Schlumberger

CoilScan RT

Real-time pipe inspection system

APPLICATIONS

- Coiled tubing (CT) operations that require real-time monitoring of pipe integrity
- Pre- and postjob CT pipe integrity inspection

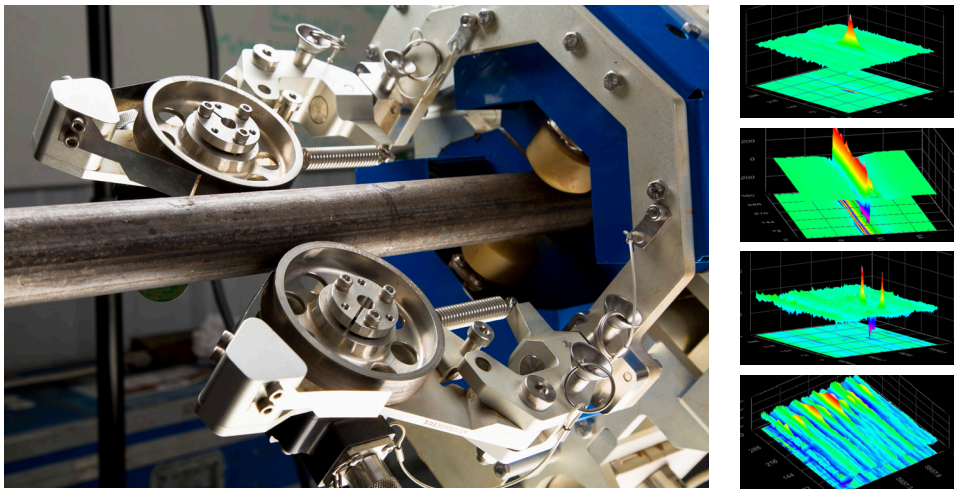
BENEFITS

- Enables real-time pipe inspection during CT interventions
- Helps mitigate CT failure

FEATURES

- Defect and mechanical damage identification in CT pipe sizes ranging from 1¼ in to 2⅞ in
- Nonstatic pipe contact
- Pipe wear detection, including corrosion, pitting, wall thickness, and ovality
- Real-time visual and audible alarms
- Accurate CT length and speed measurements
- 3D modeling and interpretation software
- Safe area and nonzoned unit availability
- Real-time integration with CoilLIMIT* coiled tubing pressure and tension limit model

The CoilScan RT* real-time pipe inspection system uses magnetic flux leakage (MFL), eddy current, and depth encoders for nondestructive evaluation of pipe integrity in the manufacturing facility or in the field. The device detects pipe defects by measuring the MFL leakage, wall thickness, ovality, length, and speed of coiled tubing. The data is interpreted by 3D modeling software during real-time operations.



The CoilScan RT system makes a full array of measurements every 0.005 in. The 3D modeling software produces MFL output signatures (right) that detect leaks such as pinhole, butt weld, excess internal metal, and seam weld.

Coiled Tubing Pipe Integrity Device	
Equipment Specifications	
Total weight	95, lbm
Requires contact with pipe	No
Requires lubrication for pipe	No
Detects pinholes and notches	Yes
Detects areas of corrosion	Yes
Operational Specifications	
Diameter accuracy	0.010, in
Wall thickness accuracy	0.005, in
CT sizes	1.25–2.875, in
Max. speed	150, ft/min
Weld seam location accuracy	12, °
Min. blind pit detected OD (W × D)	1/16 in × 10%
Min. blind pit detected ID (W × D)	1/16 in × 15%
Through hole ID (W)	1/32, in
Min. transverse notch OD (L × W × D)	0.250 in × 0.020 in × 10%
Min. transverse notch ID (L × W × D)	0.250 in × 0.020 in × 15%
Min. longitudinal notch OD (L × W × D)	0.250 in × 0.020 in × 25%
Min. longitudinal notch ID (L × W × D)	0.250 in × 0.020 in × 35%