



TUTORIAL
COUNTORN LINES &
CROSS SECTIONS

Countorn Lines & Cross Sections

DESCRIPTION

- Create countorn lines
- Create cross sections

GOAL

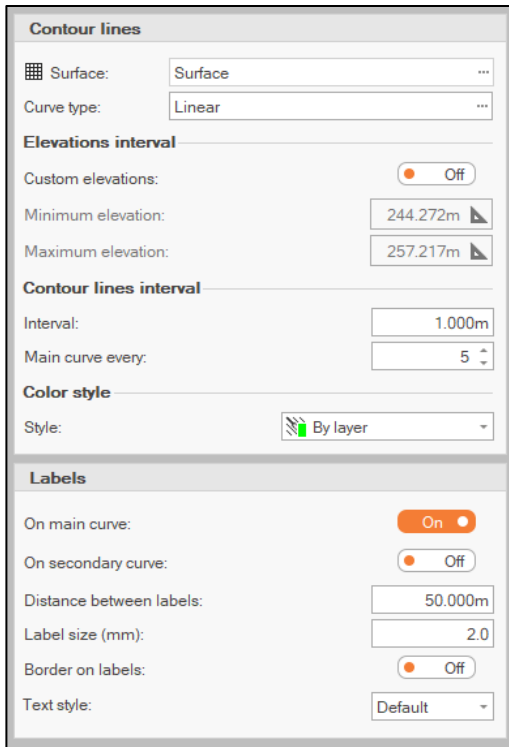
- How to generate Countorn Line
- How to define and export cross sections

DATA

- DTM.txt; Volume calculation 03.gfdoff



Contour Lines



- Contour lines function is used to create contour lines on an existing surface
- Several options are available for the contour line creation
- Contour lines can then be displayed/hidden using the filters
- Contour lines can be exported as DXF/DWG



Contour Lines

File Home View Draw Edit Survey Surfaces Design 3D Imaging X-sections Cadastral Cloud Output Search

New empty surface Settings Breakline Boundary external Boundary internal Add vertex Delete vertex Delete segment Build surface Add triangles Delete triangles Swap faces Triangles Generate Add label Remove label Contour lines View By elevation Triangle sides Triangle center Slope symbols Calculate Calculated volumes Add zone Tools Delete data Utilities

Project Manager

- Surveys
 - Main survey
- Surfaces
 - Surface
- Drawings
 - Main drawing
- Sections groups
- External documents
- Flight sessions
- Ground photos sessions
- Point clouds (Registered)
- Point clouds (Not registered)
- Raster maps
- Orthophotos
- Projection planes
 - None
 - Clipping planes
 - Clipping boxes
 - Plot boxes

