READ | CASED HOLE

Version 1

TECHNICAL DATA SHEET

MFC 24

Multi-finger Caliper (24 finger)

The 24 sensor Multi-finger Caliper (MFC24) is used to log the internal surface of smaller sized tubing or casing, providing highly accurate measurements of the profile of the internal well-bore geometry and barrier condition.

The MFC 24 is most commonly used in slim hole completions or where reduced ID restrictions are present.

The tool includes a sensor so log data can be orientated during data processing and an enhanced 3D image of the wellbore produced. An internal motor is activated from the surface logging system or by the memory/battery tool to open the fingers downhole prior to logging.

APPLICATIONS:

- Casing corrosion and erosion
- Drilling wear evaluation of casing
- Plug and packer setting depth assurance
- Scale build-up and removal quantification
- Perforation hole mapping
- Evaluation of condition of completion items
- Time lapse studies and life of well projections
- Well access modelling

BENEFITS

— Improved understanding of well integrity from high-density, high-precision measurements of tubular dimensions

— Compact or extended fingers available for greater range and flexibility

— Deployable on Slickline, Electric line, Coil Tubing and Tractor

— Suitable for all well deviations including horizontal

— Comprehensive range of log analysis and report services available from READ

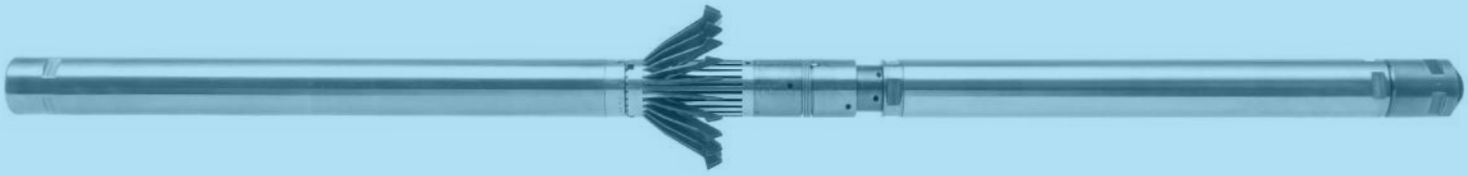

Image courtesy of GE oil & gas

Specifications

	Compact fingers	Extended fingers
Temperature rating	350°F (177°C)	
Pressure rating	15,000 psi (103.4 MPa)	
Tool diameter	1 $^{11}/_{16}$ in (43 mm)	
Tool length	64.6 in (1.64 m)	
Tool weight	20.7 lb (9.38 kg)	
Measurement range	1.75 – 4.5 in (44– 114 mm)	1.75 – 7.0 in (44– 178 mm)
Accuracy, radial	±0.020 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 – 1.25 lbf (3.4 – 5.7 N)	
Logging speed	Recommended: 30 ft/min (10 m/min) Maximum: 60 ft/min (20 m/min)	
Nominal Casing/Tubing range	2 $^{3}/_{8}$ – 5 $^{1}/_{2}$ in	2 $^{3}/_{8}$ – 7 $^{3}/_{4}$ in
Materials	Corrosion resistant throughout	