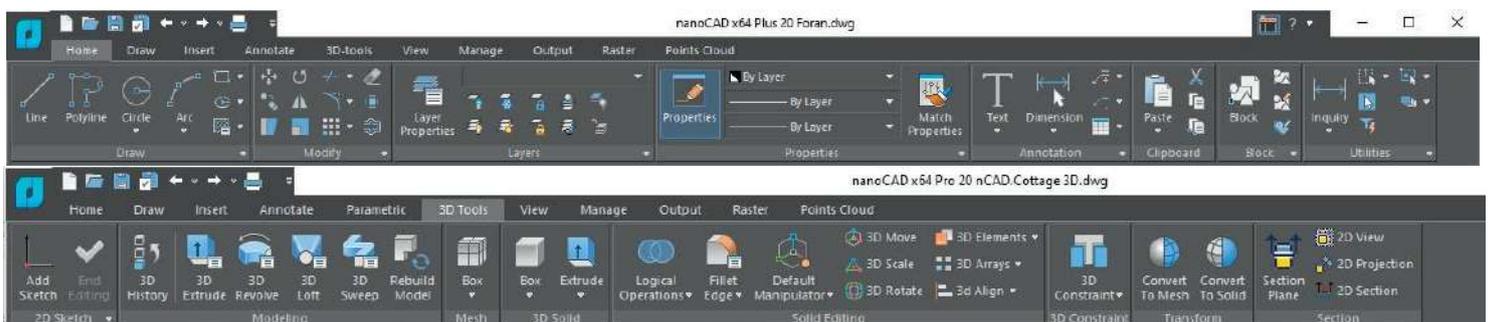
#### Compatibility with Industry APIs

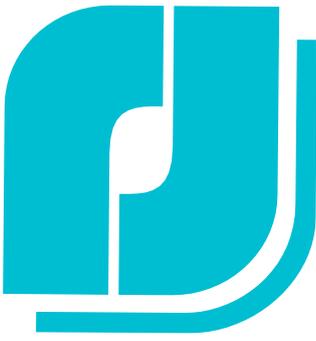
nanoCAD is not only a drawing tool, but an entire platform on which to create your own applications by extending its standard features. This means that you can integrate calculations, automate design activities, integrate drawings with external databases, and other third-party solutions. nanoCAD's API interface is very close to traditional CAD systems and so supports languages such as C, C++, C#, COM, Active X, LISP, Visual Basic, and JavaScript, and command scripting.

#### Features Unique in nanoCAD

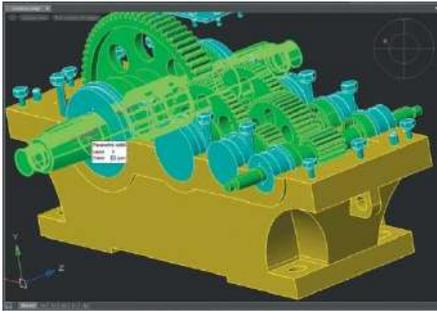
**Raster and PDF Editing** – The nanoCAD platform treats imported raster images and PDF files as full-fledged entities. While drawing, users can snap to the end points, intersections, and centers of raster primitives (lines, arcs, circles), and converts vector PDF files into vector objects. This means that users can instantly add old drawings, images, and documents to the workflow. Tools like erase remove portions of raster images, and use 4-point correction to de-skew images that weren't scanned properly.

**Table Processing** – nanoCAD imports and formats spreadsheet data and tables from other DWG editors, but it also features a sophisticated Excel-style table editor not found anywhere else. This means that users no longer just generate tables manually but also build automatically updated tables that report on data in drawing, making it the ideal tool for creating bills of material (BOMs). Such tables can contain formulas, data from external sources, and data exported to common formats, like XLS, TXT, CSV.