Project Manager

- Layers
- Survey codes
- Filters
- Report
- Export
- Building Information Model

Graphic view

Contour lines

Contour lines

Surface: Surface

Curve type: Linear

Elevations interval

Custom elevations: ☐ Off

Minimum elevation: 244.272m

Maximum elevation: 257.217m

Contour lines interval

Interval: 1.000m

Main curve every: 5

Color style

Style: ☒ By layer

Labels

On main curve: ☒ On

On secondary curve: ☐ Off

Distance between labels: 50.000m

Label size (mm): 2.0

Border on labels: ☐ Off

Text style: Default

Close Generate

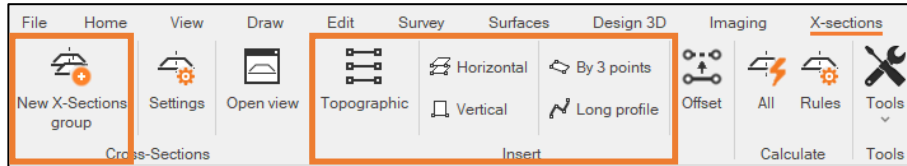
Command

X 2340973.367m, Y 5111512.173m, Z 0.000m ORTHO SNAP GRID OSNAP AUTOLIST PROMPT

Scale 1: 1000 Meters (m) GON



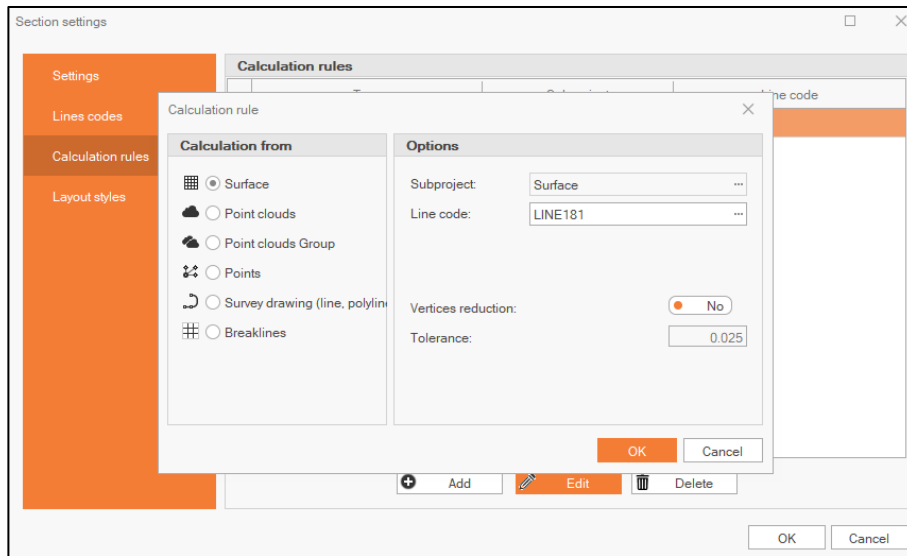
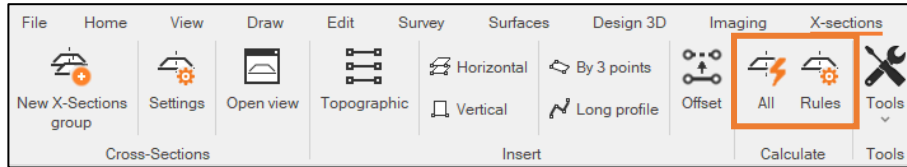
Cross section



- **New X-Sections group:** creates a new group of cross sections in the project manager
- **Settings:** Define the parameters for the section groups (cross section lines, calculation rules, and layout for final drawing)
- **Insert:** Create the cross sections (topographic, horizontal, vertical, by 3 points or long profile)
- **Offset:** creates a parallel cross section of a reference cross section



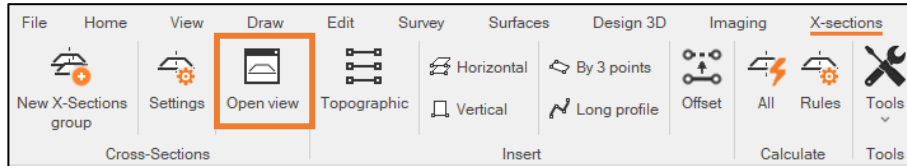
Cross section



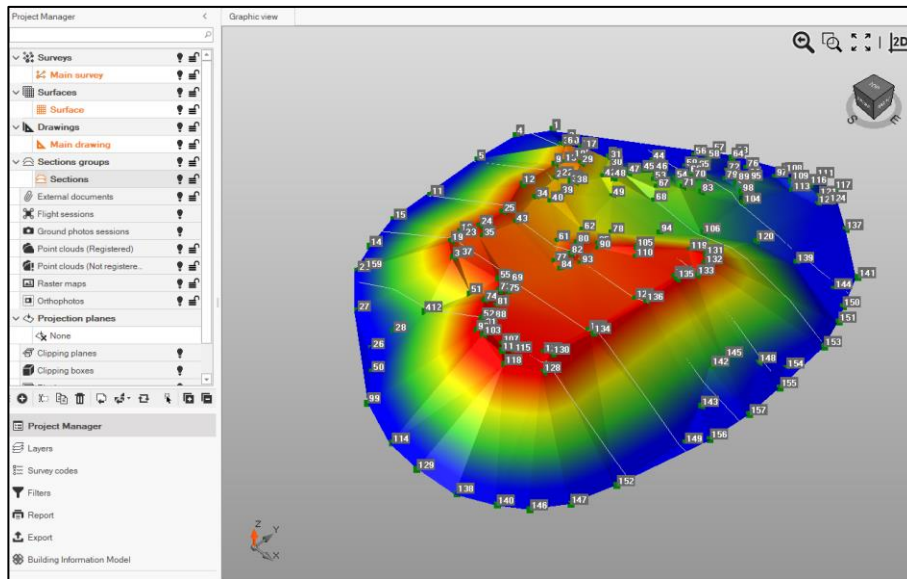
- **Rules:** used to define the section rules;
it is possible to make cross section on surfaces, point cloud or survey points
- **All:** Calculate all cross sections using the defined rules



