



TECHNICAL DATA SHEET

MTT

Magnetic Thickness Tool

The Magnetic Thickness Tool (MTT) measures variations in casing and tubing metal thickness using the propagation of electro-magnetic energy. Sensors are mounted on bowsprings to provide full coverage around the well-bore as well as flexibility through well-bore restrictions.

An alternating magnetic wave emitted from the tool permeates through the well fluid to the casing before passing along the casing to the tool sensors mounted on bowsprings. The velocity and amplitude of the received signal is impacted by the metal thickness.

READ has also designed a unique sand screen investigation application to identify integrity issues, and sand breakthrough.

The tool is designed to be run in combination with the Multifinger Caliper tool to provide a comprehensive profile - both internal and external - of the casing or tubing.

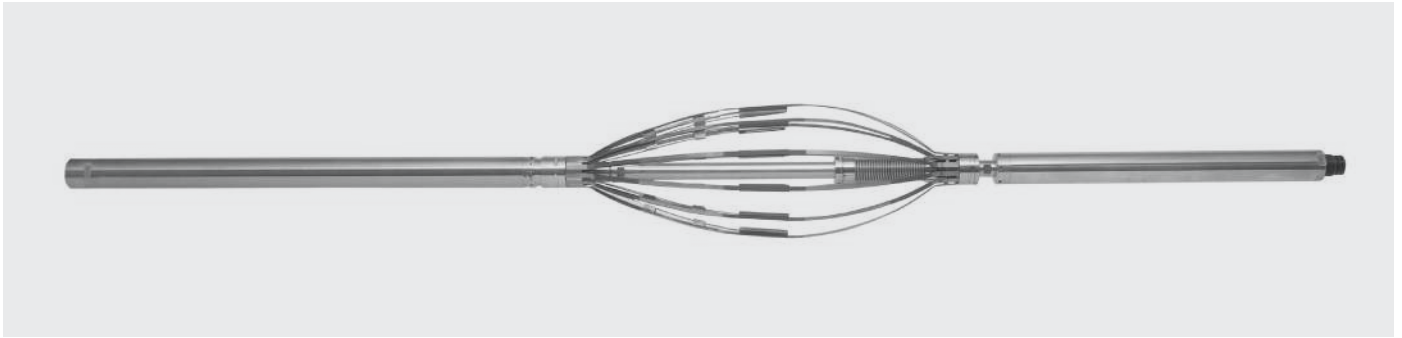
Applications

- Casing and tubing thickness evaluation
- Time-lapse metal loss studies
- Well integrity evaluation
- Sand screen integrity evaluation

Benefits

- Designed to operate equally in all well fluid types - including significant solids or sand content
- Improved understanding of well integrity through twelve discrete wall thickness measurements
- Tool flexibility permits passage through small restrictions and varying casing/tubing
- Deployable on Slickline, Electric line, Coil Tubing and Tractor
- Suitable for all well deviations, including horizontal
- Comprehensive range of log analysis and report services available from READ





Specifications

Temperature rating	300°F (150°C)
Pressure rating	20,000 psi (138 MPa)
Tool diameter	1 ¹¹ / ₁₆ in (43mm)
Tool length	82.3 in (2.09 m)
Tool weight	30 lb (13.6 kg)
Electro-magnetic generator	Multi-frequency sinusoidal waveform
Number of radial sensors	12
Relative Bearing Accuracy	±5°
Relative Bearing Deviation	5° to 175°
Logging Speed	Recommended: 10 ft/min (3 m/min) Maximum: 30 ft/min (10 m/min)
Minimum defect	30% wall thickness, 3/4 in (18 mm) defect internal or external; 40% for 3/8 in defect
Nominal Casing/Tubing range	2 ³ / ₈ - 7 in
Materials	Corrosion resistant throughout

