

Multifinger Imaging Tool (MIT 24)

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 40, 60, 80 or 120 finger versions
- 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 twenty-four 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		
	24 fingers standard	24 fingers extended
Temperature rating	350°F (177°C)	
Pressure rating	15,000 psi (103.4 MPa)	
Tool diameter	1 7/16 in. (43 mm)	
Tool length	64.6 in. (1.64 m)	
Tool weight	20.7 lb (9.38 kg)	
Toolbus	Ultrawire	
Current consumption	<30 mA (logging)/ <400 mA (motor operating)	
Measurement range	1.75 to 4.5 in. (45 to 114 mm)	1.75 to 7 in. (45 to 178 mm)
Accuracy, radial	±0.02 in. (0.508 mm)	
Resolution, radial	0.002 in. (0.051 mm)	0.003 in. (0.076 mm)
Finger tip width	0.063 in. (1.60 mm)	
Finger contact force	0.75 to 1.25 lbf (3.4 to 5.7 N)	
Logging speed	30ft/min (10m/min) recommended, 60ft/min (20m/min) maximum	
Materials	Corrosion resistant throughout	