

3D Laser Scanning



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3D laser scanners are your perfect partner when capturing 3D geometry of civil infrastructure, creating an as-built representation of a large industry complex, reconstructing a crime scene or generating 3D data for integration into Building Information Modelling (BIM).



RAS AL KHAIMA MUSEUM

Leica Scanstation P40

This instrument is a 3D scanner that can capture 1 million points per second with a 3d position accuracy of 3mm at 50m and 6mm at 100m. With its 270m radius of capture, this enables capturing of more critical information that can be transformed into rich geospatial deliverables. In surveying, these data can be used for practical applications such as highly detailed as-built survey, volume computation, linear measurement and terrain modelling. In the field, the use of Leica ScanStation can capture the entire jobsite.



AL WARQA SURVEY ENGINEERING

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3D Scanning Buildings & Other Projects

Terrestrial & Mobile 3D scanning are techniques for collecting high-density spatial imaging with millions of coordinates quickly and accurately.

Using highly accurate 3D scan data generated with 3D scanning you are able to view as-built documentation in a virtual world. The point cloud data can also be surfaced to generate a CAD model which can be used for comparison or reconstruction.

The size of the specimen being scanned is no longer limited to the directional travel of a machine, or the reach of an arm. Scans can be taken anywhere, at virtually any time. The raw output of terrestrial scanning is "point-cloud" data, which we can use as reference to create a fully parametric file in your design software.

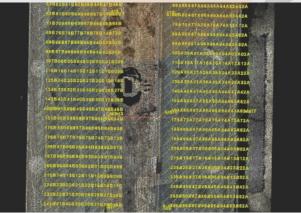
3D Scanning for Road Crossing Survey

For purposes of monitoring for ground surface movement on the roadway, the contractor hired Al Warqa to do an initial survey using Laser Scanner. The Data that been gathered shall then be process in the office at the same day. A vertex will then be created base on the pointcloud of the road pavement that have been scan with the grid of 2.0 meter. These vertex shall be the monitoring points.

The grid of monitoring points shall cover the entire width of the roadway along the drive and shall extend outwards in each direction from the centerline of the drive to a distance of the drive centerline depth below the road surface.

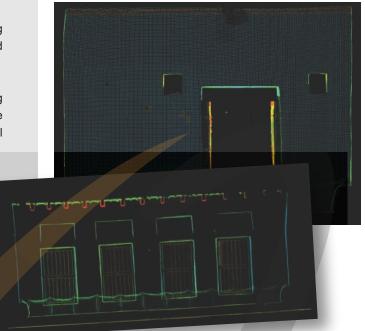
The contractor shall conduct surveys of all monitoring points and provide the Department with drawings and precise survey information on each point three times:

Sketch and schedule of ground surface movement monitoring system and baseline readings for monitoring points collected during initial survey, as well as predicted ground movement (settle-ment and/or heave) based on scientific calculations.

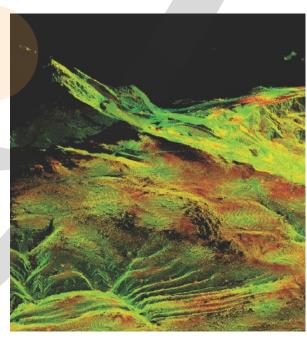


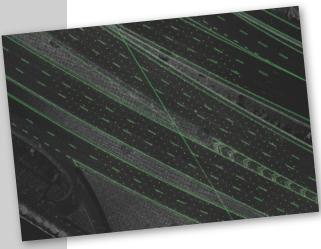
VERTEX GRID IN POINT CLOUD

3D Laser Scanning



GENERATING CROSS SECTION VIEW







PROJECTS

Hindustan Petroleum Project





3d Laser Scanner

Successfully Executed 3d Laser Scanning Of Hindustan Petroleum Corporation LTD Oil & Gas Refinery.

Alwarqa Survey Engineering



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PROJECTS



RAK Scan Survey for Ras Al Khama Museum



AL GHURAIR Scan Survey for Burjuman Center



SHARJAH CRICKET Scan Survey for Sharjah Cricket Stadium



ITECH Scan Survey for Medical Center in Walkway City



RTA Scan Survey for Road Crossing (NDRC)



HP CORP LTD Oil & Gas Refinery 3d Laser Scanning



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