

Multifinger Imaging Tool (MIT 40)

Detect very small changes to the internal surface condition of tubing or casing with a high degree of accuracy

Application

- Quantification of scale build up and corrosion.
- Accurate location of holes or anomalies.
- Detects axially oriented metal loss, such as drillpipe or rod wear
- Identification of completion items and damage
- High-resolution detail on the condition of downhole tubulars
 - Improves remedial action efforts by accurately determining the wear profile

Features

- Available in 24, 60, 80 or 120 finger version
- Surface readout or memory options
- Combinable with other Ultrawire tools
- 3D data analysis using WIVA software
- Statistical analysis using WIPER software
- Suitable for all well deviations
- Extended finger lengths available for all tools (optional)

The Multifinger Imaging Tool (MIT) is available in a range of diameters to suit varying casing and tubing sizes. The forty fingers increase 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 MIT tool is run in hole, 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. A continuous measurement of

the pipe's surface condition is made as the tool is logged up. The tool has an inclinometer to indicate the finger positions 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 condition using **Sondex's Well Integrity Visual Analysis (WIVA) software**. **Well Integrity Processing, Evaluation and Reporting (WIPER) software** can also be used to make a statistical analysis of the pipe condition.



Specifications

	40 fingers standard	40 fingers extended
Temperature rating	350°F (177°C)	
Pressure rating	20,000 psi (138 MPa)	
Tool diameter	2.75 in. (70 mm)	
Tool length	66 in. (1.68 m)	
Tool weight	70 lb (31.75 kg)	
Toolbus	Ultrawire	
Current consumption	<30 mA (logging)/<500 mA (motor operating)	
Measurement range	2.75 to 7.0 in. (70 to 178 mm)	2.75 to 10.0 in. (70 to 254 mm)
Accuracy, radial	±0.02 in. (0.51 mm)	±0.025 in. (0.64 mm)
Resolution, radial	0.0015 in. (0.04 mm)	0.0022 in. (0.06 mm)
Finger tip width	0.064 in. (1.63 mm)	
Finger contact force	0.75 to 1.25 lbf (3.4 to 5.7 N)	
Logging speed	30 ft/min (10 m/min) recommended, 60 ft/min (20 m/min) maximum	
Materials	Corrosion resistant throughout	