BHTV42CT

Borehole Imaging - Casing Thickness





The **BHTV42CT** builds on the industry-reference **BHTV42** standard acoustic televiewer probe by adding a casing thickness measurement for cased-hole inspections. As well as recording the primary echo from the inner casing surface, the subsequent parts of the signal returning to the probe are analysed for the repeating signals corresponding to the energy being re-emitted after having traversed the casing itself in both the outward and inward directions. The in-casing two-way travel time is measured and converted into a thickness value based on the propagation speed of the ultrasonic signal. The results are displayed in real-time in the form of an additional image in in the acquisition software window (see below left).

Naturally, the **BHTV42CT** can still be used for open-hole inspections in order to obtain a wealth of detailed structural information on the geological formations.

The **BHTV42CT** probe can be supplied with a natural gamma detector to provide additional lithological information or for horizon correlation purposes.

Specifications

✓ Diameter: 42 mm /1.65 " ✓ Length: 2100 mm / 82.7 " 8 kg / 17.6 lbs 70°C (standard) 200 bar / 2900 psi ✓ Weight: √ Max. operating Temp: √ Max. operating Pressure:

2000 m with 3/16" 4Go cable ✓ Recommended max.cable 1000 m with 1/10" monocable lenath: √ Housing type: Titanium & non-magnetic brass

Data / sensor parameters

✓ Max.communication speed: 312.5 Kbit/sec.

✓ Transducer: 1" focussed piezo-composite and rotating mirror

√ Signal frequency: 1.5 MHz

✓ Acoustic beam angle: 3°(3dB) conical

0 to 60dB in 1dB steps/AGC ✓ Amplification: √ Horizontal resolution: 90, 120, 180 or 360 pixels

√ Vertical resolution: defined by logging speed (2.4 m/min if resol.is 2 mm)

√ Orientation sensor: triple magnétometers / accelerometers

√ Orientation precision: ± 0,5° inclination, ±1° azimuth

Accessories / options

✓ Natural gamma detector: ø25 x 50 mm NaI(TI) crystal

✓ Non-magnetic centralisers

√ Sinker weight

√ Image reference calibrator

Borehole conditions

✓ Fluid-filled open borehole: water or light bentonite mud

✓ Probe must be centralised

✓ Recommended diam. range: 75 to 300 mm / 3 to 12"