

3D Laser Scanning

BTW Company (BTW) provides 3D laser scanning services in New Zealand and abroad as part of our engineering services.

3D data capture complements our engineering capabilities to provide clients with an unprecedented amount of high quality data in a fast, efficient and user friendly manner.

Utilising the industry's best performing Ultra-High Speed Laser Scanner – the Leica P20 Scanstation - BTW is able to capture data at a rate of up to 1 million points per second with millimetre accuracy at a range of up to 120 metres.

Using this technology has enabled data for hazardous or inaccessible areas to be captured without jeopardising the health and safety of personnel. Field work can be carried out remotely and at a safe distance by our highly skilled engineers.

Our current 3D laser scanning capabilities are providing data capture for:

- Accurate as-built documentation of a facility for redesign and refurbishment projects, or for updating existing plant documentation in 3D.
- Condition surveys for structures such as roads and buildings which require high density and long range data.
- As-built and As-Is conditions for MEP services, structures or virtual design and construction (BIM) projects
- Production of high resolution topographical maps which generate 2D and 3D CAD views enabling measurement of distances, areas, and volumes.
- Production of 3D modelled objects from asbuilt point cloud data.

Deliverables include 3D point cloud data, 3D modelled objects, isometric plans or 2D layout and construction plans. All deliverables are fully compatible with the latest 3D design and modelling software, including AutoCAD, AutoPLANT, Revit and Microstation.

3D laser scanning is a new and innovative technology which is revolutionising engineering data capture techniques and challenging traditional thinking. It is a cost effective engineering tool which can assist with the structural assessment of buildings, such as those damaged by earthquakes.

Contact BTW Company now to see how 3D Laser Scanning can add value to your project - www.btwcompany.co.nz

