Terrestrial Laser Scanning

Proudly Black Empowered

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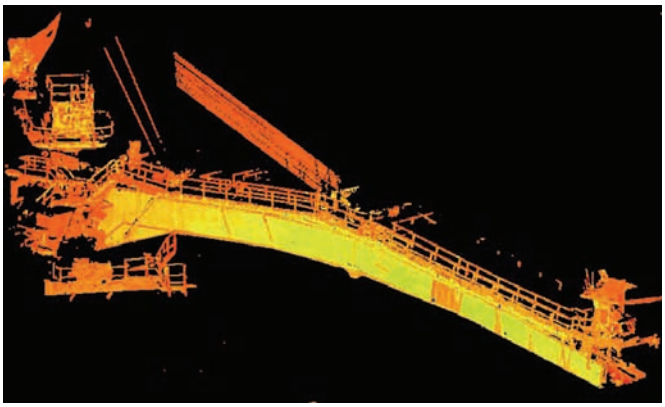
Introduction

AOC harnesses the technology of Terrestrial Laser Scanning (TLS) to provide spatial solutions for a wide range of applications.

Terrestrial Laser Scanning is a tool that provides high resolution spatial definition by measuring the reflectance of laser light emitted from a scanner to a target object or surface.

The initial output from Terrestrial Laser Scanning is a high density cloud of points captured at a rate of > 5,000 points per second.

The point cloud is acquired by scanning laser light across the target surface using a rotating laser and mirror system.



Benefits

TLS is rapid

TLS literally harnesses the speed of light, emitting thousands of discrete points per second.

TLS is accurate

TLS routinely produces high accuracy 3D surface models. Large datasets are selectively thinned to reduce the file size while retaining integrity.

TLS is convenient

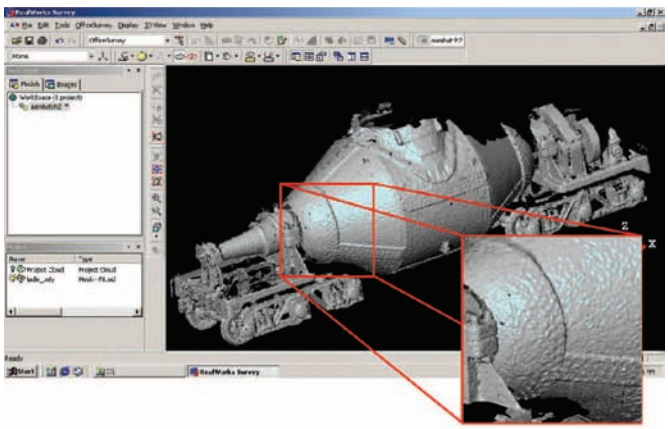
Sophisticated software and advanced procedures un-cloud the picture while retaining the integrity of solid surface depictions.

TLS is proven technology

AOC has dedicated professionals who have successfully applied TLS technology for the benefit of our clients.

TLS is comprehensive

Target objects are defined by dense data clouds of millions of co-ordinated points. The TLS data cloud provides astonishing detail about the study area and captures the target object in context with its surroundings.



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AOC Role

AOC has two office locations in South Africa. Our Terrestrial Laser Scanning and Industrial Measurement expertise can be mobilised to site quickly and efficiently and backed up by our track record of managing projects domestically and internationally.

Industrial measurement resources:

- Faro Arm
- Laser Tracking
- Close Range Photogrammetry
- Metric Photography
- Processing hardware including a network of advanced workstations and media writing facilities
- Comprehensive suite of proprietary software and commercial software packages including Cyclone, Cloudworx, Microstation, CAD, and Realworks.

Deliverables

Since the introduction of Terrestrial Laser Scanning Our team has established field techniques and data processing excellence to accurately determine surface shapes.

Spatial information services:

- Expert advice on survey options
- Planning, acquisition and processing
- Rapid response and support for industrial operations

Data modelling and 3D visualisation:

- Formatting to grids, rasters or industry standard formats
- Data sets and modelling of partial and entire brownfield sites
- Thinning services to remove superfluous datapoints
- Analysis for feature identification