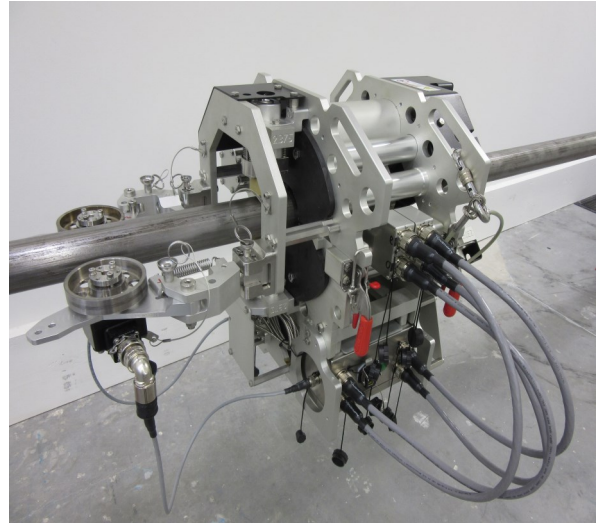




Coiled Tubing Assessment Services

VALUE PROPOSITION

Regular assessment of Coiled Tubing (CT) strings is key to early detection of small defects that evolve rapidly to costly CT failures and premature disposal of strings. No fatigue model can detect random mechanical damage a string may suffer during a job. itRobotics CT Assessment Services offer prompt and regular monitoring of the entire string length, using a combination of the MFL and ET NDE techniques. Our goal is extending the lifespan of a string through early detection of flaws and monitoring of their evolution. We bring our NDE service to the strings in the field and cut the cost of transporting them to a test yard.



itRobotics' External CT Assessment System

PERFORMANCE

Defect Detection

- Meets ARAMCO'S requirements for used CT
- Reports on defects such as: corrosion, pitting, transverse fatigue cracks, longitudinal notches
- Measures wall thickness and reports on out-of-range wall thinning
- Measures outside diameter and ovality, and reports on out-of-range values

Resolution

- High axial & circumferential MFL resolutions
- Detects pits of 1/32 inches in diameter
- Wall thickness accuracy: ± 0.005 inch
- Diameter accuracy: ± 0.01 inch
- Accuracy maintained through temperature range of -20° to $+70^{\circ}$ C

AVAILABILITY

Territory and CT Size Coverage

- Services available in the K.S.A
- Support for CT diameters ranging from 1.5 to 2.875 inches
- API 5ST baseline inspection of new strings at CT mills through itRobotics Inspection Services

Field Operation

- Support for spooling speeds of up to 3 ft/sec
- itRobotics deploys equipment and inspector (s) to location; spooling equipment and staff to be provided by customer