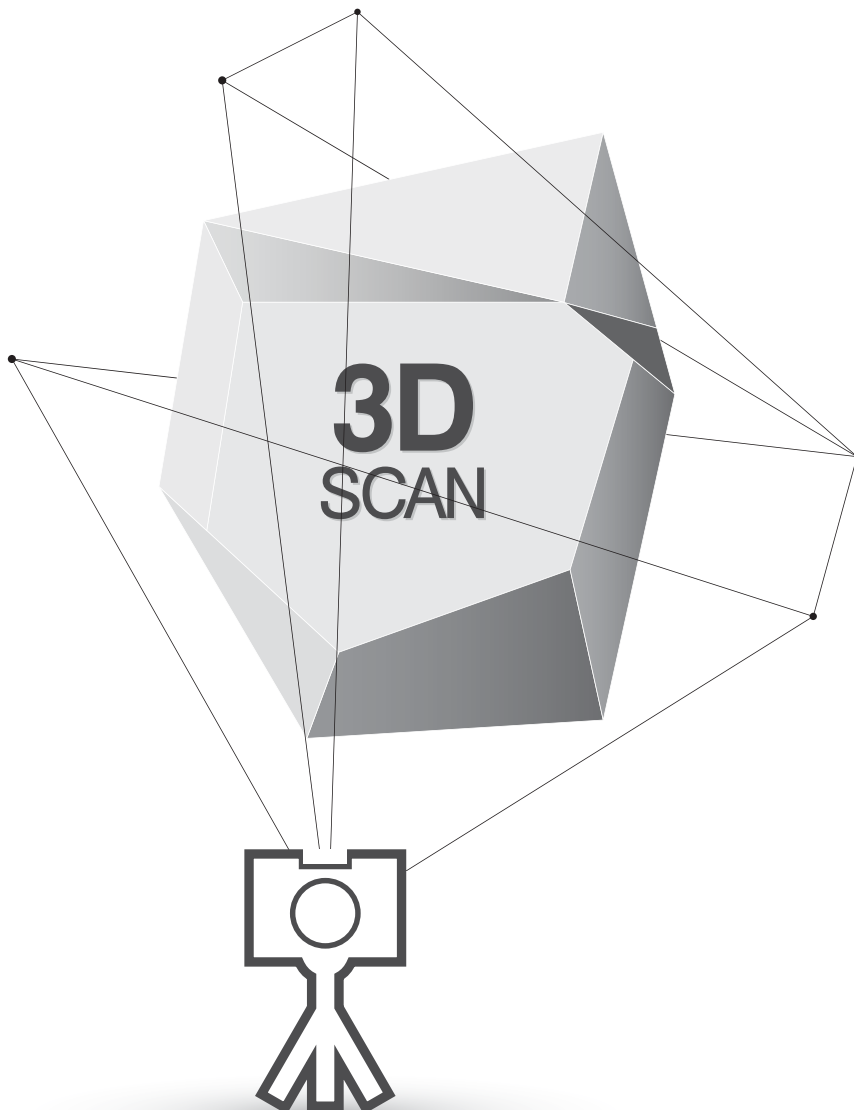




WALLTOPIA

3D Scanning Service

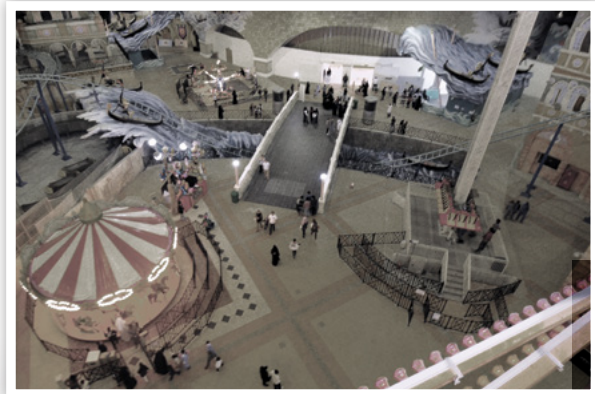


WHAT IS 3D LASER SCANNING?

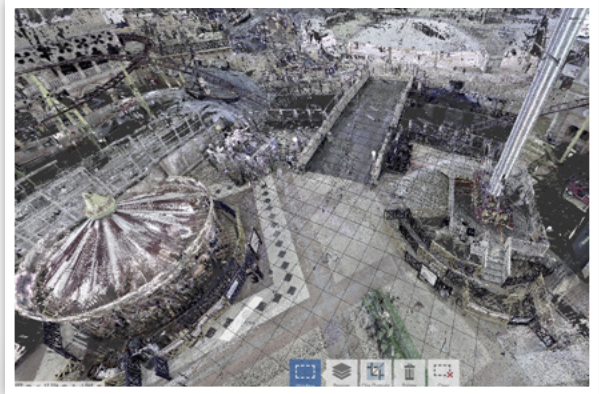
3D Laser Scanning is a service for obtaining precise dimensions of an indoor or outdoor space with a high-tech 3D laser scanner. The captured point cloud data is later used to construct a digital 3D model of the project site. The 3D Scanning service minimizes the risk of mistakes during the engineering phase and/or after the start of assembling. It also saves you a lot of time since it typically takes just a day to do.

