



# Calculating Volumes from Measured Values

## Volume Calculation from Measured Coordinates with Sokkia Total Stations, 3-DIM Observer and Pictor-3D

### On-site survey

The volume of a workpiece, a space, or a tank with numerous corners and edges is to be determined.

The corner points of the volume body are easily measured with the reflectorless Sokkia instruments.

The smart functionality of the 3-DIM Observer makes it even possible to determine edge locations without using targets. Reflectorless points measured with instruments of the NET series have accuracies greater than 1 mm.

Points can be automatically connected with one another by lines right in the 3-DIM Observer already during the measurement. This subsequently yields a graphical grid model in Pictor-3D. Analyses are thereby greatly facilitated and simplified.

### Analysis with Pictor-3D

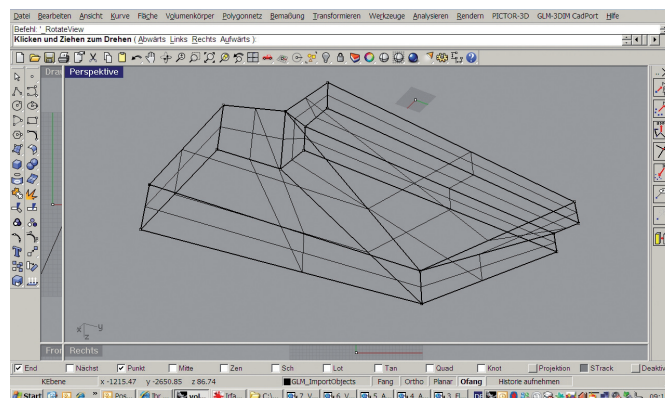
Your result is delivered to you in just a few steps:

The measured data are imported to Pictor-3D. The grid model is manually converted to areas.

Once the volume body is finished, you immediately have your desired result.

### Documentation

In addition to the graphical depiction, you also have the option of mapping your results in an Excel table. The measured values can be entered into an Excel worksheet simply by pushing a button.



Exact 3-D image of the volume body

Pointnumber	Lines	Coord X	Coord Y	Coord Z
8	SfPlus1	0	0	0
9	Smp12	-900.80994	1674.90391	1593.87045
10	Smp13	-898.78948	1675.47454	1885.48132
11	Smp14	-540.7558	1624.27035	1884.39209
12	Smp15	-537.52904	1619.42205	2139.12814
13	Smp16	1882.03402	1258.34871	2142.78825
14	Smp17	1279.62182	-3037.41993	2153.09771
15	Smp18	-707.42916	-2744.83844	2140.75228
16	Smp19	-676.74305	-2122.07899	2140.40813
17	Smp110	-1075.17082	-2057.91197	2143.35579
18	Smp111	-1078.46462	-2058.3774	1882.78549
19	Smp112	-1418.69444	-2002.294	1883.57826

Automatic report with volume information and the measured points

The volume data can be imported from Pictor-3D using copy & paste. In just a few minutes, the clearly structured documentation is available and can be used as a PDF document or a printout.