Contact: info@applus.com

DTI Trekscan

DTI Trekscan is the first free-floating pipeline in-line inspection tool designed to traverse back-to-back one-dimensional (1D) bends, with an optimum speed of one-metre-per-second (2.2 mph). It can run in pipelines previously considered to be 'unpiggable'. The bi-directional tool measures the return echoes of a transmitted ultrasound beam. The amount of time it takes to receive an echo provides highly accurate information on the remaining wall and enables the detection, characterisation and sizing of metal-loss anomalies. Using the latest ultrasonic technology and high-density transducer-carrier design, most refined petroleum products, water and crude oils can be used as a medium to run this tool.

Target customers

Trekscan has been designed for use in a range of pipeline infrastructure, including but not limited to:

- Compressor and pump-station interconnects
- Tank farm and interconnect lines
- Gathering and distribution lines
- New construction baselines
- Pipelines with no as-builts or drawings
- Product and fuel/dock lines
- Terminal storage lines
- Upstream loading and gathering lines
- Water-distribution lines
- Airport fuel pipelines

It is an ideal tool in the following scenarios:

- In-line inspection
- Unbarred tees at any orientation
- Short radius bends (up to 1.5 D)
- Back-to-back bends
- Mitre bends
- Bore restrictions including: reduced port valves, dents and ovalities, mechanical damage, buckling, step changes, extreme heavy wall changes and non-typical fittings
- Small diameters (up to 27.3cm/10.75” NPS)
- Absence of launch/receive pig-trap facilities
- No area to position launch/receive pig-trap facilities
- Short lengths (where it can be difficult to control speed)
- Y-connections
- Low pressure/low flow

Key customer benefits

Traditionally, the internal inspection of unpiggable pipelines has often been cost prohibitive or too problematic for effective pipeline-integrity management. The Applus+ DTI Trekscan, our own-developed tool, has addressed these challenges with key design attributes that allow for the successful inline inspection of unpiggable pipelines.

The standard configuration of DTI Trekscan comes in 15cm (6”) and 20cm (8”) sizes. It is also extremely lightweight – 15kg (33 lb) – and its maximum operating temperature is 40°C (104°F). It is untethered and battery operated. The tool can measure wall thicknesses ranging from 2.8mm (0.1”) up to 50mm (2.0”).

The resulting report provides operators with ranked and screened ultrasonic-survey data that will assist them with maintenance planning for the examined pipeline segments.

Through Trekscan, Applus+ can provide:

- Customised in-line inspections
- Multi-diameter pipeline inspection
- Online data-retention services

We can also provide the following services either as individual packages or combined to provide a total asset integrity management programme:

- Advanced (non-intrusive) inspection services

- Sub-sea inspection services
- Engineering design solutions
- Risk-based inspection planning
- Inspection-management services
- In-service inspection
- Plant-life management
- Metallurgical services

Applus+ can also call upon extensive in-house expertise and resources for advanced inspection and conventional non-destructive testing, providing a total capability for management of through-life plant integrity.