Laser Testing Methods

Laser technologies have been employed throughout various industries to varying degrees over recent decades. The industrial sector has identified opportunities for laser technologies to aid in many tasks that were previously thought time-consuming and ineffective. Laser profilometry has provided time- and cost-efficient approaches to data collection and increased data quality to a level unobtainable through manual measurements.

THE Applus+ SOLUTION

Applus+ has developed many proprietary laser systems, setting the standard in collection speed and versatility.

Through our extensive RandD work, often as a result of client requests, we have developed LPIT (the Laser Pipeline Inspection Tool) to aid in the fast and accurate data-collection protocols required to obtain accurate and reliable data on external pipeline corrosion-type defects. Unlike other systems available on the market, LPIT has been designed with the client’s needs in mind. From the quick collection speeds and the accuracy of the data to the field-generated reports including Kappa calculations, Applus+ has set the bar for the industry and continues to strive for improvement.

In addition to our proprietary LPIT system, we have a range of complementary tools at our disposal according to the client’s needs. Most recently, the deployment of multiple Creaform HandySCANs has been instrumental in the collection of data from items other than pipes, including vessels, plates, small pipe areas and complex geometric shapes. Our extensive toolkit enables Applus+ to assist clients in the collection of data no matter what the end use. In most cases, this data is used to determine removed volumes of material; however, the same data may be used for accurate point-cloud creation, as-built /current-state modelling or reverse-engineering activities.
Target customers

The versatility of laser profilometry and related data-collection protocols has opened up laser technologies to a broad customer base. Any company wanting to collect data on the current state of parts, pieces or defects is now able to attain this data in a timely manner under field conditions.

Key customer benefits

Benefits of the effective deployment of laser technologies include:

- More rapid on-site data collection
- More accurate results
- Faster data analysis and reporting capabilities
- Reduced downtime, leading to cost savings