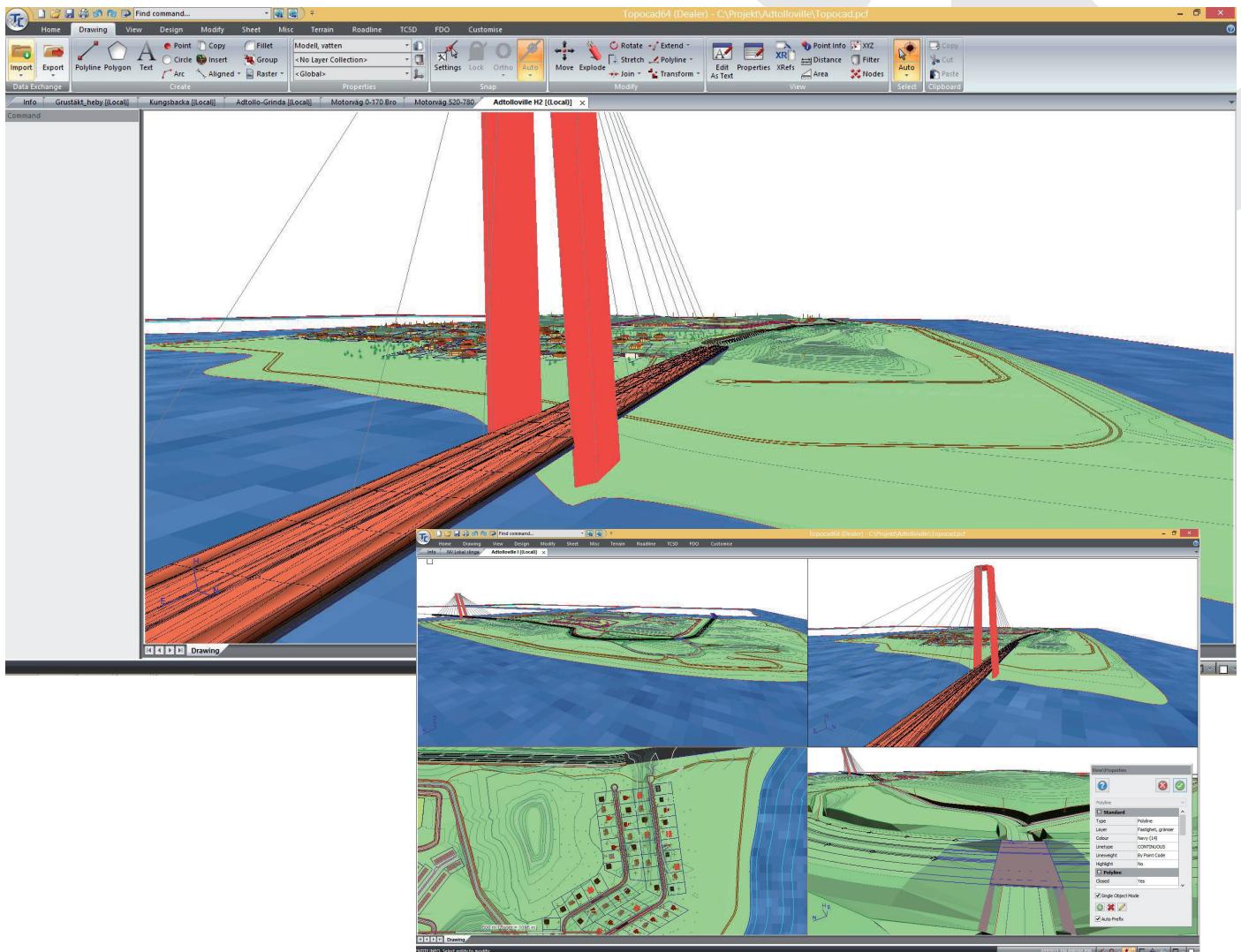


3D CAD



Topocad is easy to use and provides a powerful CAD system for all requirements when it comes to technical survey calculations integrated with data import, CAD, net adjustment , civil planning, engineering, point cloud and machine control data . A modern product which, since its inception in 1994, has reached more than 23 000 users around the world, it is installed in over 100 countries and translated into 17 languages.

