



TECHNICAL DATA SHEET

HPHT MFC40

HPHT 40-Finger Caliper

The HPHT 40-Finger Caliper Tool (HPHT MFC40) is a unique technology developed exclusively by READ Cased Hole, created to enable integrity logging of HPHT wells. The technology is based on industry leading Multi-Finger Caliper technologies, and is used to evaluate the integrity of tubing or casing, providing highly accurate assessment of barrier condition.

Through its high resolution and high data density measurement the HPHT MFC40 provides a continuous map of the well's internal surface delivering detailed understanding of downhole geometries and barrier condition.

The Memory or Surface Read Out telemetry units, Gamma Ray and caliper's sensitive electronics (with the exception of the sensor fingers and their mounting unit) are enclosed in a thermally isolating inconel Dewar flask. The tool includes an inclinometer, to ensure features can be orientated during data processing and an enhanced 3D image of the wellbore produced.

APPLICATIONS:

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

BENEFITS

- Well integrity logging for HPHT wells
- Improved understanding of well integrity from high-density, high-precision measurements of tubular dimensions
- 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
- Modular design with Gamma Ray measurement available
- Memory or Real Time telemetry logging



Specifications

| | Compact fingers | Extended fingers |
|-----------------------------|-----------------------------------|-------------------------------|
| Temperature Rating | 430°F (220°C) for up to 10 hours | |
| Pressure rating | 20,000 psi (137.9 Mpa) | |
| Tool Diameter | 2.875 in (73.0 mm) | |
| Tool Length * | 276.8 in (7031 mm) | |
| Tool Weight * | 306 lb (139 Kg) | |
| Measurement range | 2.875 – 7.0 in (73 – 178 mm) | 2.875 – 10.0 in (73 – 254 mm) |
| Accuracy, radial | ±0.020 in (0.508 mm) | ±0.025 in (0.635 mm) |
| Resolution, radial | 0.002 in (0.051 mm) | 0.003 in (0.076 mm) |
| Finger tip width | 0.064 in (1.63 mm) | |
| Finger contact force | 0.75 - 1.25 lbf (3.4 - 5.7 N) | |
| Logging speed | Recommended: 30 ft/min (10 m/min) | |
| Nominal Casing/Tubing range | 3 1/2 – 7 5/8 in | 3 1/2 – 9 5/8 in |
| Materials | Corrosion resistant throughout | |

Optional abrasion resistant fingers – further details available on request

*Full toolstring including telemetry housing, 40 finger caliper and 3 heavy duty centralisers