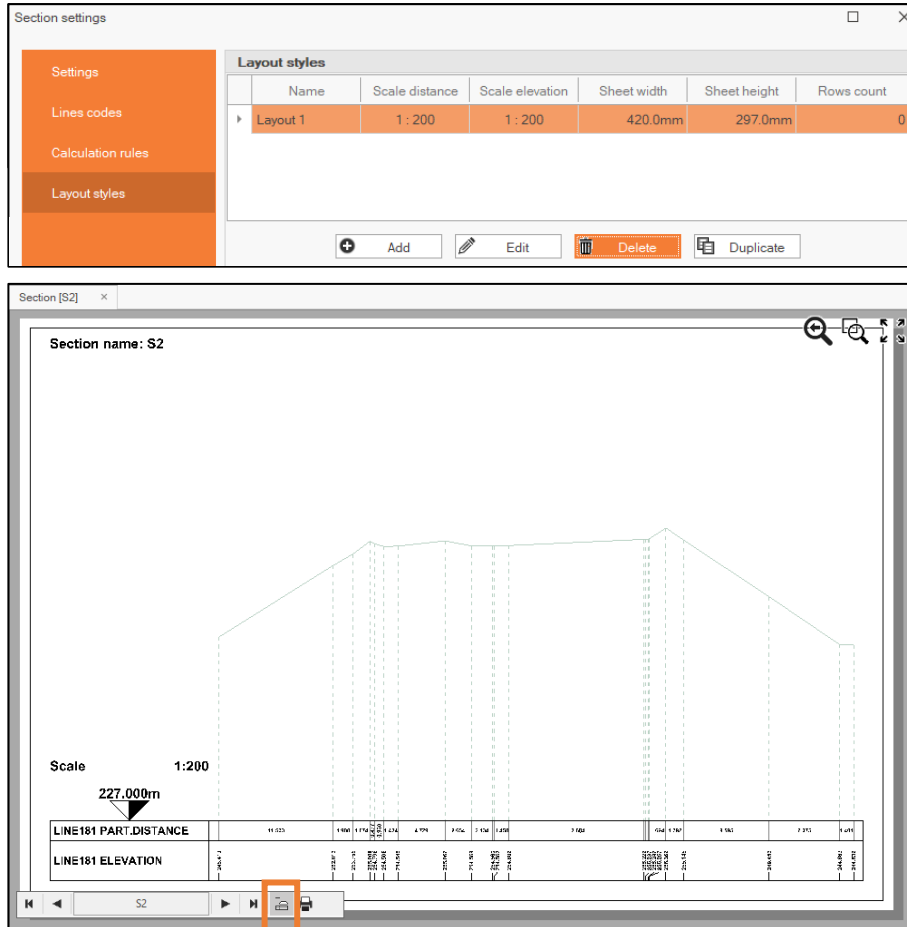
Cross section



- **Open view:** Open a window that allow to have the trasversal view of calculated cross sections



Cross section



- **Layout style:** From Layout styles it is possible to to define the layout of the final drawing of the cross sections, customizing the Drawing layout and the layout rows with different information
- Cross sections can be exported according to the layout style as DXF/DWG

