

3D Scanning for Design & Construction


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FARO INDIA

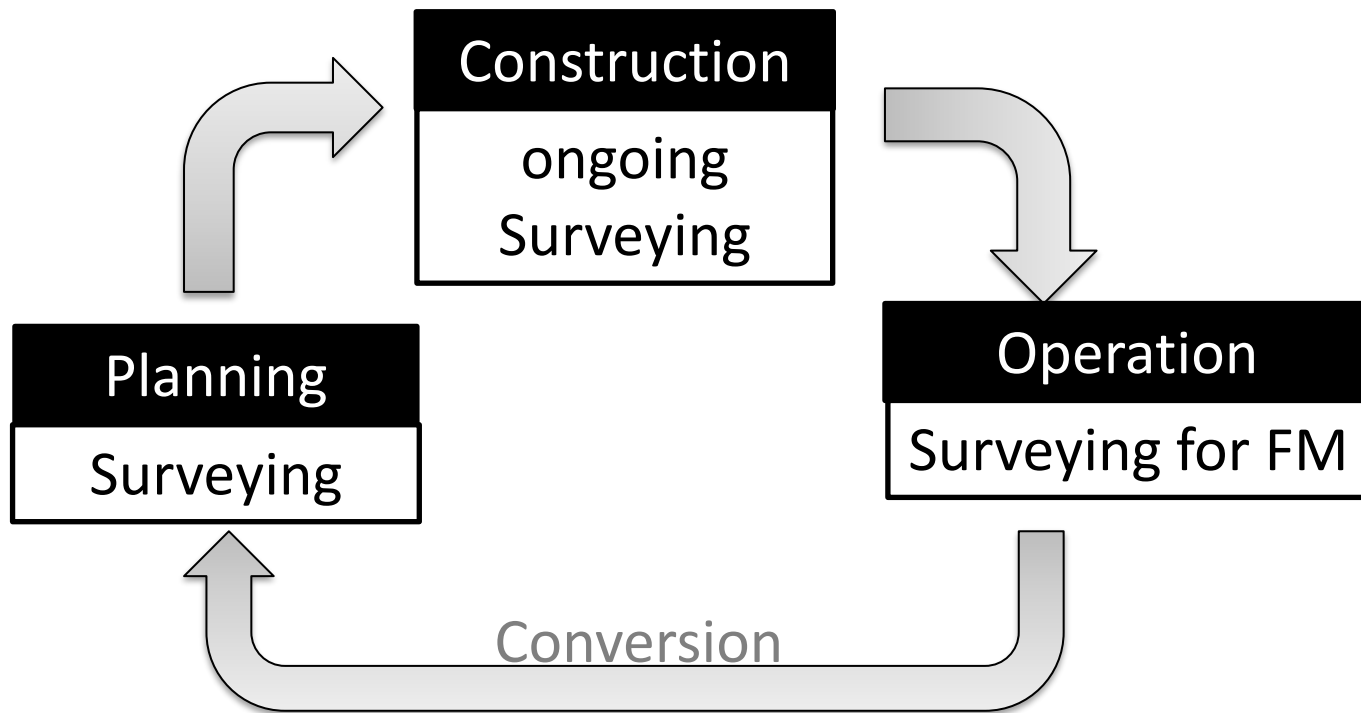
Agenda

- Why Laser Scanning ?
- What does FARO Provide?
- How is it Beneficial ?

Why Laser Scanning

- Significant Population Shift Towards Cities
- 90% of Information that comes into Brain is visual
- Accurate and complete data are very crucial for designing, modeling and planning

Where Does Scanning Play a Role



Sensors

- Great amount of different sensors for a variety of data collection activities

Terrestrial Laser Scanning



e.g.: Laser Scanner
FARO Focus

Handheld Scanner



e.g.: FARO Freestyle
3D

Mobile Mapping



e.g.: Road Scanner C

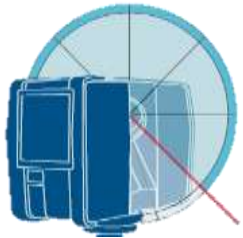
Photogrammetry



FARO

How do Scanner Work

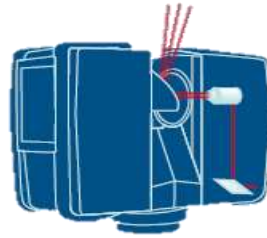
- Captures millions of 3D points in minutes
- Produces a "copy" of high-density reality



vertical angle



horizontal angle



distance measurement

Laser Scanning Process



Capturing

Scans from
different
positions



On site



Registration

Combine the
individual scan
positions into one
common reference
system

Pre-Processing Tool
(e.g. FARO Scene)



In the office

Pre Process

Clean and filter the
raw scan data

Export



Post Process

Interpretation and
modelling

Design Tool
(e.g. Revit)



Scanning



FARO[®]

