Sondex™
a Baker Hughes business

# Multifinger Imaging Tool (MIT 60)

## 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, 40, 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 sixty 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

| | 60 fingers standard | 60 fingers extended |
|---|---|---|
| **Temperature rating** | 350°F (177°C) | |
| **Pressure rating** | 20,000 psi (138 MPa) | |
| **Tool diameter** | 3.9 in. (99.06 mm) | 4.4 in. (111.76 mm) |
| **Tool length** | 61 in. (1.55 m) | |
| **Tool weight** | 95.7 lb (43.5 kg) | |
| **Toolbus** | Ultrawire | |
| **Current consumption** | <30 mA (logging) / <500 mA (motor operating) | |
| **Measurement range** | 4 to 10 in. (101.6 to 254 mm) | 4.5 to 14 in. (114.3 to 356.6 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 | |