HOW DOES IT WORK?

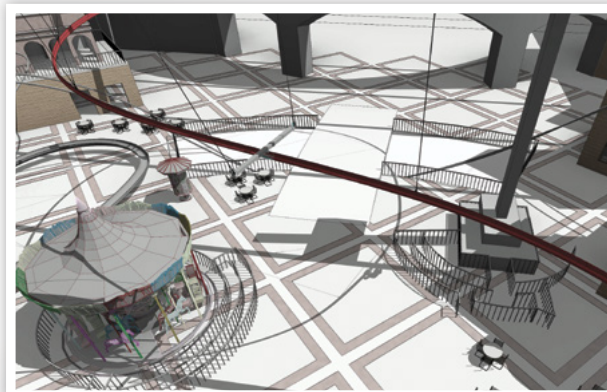
The laser scanner uses multiple laser points to scan across an object. A sensor picks up the laser light that is reflected off the object, and using trigonometric triangulation, the system calculates the distance from the object to the scanner. The final result is a “point cloud” (*.rcp) file consisting of multiple points defining the exact 3D coordinates of the surface of the scanned object. Then this data is imported in AutoCAD/Revit/SketchUp to construct the actual as-built 3D model of the site.



01 indoor complex scan



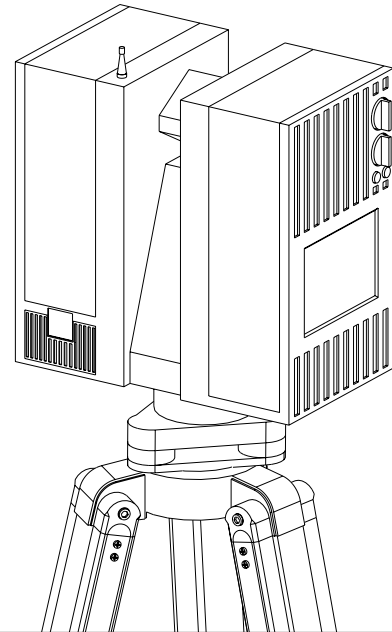
02 “point cloud” (*.rcp) file



03 construct the actual 3D model based on .rcp file

TECH INFO ABOUT THE SCANNER

- Most cutting edge 3D Scanner
- **Range 187 Meters** (approx. 600 ft.)
- Range noise and accuracy: $\leq 1\text{mm}$ linearity error, range noise **0.2 mm – 2.2 mm at <50m.**
- High Dynamic Range panorama imagery with **80 mega pixels** resolution
- High-speed of up to 1 million pixel/second
- The Dynamic Compensator will correct angular tilt for each pixel during scan acquisition.
- Electronic level for maximum accuracy
- $320^\circ \times 360^\circ$ field-of-view for maximum coverage
- Operational in all lighting conditions



WHERE IS THE 3D SCANNING APPLICABLE?

- existing location without any construction documents and drawings
- existing location with outdated construction documents and without as-built drawings
- outdoor site (e.g. landscape park with many trees or complex terrain, theme park, water park)

HOW MUCH DOES IT COST?

Site	Difficulty	Site Description	Price *	Time
Indoor	Standard	<ul style="list-style-type: none"> • Simple, single room building (e.g. warehouse, industrial building, storage) • no obstacles; open empty space 	3000 EUR	1 day
Indoor	Complex	<ul style="list-style-type: none"> • Multiple rooms; • Complex shape with many corners • Multiple levels; • Filled with furniture or equipment space 	4000 EUR	2 days
Outdoor	Standard	<ul style="list-style-type: none"> • Relatively flat and open terrain • Very little trees or other objects 	4000 EUR	1-2 days
Outdoor	Complex	<ul style="list-style-type: none"> • Inclined terrain • Numerous trees or other objects 	5000 EUR	2 days
Optional Design work with architect on site			400 EUR/day	+1-5 days

**Price doesn't include VAT, flights and accommodation.*

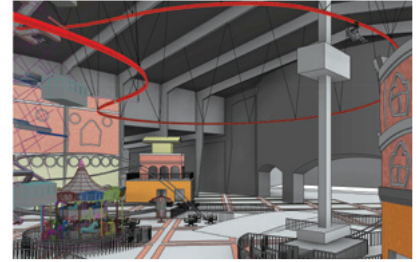
3D SCANNER IN ACTION - EXAMPLES



01 Qatar Doha
indoor complex scan



02 "point cloud" (*.rcp) file



03 Actual 3D model based on .rcp file



01 Central Rock Warwick
indoor standard scan



02 "point cloud" (*.rcp) file



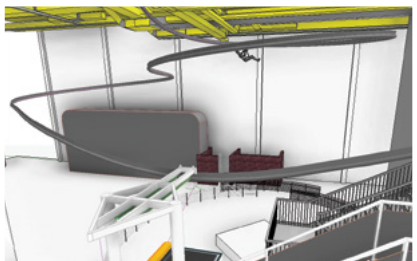
03 Actual 3D model based on .rcp file



01 Gatlinburg
indoor complex scan



02 "point cloud" (*.rcp) file



03 Actual 3D model based on .rcp file