

SPACE Vernier

True spatial understanding of downhole measurement



SPACE® Vernier is a state-of-the-art high-resolution cased-hole ultrasound thickness and caliper tool. The tool is capable of measuring the internal diameter and wall thickness of tubing or casing in most production fluids. Proprietary software allows detailed mapping and visualisation of the tubing or casing, as well as statistical analysis of corrosion and damage.

Features & benefits

- Run in all production fluids, optical clarity is not needed
- Robust, designed and built for hostile environments
- Precise Diagnostics - unparalleled ability to identify downhole challenges through advanced internal diagnostics
- True Spatial Understanding - comprehensive view facilitating better decision-making
- Different pipe sizes in 1 run, thanks to its optimized resolution at a given focal length
- Mechanical Reliability - no moving parts which means No risk of losing data!
- Non-Invasive Evaluation. Non-contact evaluation. No risk of compromising the integrity of the well!
- Intuitive & immediate results, get 3D rendering of complex downhole completion items within seconds! And without relying on subjective interpretations
- Powered by new adaptive high-speed telemetry

Typical Applications

- Tubing and casing measurement and analysis – internal diameter and wall thickness
- Tubular inspection—detection of corrosion, damage and deformation
- General imaging applications with extended features unavailable to optical cameras

Specifications

Physical

Outer diameter	3" [76 mm]
Length	52.8" [1341 cm]
Weight	49.2 lb [22.3 kg]

Environmental

Maximum temperature	275°F [135°C]
Maximum pressure	7500 psi [517 bar]

Electrical

Voltage	240 VDC
Current	200 mA

Functional

Number of sensors	288
Maximum azimuthal resolution	1.25 deg
Vertical resolution	0.39" [10 mm]
Precision-ID	0.012" [0.3 mm]
Precision-Thickness	0.012" [0.3 mm]
Measurement range-Thickness	0.2-0.8" [5-21 mm]
Measurement range-ID	4-13" [102-330 mm]

Operational

Logging speed	3-30 ft/min [0.9-9.1 m/min]
Logging mode	Real-time

Well conditions

Fluid	Water, brine, oil, produced liquids
Minimum casing ID	4-1/2" [114 mm]
Maximum casing size	13-3/8" [340 mm]