



TECHNICAL DATA SHEET

RBT

Radial Bond Tool

The Radial Bond Tool (RBT) facilitates a detailed, qualitative analysis of the zonal isolation achieved by cementing services. The RBT allows the detection of poor cement conditions and is available in 3 1/8 in and 1 11/16 in OD sizes. The tools can be run with multi-finger caliper, casing thickness and leak detection to provide a comprehensive well integrity service in a single run.

The RBT features a powerful sonic transmitter and an array of radially segmented acoustic sensors that derive a calibrated amplitude measurement of the induced sonic signals as they propagate along the length of the casing or liner.

These segmented measurements enable the identification of small axial channels. In addition the tool provides the traditional 3 ft amplitude and 5 ft VDL measurements to provide comprehensive evaluation of cement to casing and cement to formation bonding.

APPLICATIONS:

- Cement bond evaluation behind casing
- Cement top identification
- Cement to formation bond evaluation
- Micro-annulus detection
- Cement bond evaluation prior to Well Abandonment

BENEFITS

- Enhanced understanding of cement and annular integrity
- Combinable with caliper, magnetic thickness and leak detection technologies for comprehensive integrity assessment in a single run
- Deployable on Slickline, Electric line, Coil Tubing and Tractor
- Suitable for all well deviations, including horizontal
- Standard and slimline tools provide flexibility to permit deployment through tubing to log liner below



Image courtesy of GE oil & gas

Specifications

	Standard	Slimline
Temperature rating	350°F (177°C)	
Pressure rating	20,000 psi (138 MPa)	
Tool diameter	3 1/8 in (79 mm)	1 11/16 in (43 mm)
Tool length	9.5 ft (2.89 m)	10.27 ft (3.13 m)
Tool weight	140 lb (63.5 kg)	40 lb (18.1 kg)
Transmitter frequency	22 kHz	
Number of Radial Receivers	8	6
Primary curves	Amplitude (3 ft) - radial 1 to 8 Amplitude map Travel time (3 ft) VDL (5 ft)	Amplitude (3 ft) - radial 1 to 6 Amplitude map Travel time (3 ft) VDL (5 ft)
Logging speed	Recommended: 30 ft/min (10 m/min) Maximum: 60 ft/min (20 m/min)	
Nominal Casing/Tubing range	4 - 13 3/8 in	2 7/8 - 7 1/2 in
Materials	Corrosion resistant throughout	