nanoCAD 3DScan

nanoCAD 3DScan is specialized software designed for processing 3D scanning data and tackling engineering and informational challenges across fields such as geodesy, mechanical engineering, construction, infrastructure, and metrological monitoring.

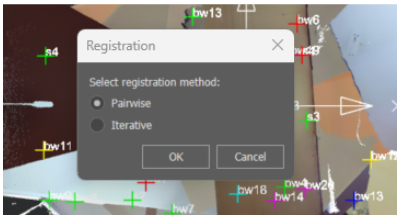
Types of Laser Scanning data to be processed

Surface | Air | Mobile | Other Types

NPC Formats Supported

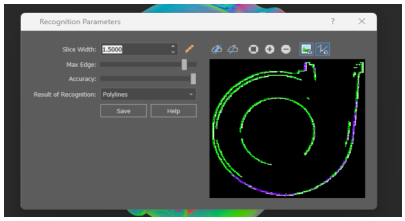
BIN | E57 | FBX | LAS | LAZ | PCD | PLY | PTS | PTX | RSC (RCP) | TXT (XYZ) | XYB

Over 150 commands for point clouds processing



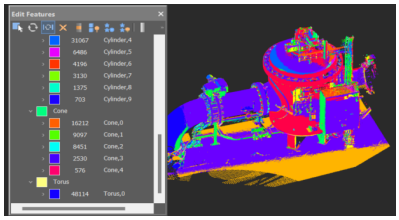
Registering point clouds by reference points with error control

Mutual orientation of multiple point clouds enables registration to identify transformation parameters for any number of reference point groups. Two techniques are employed: pairwise and iterative.



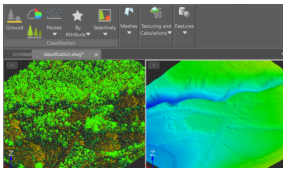
Layer-by-layer vectorization and floor plan generation

Automatic construction of multiple sections of point clouds at specified intervals, followed by their vectorization and the generation of raster images.



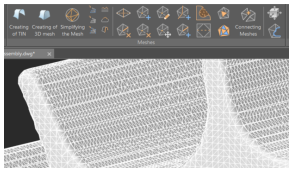
Global search for geometric shapes and pipeline systems

The command identifies basic geometric shapes (plane, sphere, cylinder, cone, torus) within a point cloud.



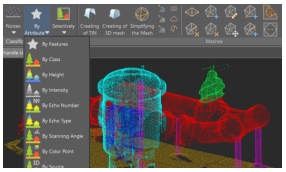
Classifying and verifying ground

An algorithm for automatic ground identification, complemented by a ground verification command that allows for manual refinement of automatically classified points.



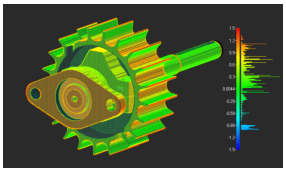
Creation and editing of 3D meshes

The command conducts 3D triangulation of volumetric object point clouds, creating meshes that can be used for triangulating buildings and other surface structures.



Classifying points and establishing named views

An extensive toolkit and parameters are available for the automatic classification of terrain and other categories based on specified criteria.



Comparison of point clouds

The tool enables evaluation of the degree of alignment between two point clouds or between a point cloud and a model.

And...

Scope of application

Modeling

- Three-dimensional modeling, including simulation;
- Support for Building Information Modeling (BIM).

Design

- Construction and operation of engineering structures, buildings, and communications;
- Design of machines and mechanisms.

Topography

- Creation of 2.5D drawings and plans, including topographical ones;
- Populating GIS systems.

Monitoring

- Monitoring the technical condition of facilities, emergency situations, and environmental conditions;
- Inventory and automation of creating digital twins of industrial facilities.

Supervision

- Modeling transportation tasks;
- Collision detection;
- Author's supervision.

Measurements

- Conducting operational calculations and measurements.

nanoCAD Platform as a base

3DScan expands the capabilities of the nanoCAD Platform by:

- Simultaneously using ideal vector CAD models and unstructured real-world data;
- Providing a hybrid representation of real-world data with annotations of ideal geometry;
- Enhancing standard CAD geometry with semantics and parameters derived from the real world;
- Enabling the creation of fully specific objects based on real-world information, etc.

Topoplan Module as an additional feature

Topoplan module expands functions of 3DScan by:

- Digital Terrain Model creation (TIN creation);
- Creating a survey plan;
- Preparation for printing;
- Measurements archieving;
- Transformation to default coordinates;
- Volumes and areas calculation;
- Surfaces texturing, etc.

Flexible Licensing

- **1-year subscription** to get started right away at minimal cost.
- **3-year subscription** gives a perpetua license and full support and upgrades for 3 years.
- **Workstation license** can be used on a single computer and cannot be transferred.
- **Network license** can be used on any computer on the local network.
- **Trial License** allows to use nanoCAD 3DScan and nanoCAD Platform with all modules for 30 days for free.

Pricing

nanoCAD 3DScan is a vertical app that requires nanoCAD Platform and 3D Solid Modeling Module for operation. Topoplan Module, necessary for creating topographic maps, is an optional add-on.

Here are full prices for 1 working place of each product:

Product	Workstation		Network	
	1 year	3 years *	1 year	3 years *
nanoCAD 3DScan	**$1,200**	**$3,600**	**$1,600**	**$4,800**
nanoCAD PRO (Bundled solution: includes nanoCAD Platform + 3D Solid Modeling module)	**$399**	**$1,197**	**$469**	**$1,407**
Total (for full package)	**$1,599**	**$4,797**	**$2,069**	**$6,207**
Topoplan Module (optional)	**$199**	**$597**	**$199**	**$597**

* 3-year subscription includes a perpetual tual license with three years of full support and upgrades.

nanoCAD
ENGINEERING ECOSYSTEM

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