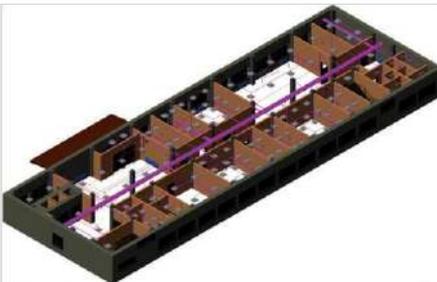


Combining many kinds of 3D data, nanoCAD is your home base for 3D DWG, BIM, point clouds, and 3D solids. You navigate through them instinctively.

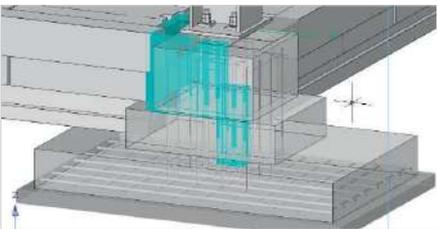


**Dynamic Development Process** – The collection of nanoCAD programs is a fast-evolving CAD system. This means that users regularly receive useful functions as we are working in close cooperation with our customers.

**Permanent Licenses** – When it comes to operating CAD software, we understand that users have different needs. This means that we are pleased to offer a flexible approach to licensing. Managers and users find subscription, permanent, and network licenses. By purchasing three-year subscriptions, users obtain the permanent licenses free.



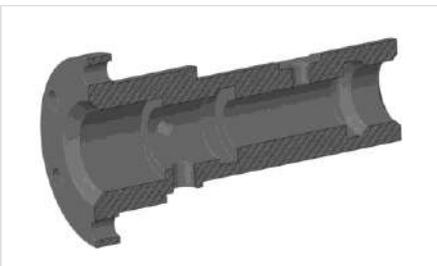
**Huge 3D Models** – One of the key areas in recent nanoCAD platform development was enhancing its ability to work with huge 3D models. This means that you open and regenerate drawings much faster. Recent versions implement multi-threaded computing to increase nanoCAD's performance by 20–30%.



**IFC and OpenBIM** – IFC is the open format for exchanging information about architectural models among BIM systems. The nanoCAD platform imports IFC data into DWG environments and so combines the two. This means that user can view and select IFC objects to get information about them in Properties panel.



**Point Cloud Processing** – nanoCAD opens and views 3D point cloud files captured by laser scanners in LAS, BIN, PTS, PTX, PCD, and XYZ formats. This means that users can work with extremely large point clouds of one billion points and more. Users have access to point cloud metadata and can work with points cloud as if they were vector objects, such as changing insertion points, scaling, 3D mirroring, embedding 3D models, and taking sections plane of them.



**3D Navigation** – nanoCAD combines 3D data like 3D drawings, BIM models, and Point Clouds into a single document, and it provides users with ways to navigate through models conveniently. This means that users have access to on-screen controls select shading modes and viewpoints instantly. Bounding prisms use 3D clipping to look inside models and isolate parts.

## Why nanoCAD Pro?

nanoCAD Pro is the advanced version of nanoCAD Plus, focusing on 3D solid modeling and 2D/3D constraints.

### 3D Solid Modeling

nanoCAD Pro enhances design with 3D solid modeling. This means that users can create precise models that reflect the real world, accurately. Tools like stamping, push-pull, and Boolean operations let users create complex models, both with the assistance of the history tree and through direct modeling. Dynamic UCS makes it trivial to sketch on 3D faces.

Flat drawings of 3D models can be generated using sections. As drawings are linked to models, changes users make to models are reflected in the drawings.

### 2D/3D Constraints

Designs become interactive with 2D and 3D constraints. This means that users can apply dimensions that drive the geometry, and have geometry drive geometry, such as perpendicularity, concentricity, and fixed distances. A single model can generate dozens of variations through formulas controlled by the Parametrics panel, and several parts can be combined into an assembly.

Solid modeling and constraints kernel provided by C3D Labs.