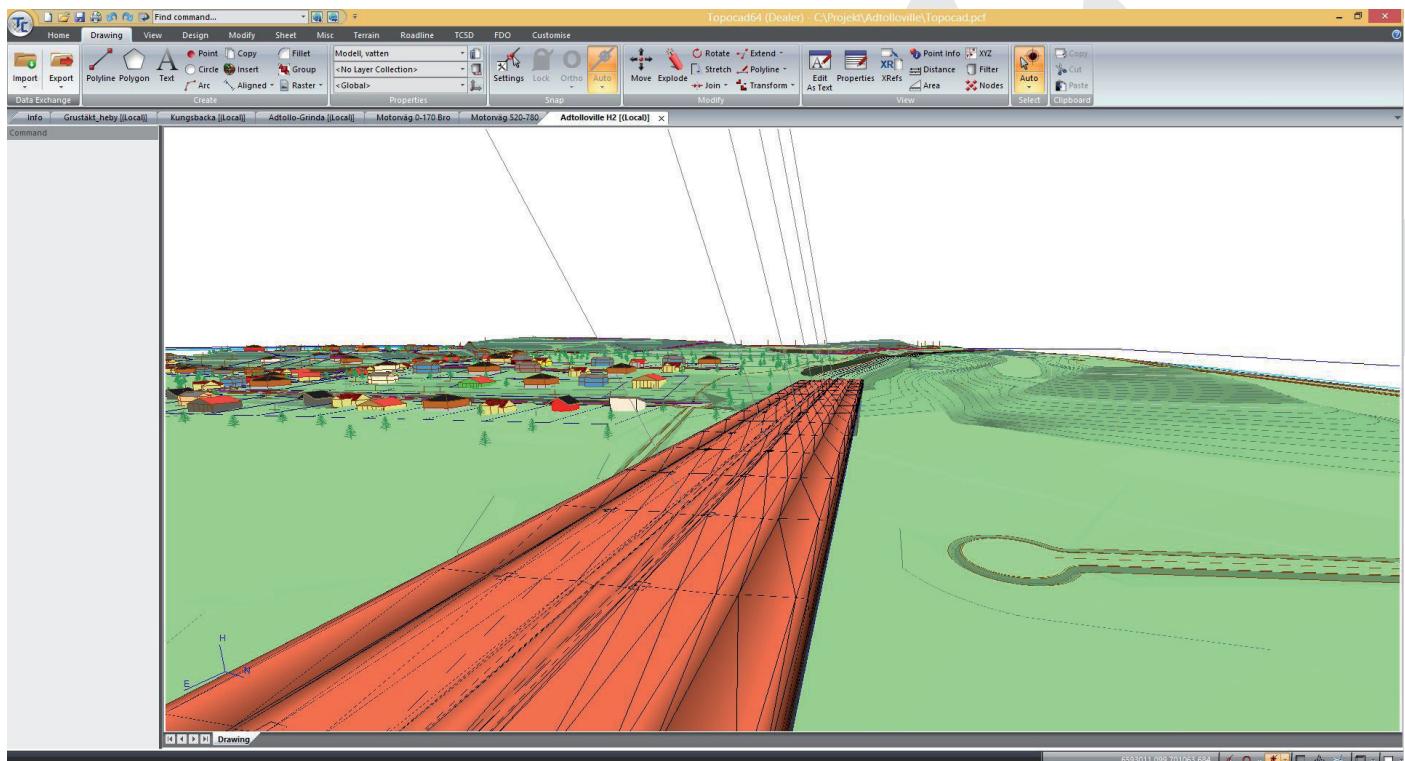
Topocad is a powerful 64 bit system with a drawing file format (TOPX) that blends all types of data: vectors, rasters, TIN's, point clouds and also BIM objects.

Topocad reads data from total stations, GNSS instruments, levelling instruments and calculates its data into the drawing. With code table functions, the result can be sorted into layers with colours and the objects get line types and symbols.

With the use of control codes, different geometries can be created directly from the field, with no editing in the drawing necessary. Attributes are handled from the field via the drawing to the database. Default values of attributes and codes can easily be specified in the field or edited directly in the survey data or drawing. The attributes value can also control the appearance of objects in the drawing.

Topocad's three dimensional editing is extremely powerful. All data is held as three dimensional points or lines. There are many CAD commands to create data: draw polylines, points, arcs, circles, polygons, write text, dividing surfaces, create slope hatching, copy, mirror, group objects, split into lines and calculate mean points, just to mention a few.

Special commands are available for creating pile protocol and pile bottom. There is also a very powerful dimension function. The software can work with raster images; add and geo-reference them within a drawing. Topocad also reads JPEG, TIFF, ECW, CALS , MrSID, PNG and bitmap formats. A large number of commands are used to edit objects: move, trim, explode, rotate, edit polyline, edit properties, stretch, join, extend. In addition, three different types of transformation are built-in.



The first is with Helmert or Affins method where you create or specify the transformation parameters. The other one is with Lantmäteriets Gtrans and the third is with Open source Proj4, which uses all EPSG codes. Topocad drawing management is effective. The drawing templates and their views are added to the area or areas you want to print. Built-in functions are available for creating legends, coordinate crosses, north arrows, and more.

The Macro module is included in the Base module, and makes it possible to create custom commands and automatic drawing of objects in predefined layers, colours, symbols, polylines. A built-in DTM creates a digital terrain model and draws contour lines quickly. Setting/Stake out data can be sent directly from Topocad to an instrument or controller. The import and export formats are many; DWG, DXF, PXY, LandXML, coordinate files, DGN, Shape to just mention a few. All file types that can be imported, can also be used as external references. These can both have a displacement or scale change, or even a transformation calculation online .

Topocad is a powerful CAD system and is easy to use. It is built up with different modules, and the base module can be supplemented by a large number of add-on modules for volume calculations, cross-sectioning, net adjustment calculation and database adapters .

- 3D CAD, 32 bit and 64 bit
- Communication to instruments and field computers
- Calculation of survey data
- Handling of code tables, symbols, line types and attributes
- Transformation
- Terrain Modeling
- Creation of level curves
- Reads and writes drawing formats like DXF, DWG and DGN
- Reads and writes GIS formats like Shape and Mif
- Complete print management
- Connection to GNSS in field
- Macro commands

