

Multifinger Imaging Tool (MIT 120)

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

- Also available in 24, 40, 60 or 80 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 one–twenty 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

	120 fingers standard	120 fingers extended
Temperature rating	257°F (125°C)	
Pressure rating	20,000 psi (138 MPa)	
Tool diameter	12 in. (304.8 mm)	
Tool length	58.70 in. (1.49 m)	
Tool weight	339.5 lb (154 kg)	
Toolbus	Ultrawire	
Current consumption	<30mA (logging)/<550mA (motor operating)	
Measurement range	12 to 18 in. (304.8 to 457.2 mm)	14 to 22 in. (355.6 to 558.8 mm)
Accuracy, radial	±0.025 in. (0.635 mm)	±0.030 in. (0.762 mm)
Resolution, radial	0.003 in. (0.076 mm)	0.005 in. (0.127 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	