TUTORIAL DXF CALIBRATION FOR STAKEOUT









DESCRIPTION

• Georeferencing DXF drawing on Survey data for use in field

GOAL

- How to use survey data for georeferencing a DXF drawing
- How to view the georeferenced drawing in WebMap
- How to export data for field use





Import SURVEY data



IMPORT FILE bar are the toolbar where find all the features related to data importation

Select **X-PAD Survey** to import survey file recorded in field with X-PAD Field software.







Import DXF data



Again from *IMPORT FILE* bar, import now the modified **DWG/DXF** project file which we will calibrate

Import DWG/DXF	Import DWG/DXF	C
Import DWG/DXF file Select file and ontions	Wizard Page Here is a description of this page	3
File name: C\Users\menanLGS-NET\Desktop\19\park.dwg	Importing topographic points Convert points Yes	te
Import options	Convert blocks No Insert topographic points on element main positions	e
Import as De datuming (clearation = 0) Import 3D Mesh as terrain surfaces Distance unit of the selected drawing: Meters V	Starting name: P100	C
		р
Next> Cancel	< Back Next > Cancel	
Nex> Cancel	< Back Next > Cancel	

Selecting *Insert topographic points on element main positions* it is possible to import the CAD file with assigned points.







Use the *Transform* function from Survey menu for connect the CAD file to the survey. From the windows *Transform project* select the button + to start selecting transformation points

Transform project 4					
Transformation data					
			View all data No		D
	Н	V	Source	Destination	1
2	No Pre	data a ess Ade	available. d button to select co	ntrol points.	
	L				
θ	Π		Transformation:	Rigid	~
×	Close			Nex	t >





The transformation will be defined through the graphical selection of two or more control points. Each *DXF* point, called *Source*, must be connected to the corresponding *Survey point*, called *Destination*

Source Point (DXF)

Destination Point (Rilievo)







- From the *Graphic View* it is possible to control the correct graphic connection between selected source and destination points
- From the *Table* it is possible to check the data of the source and destination positions of the respective linked points







From the *Table* it is possible to control the deviations of the points used in the transformation and deselect the horizontal H or vertical values V too high

 112
 112

 ΔH
 0.000m
 ΔV
 0.000m

It is possible to select the transformation type from the menu:

- Rigid
- Conformal
- Helmert 3D

Transformation: Rigid

Rigid Conformal Helmert 3D







It is possible to use **Select object from CAD** to select/exclude



parts of the drawing from transforming

Transform project	4
Select objects	
Select objects from CAD elect objects to transform.	No
Select objects from document	Yes
Main survey	
✓ 🛠 Project	
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Dark	



Project on WebMap



It is possible to view the calibrated project directly from WebMap





Export Project

Open
Save
Save as
Import
Export
Reports
Close

From **FILE** menu select **Export** to save the Project

Select Field formats to export the File For XPAD Field

The created File will be ready for **Stakeout**

Field formats



Create X-PAD Survey file



Create instrument file

Upload data to TPS









XPAD Survey

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