

Magnetic Thickness Tool

The Magnetic Thickness Tool (MTT) is designed to investigate variations of metal thickness within downhole completions.

It is run centralised within the wellbore, combined with a Multi-Finger Imaging Tool (MIT) or with MIT data available. The tool has an array of 12 sensors, with each sensor measuring a magnetic value. MIPS analysis software is available to create and display a 3D representation of recorded data. The tool can pass through tubing to log casing up to 7”.

Applications

- Inspection of tubing and casing for internal and external pitting and metal loss
- Measures gradual wall loss
- 3D visualisations using MIPS analysis software
- Detects pitting and gradual wall loss

Interfacing and tool combinations

- Memory or surface read out operations
- Standard 1³/₁₆” (30.2mm) UN 12tpi/GO connections
- Simultaneous operation with other Ultrawire tools
- Builds a report summarising the condition of the pipe in the well



Technical specification	
Temperature rating	150°C (300°F)
Pressure rating	15,000 psi
Tool body diameter	1 11/16" (43mm)
Make-up length	86.07" (2186mm)
Weight	30lbs (13.6kg)
Number of sensors	12
Magnetic generator	1
Maximum pipe size	7" (178mm) ID casing
Minimum pipe size	2" (54mm) ID tubing
Toolbus standard	Ultrawire for memory or SRO
Thickness accuracy	Depends on size of defect. In undamaged pipe, accuracy is better than 15% of wall thickness
Resolution	Ø 3/8" defect : 50% wall thickness, 35% metal loss
	Ø 3/4" defect : 30% wall thickness, 20% metal loss
Coverage	100% coverage up to 5" ID casing