3D Laser Scanning Software

Powerful, Innovative, Easy to use

Fast processing of scan data for accurate modelling and volumetric analysis
Productive surveying with laser scanners

Maptek™ I-Site™ Studio offers advanced tools to successfully apply laser scanning to survey tasks within the mining and engineering industries.

I-Site Studio takes advantage of Windows™ 64 bit computing to easily manage scanning projects with hundreds of scans and millions of points in one software session.

Large point datasets can be efficiently interrogated, modelled and manipulated on a desktop PC or field laptop. Transfer data between projects, DataEngines and networks using familiar techniques.

I-Site Studio integrates data from high performance laser scanning instruments with conventional survey and mapping. Process, combine and model point cloud data from different sources.

Survey station data can be accessed and accurately located against other scans and/or with real world coordinates with I-Site Studio registration tools. A single step global registration process registers multiple scans and objects together.

I-Site Studio helps you get maximum benefit from your geospatial laser scan data. A powerful 3D graphics interface, colour and intensity data display, and easy to use Windows™ style data browser.

Reasons to use I-Site Studio

- Intuitive CAD tools operate directly in the visualisation environment
- Powerful modelling tools
- Export contours & sections
- Calculate surface, solid & differential volumes
- Specialised geotechnical tools
- New reporting module
- New geological tools
- Integrated mine survey workflows
- Familiar Windows™ style interface

Modelling

I-Site Studio streamlines mapping and modelling of infrastructure. Models can be easily exported as CAD wireframe, string files or solid surfaces. Link to external databases through ODBC.

- Generate CAD drawings, as-built strings and 3D models
- Colour surfaces based on 3D distances to other surfaces
- Create underground tunnel and void models
- Comprehensive 3D modelling for retaining the true shape of undercuts

Contours

I-Site Studio allows fast generation and export of contours and sections.

- Automatically determine surface high / low points
- Create major and minor contours
- Name and colour contours
- Export contours as DXF, DXB or DWG strings
CAD tools
I-Site Studio uses simple geometric shapes such as lines and polygons as viewing aids and to provide boundaries for data reduction. Working directly in the visualisation environment allows geometry to be drawn on the scans and views to be changed interactively during editing.

- Design points, lines and polygons; move, insert or delete points
- Mirror surfaces, fit and extrude standard geometric shapes
- Extract selected spatial data as individual points or as best fit planes through scan sections
- Streamline production of detailed 3D line drawings from registered scans with automatic edge detection
- Annotate models and survey data with text
- Trace along edges in scans and surfaces with ‘Smart Line’ tool
- Create closed polygons for tunneling or void modeling with ‘Loop Wrap’ tool

Mining tools
I-Site Studio is an intuitive point cloud processing package designed for mining and other survey applications. Users are able to quickly turn detailed datasets into easily understandable results.

- Automatic toe and crest detection in open pits
- Update of open pit models by integrating new selected scan data
- Global registration tool streamlines vehicle mount setup and use
- Labelling of elevations on generated contours
- Extensive volume calculations: surface, solid, differential
- Open pit and quarry survey tools
- Bucket, shovel and dump truck volumes
- Specialised geotechnical module (additional licence required)

Data management
I-Site Studio’s familiar Windows™ style user interface allows you to manage scanning hardware and data processing with ease. A visual browser providing access into the project DataEngine allows you complete freedom to organise your data.

- Multiple Document Interface style of operation
- Windows™ style explorer to copy, paste, delete and move data, undo and redo on selected data
- Independent 3D view windows
- Multi-data transfer between projects, DataEngines and networks
- High resolution screen capture not limited by screen display
- Drag and drop between browsers, views and dialog boxes
- Export 3D PDF and Universal 3D file formats
Industry Leading Global Solutions

Maptek is the leading global provider of innovative software, hardware and services for the mining industry. More than 1800 customers in 75 countries rely on Maptek.

Our solutions help reduce operating costs and improve performance, productivity and profitability. Maptek provides expert consulting, training and support services to ensure you get the most from your investment in our products.