



# TULA™



TULA™ - Another ground breaking innovative product from GB Inspection Systems. Detects early stages of High Temperature Hydrogen Attack (HTHA). Patent pending numbers 1808654.6, 1808665.2

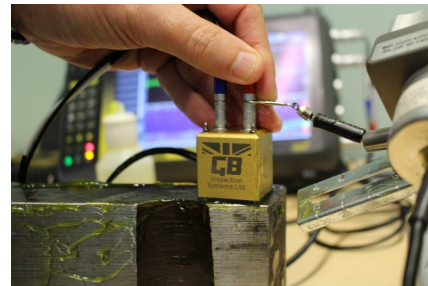
Lavender International's HTHA course is endorsed by all major oil companies. Oil companies mandate that their technicians pass Lavender's course before being permitted to perform HTHA inspections. Our TULA™ HTHA transducer plays an important part of Lavender's training due to its unique feature of HTHA early stage detection.

### Benefits and Features of TULA™:

- TOFD principle, in one housing.
- Affordable.
- Can be used with many instruments that have colour, encoded B-Scan capability.
- Suite of TULA™ probes with defined focussing to cover thicknesses up to 120mm. Standard TOFD may be impractical on thick sections.
- TULA™ probes are designed to specifically identify early stages of HTHA (High Temperature Hydrogen Attack).
- Further variants can be manufactured to suit specific thickness ranges.
- Ease of deployment. TULA™ probes can be used by hand or with simple encoded scanners.
- Fast scanning speeds of up to 300mm per second is possible.



*TULA™'s concept has also been applied to angle beam probes for the purpose of detecting HTHA in weld HAZ regions.*



## GBIS does TOFD... only better!



@GBInspectionSystems



@GBInspection



www.gbinspection.com

## i-T

- Faster and easier setup time—No connection between transducer and wedge necessary.
- Consistent sensitivity—No couplant inconsistencies between transducer and wedge pairing.
- Greater reliability—Transducer and wedge cannot become loosened during use.
- Eliminates the risk of breakage between transducer and wedge.
- Available in a variety of angles, frequencies and crystal sizes.

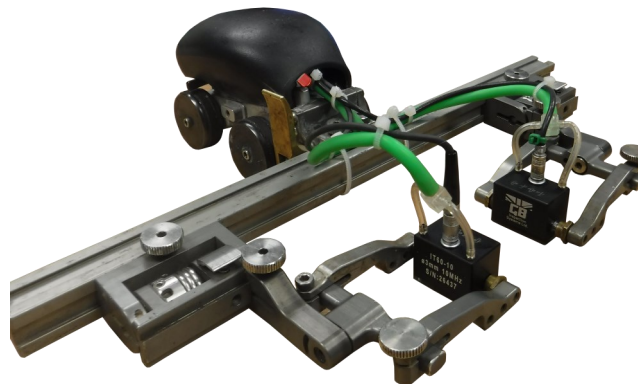
Patent Pending No.1721460.2



### Available Options

- Axial and circumferential contouring
- Fits all available scanners
- Left and Right options for improved cable management
- Variable contact faces
- High Temperature versions
- Couplant feed inputs as standard
- A variety of connector styles
- Integral cable versions also available if required

Integral TOFD shown on the JIREH Microbe scanner



### Unique Features and Benefits of the LIMBOTOFD™

Low Profile - Only 10mm high allowing easy access to previously inaccessible areas which are currently untestable using conventional TOFD transducers

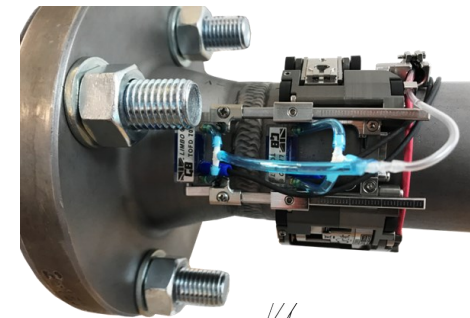
Reduces inspection cost - No need to implement other possibly disruptive inspection methods such as Radiography

High signal to noise - Single cycle responsiveness using a frequency of 10 or 15 MHz

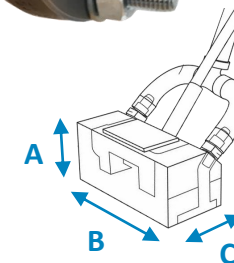
Integral Wedge - Unique patent pending (No.1721460.2) design providing convenient use without the need to change wedges providing the assurance of the transducer/wedge couplant film.

Increases productivity - With conventional TOFD, losing a transducer may result in the loss of the use of its dependent wedges and forcing the inspection to stop,

**LIMBOTOFD™** eliminates this risk.



Currently available are 3mm $\phi$  or 6mm $\phi$  and a frequency of 10 or 15 MHz Composite crystals. Connector types are: Lemo 00 / Lemo 01 / BNC.



- A) 10mm high
- B) 22mm length
- C) 10.5mm width

