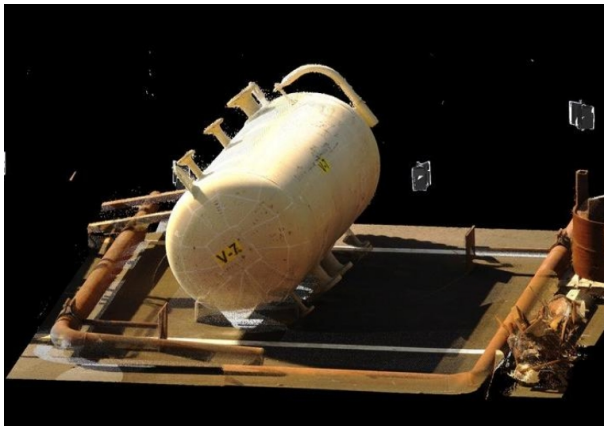
Contact: info@applus.com

Laser NDT - 3D Surveying

Laser NDT scanning of a site or facility generates a 'point cloud', which serves as the platform for a series of deliverables. The laser scanned point cloud itself is spatially aware and can capture measurements across all planes. Common laser scan to point cloud applications include as-built documentation, job planning, safety planning, phased construction planning, fit and clash detection, planar analysis, tank inspection and analysis and QA/QC for the fabrication industry. Once the field-scanning portion is completed, we can generate multiple deliverables for the client. The point cloud itself is inter-operable with industry leading vendors such as AutoDesk, Aveva PDS, Bentley, InoVX, ESRI, etc.



THE Applus+ SOLUTION

The Laser NDT services at Applus+ deliver highly efficient processes for laser scanning off-site in the field, and uses optimal hardware to provide deliverables to the client in the quickest possible time. As a global NDT company, Applus+ can provide Laser NDT services to clients anywhere in the world. Our field teams transfer data to office staff on a daily basis, which is then registered while the field scanning continues. Having two processes occurring simultaneously, allows for speed and accuracy and ensures that the project stays under budget and ahead of schedule. In terms of competitive advantage, we've developed our unique "dual task" workflow. Applus+ has also developed partnerships with industry-leading consultants and vendors in the laser-scanning industry, which allows us to take on Laser NDT projects of any size. We can generate standard deliverables in the industry and also work with clients to customise our services as needed.

Target customers

Laser NDT scanning can be used in all cycles of a project, from process all the way through to optimisation. Clients typically use laser scanning to produce an intelligent

model, which can then be used as a pre-planning tool for safety, construction, maintenance and optimisation purposes.

The ability to view the site remotely and take measurements that are accurate down to 2mm presents tremendous value for the client. The client also has the ability to add annotation to certain areas and attach supporting documents via our cloud offering. Applus+ can deploy laser NDT and 3D surveying in many industries, including architecture and construction, manufacturing and fabrication, oil and gas, mining and verticals of the alternative/renewable power-generation industry.

Key customer benefits

Benefits of Applus+ 3D laser scanning and surveying services include:

- 3D models can be linked to SQL databases with special software
- 3D models can be queried like a database after linking
- 3D models are true BIM models, containing contextual data
- Bill of materials allows the client to forecast costs more accurately
- Highly accurate as-built documentation
- Job planning from remote location without visiting site
- Safety planning from office without entering site
- Model can be used to perform simulations of construction projects and renovations /retrofits to existing physical location
- Remote measurement and annotation tools allow for maximum planning, fit checks and reduced error-related project costs
- Ground-level orthographic photography and high detail and geo-reference