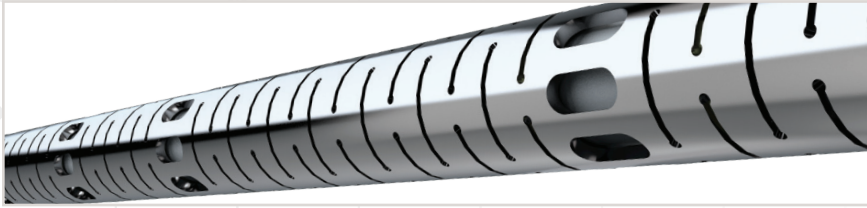


# Intelligent Waveform Sonic Tool (iWS)



The iWS acoustic tool was designed for acquiring high-resolution, full-wave acoustic data. The tool features a monopole transmitter and a five-receiver array, which records waveforms at each receiver, while obtaining formation-integral travel time ( $\Delta t$ ) and shear ( $\Delta t$ ) in fast formations. The iWS requires a fluid-filled borehole and can be used in fresh, salt or oil-based mud systems. In cased holes a traditional cement bond log can be produced.

## LOGGING APPLICATIONS:

- Compression and shear velocity measurement
- Determine mechanical characteristics of formation
- Correlate seismic data
- Secondary porosity measurements (vugs, fractures)
- Determination of lithology
- Casing cement evaluation

## MECHANICAL:

LENGTH	11.9 ft (3.6 m)
DIAMETER	2.25 in (57 mm)
WEIGHT	77 lbs (35 kg)
PRESSURE RATING	20,000 psi (140 Mpa)
TEMP RATING	350 °F (175 °C)
MAX HOLE SIZE	12 in
TENSILE STRENGTH	9,000 lbs (40,034 N)

## MEASUREMENT:

OUTPUT	Delta-T CBL
RANGE	40-160 us/ft
VERTICAL RESOLUTION	2 ft (0.61 m)
ACCURACY	+/- 2 us/ft (+/-6.6 us/m)
DEPTH OF INVESTIGATION	3 in (7.62 cm)

