

CASING INSPECTION: MIT

MIT: Multi-Finger Imaging Tool

(24, 40, and 60 arm calipers for casing and tubing inspection)

The Multi-Finger Imaging Tool (MIT) is used to detect very small changes in the internal surface condition of tubing and casing with a high degree of accuracy. The tool may be run with extended fingers to increase the measurement range. It is often run with the **Magnetic Thickness Tool (MTT)** for OD/ID casing inspection.

Description: The MIT is available in a range of diameters to suit varying casing and tubing sizes. The number of fingers increases with the diameter of the tool to maintain maximum surface coverage. The tools can be run in combination with other well-integrity instruments and Ultrawire™ production logging tools. When the tool is run in a well, the fingers are closed to prevent damage. Once at logging depth, a motor is activated from the logging system or by the memory tool and the fingers open. Continuous measurement of the pipe's surface condition is made as the tool is logged up.

The tool has an inclinometer to indicate finger position relative to the high side of the pipe so that features can be orientated correctly during data processing. MIT data can be used to generate 3D images of pipe conditions using visualization software Well Integrity Visual Analysis (WIVA). Well Integrity Processing, Evaluation, and Reporting software (WIPER) can also be used to make statistical analysis of pipe conditions.



	MIT-24	MIT-40	MIT-60
# Sensors	24 Fingers	40 Fingers	60 Fingers
Temperature	177°C	177°C	177°C
Pressure	103 MPa	138 MPa	138 MPa
Tool OD	43 mm	70 mm	99 mm
Tool Length	1.64 m	1.68 m	1.55 m
Tool Weight	9.4 kg	31.8 kg	43.5 kg
Measurement ID Range	50 - 178 mm	100 - 178 mm (245 mm extended)	102 - 254 mm
Logging Speed	10 m/min	10 m/min	10 m/min
H₂S / CO₂	yes	yes	yes
Memory	yes	yes	yes