FARO[®]

Benefits

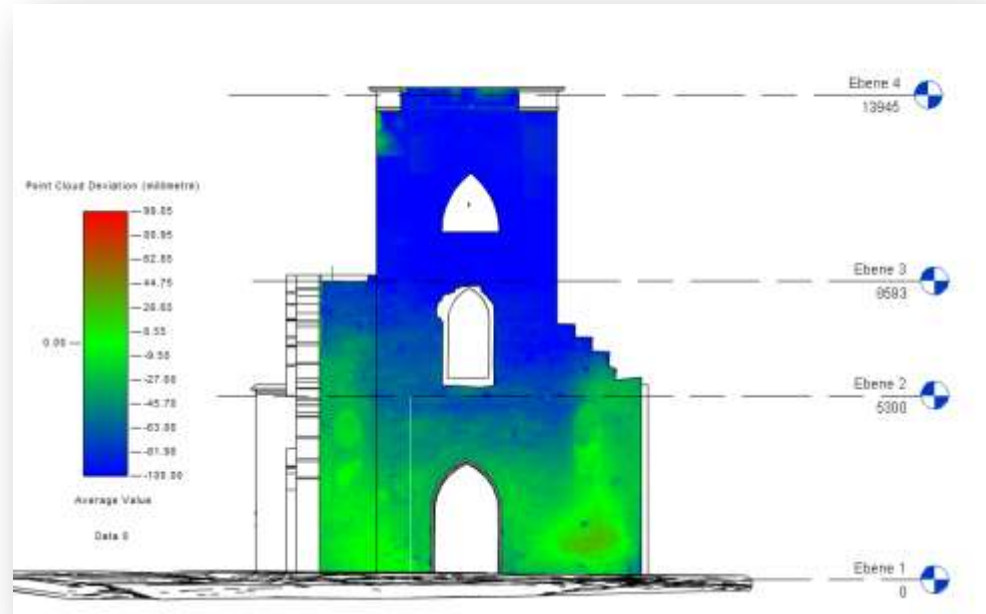
Quick & Easy Detailed Documentation



FARO

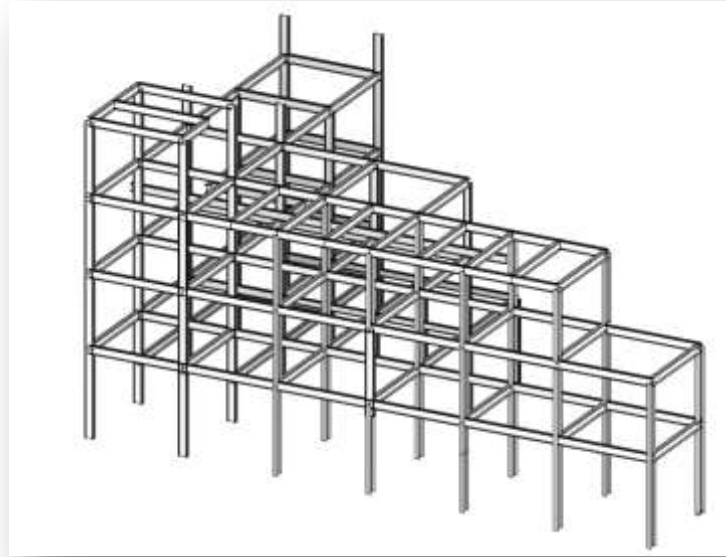
Benefits

Model Quality Control



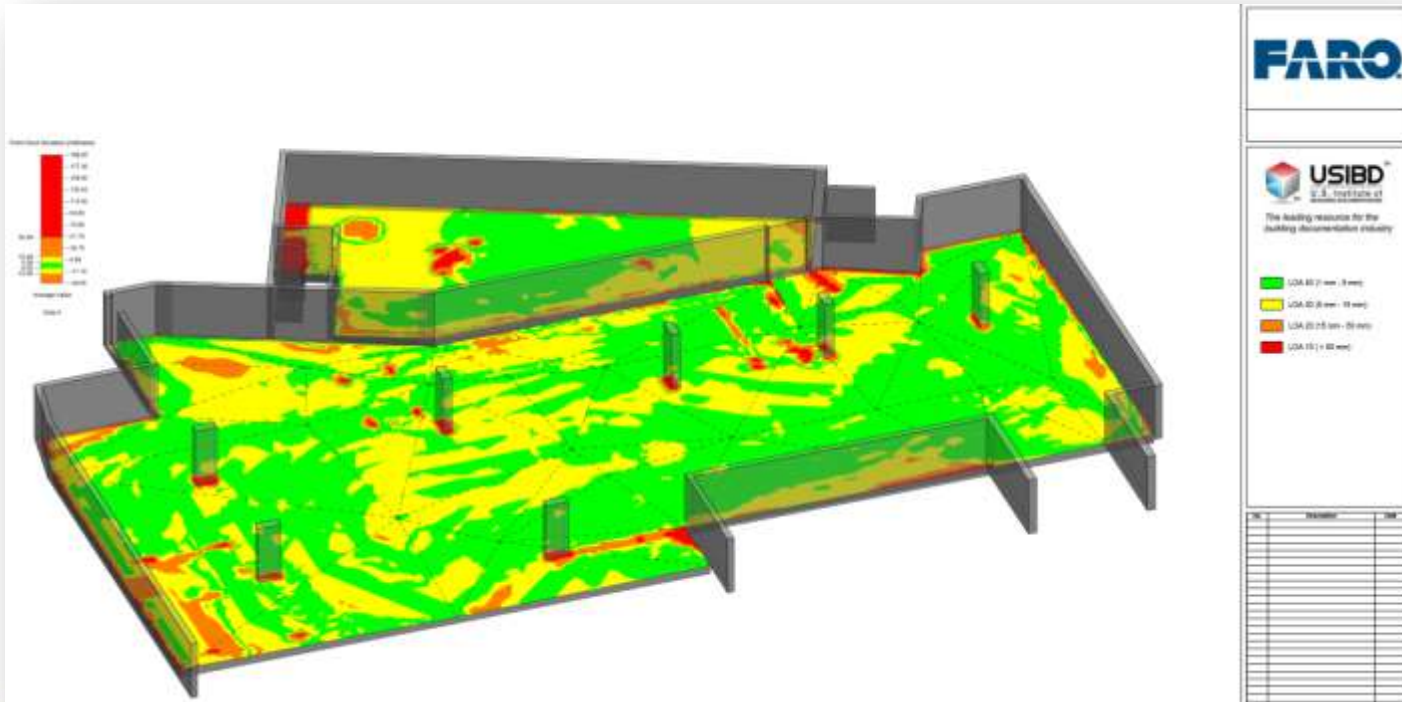
Benefits

Model Quality Check



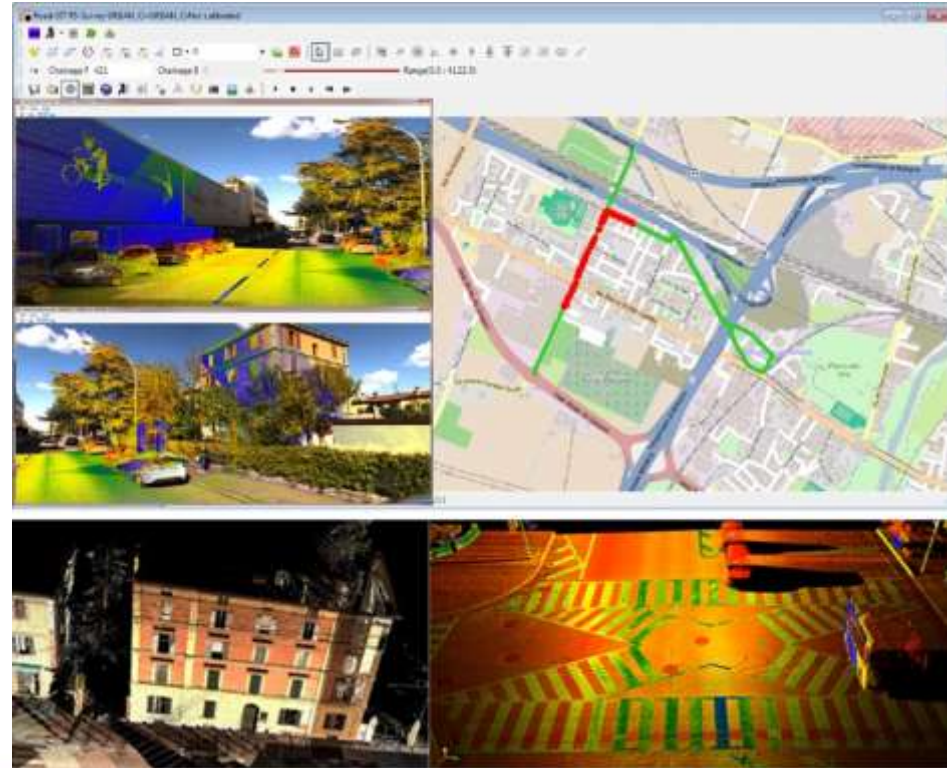
Benefits

Model Quality Check - Flatness



Benefits

On the Go-Mapping



Benefits

- Detailed As Built Data
- Accurate measurement of Intricate Building details
- Faster Data Capture
- No Frequent Site Visits

Laser scanning is highly versatile and can be used in many applications including Measured Building Surveys, Topographic Surveys, mapping of utilities, accurate modelling of plant and machinery and even recording data of archaeological significance.



THANK YOU

FEARDO

3-DEFINE YOUR WORLD™