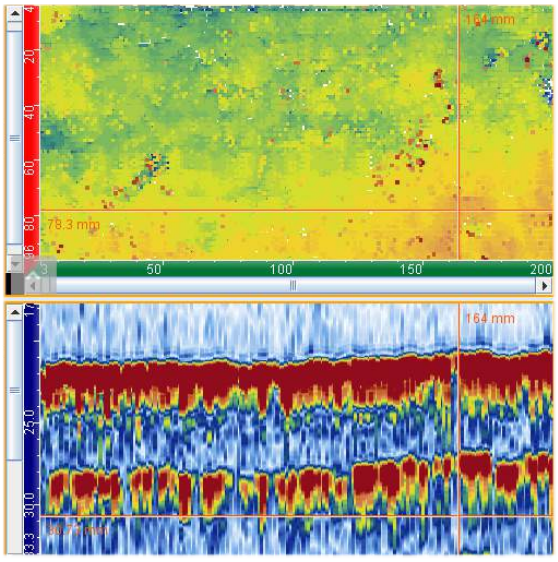
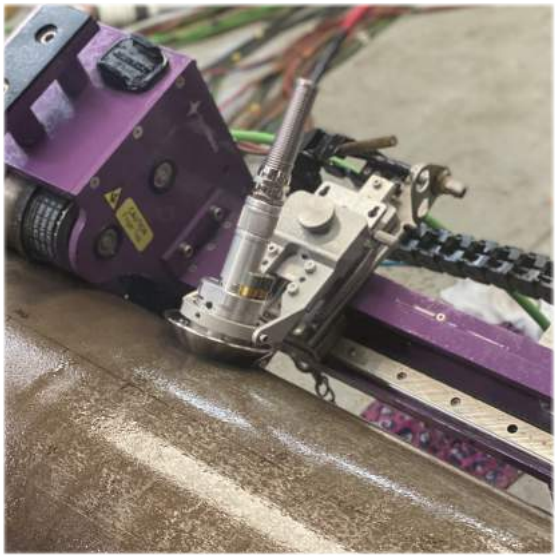
On-stream, high-temperature corrosion mapping with HotSense™

Minimise operational risk and maximise productivity with on-stream asset intelligence

Dual element ultrasonic transducer for high-temperature thickness, corrosion and erosion monitoring for use in applications across refining, oil & gas, energy, nuclear, aerospace and process sectors.

Keywords: corrosion, erosion, in-service inspection, extreme environments, high temperature





HOTSENSE

- **Built on the award winning HotSense™ ultrasonic platform** powered by the proprietary Ionix HPZ piezoceramic
- **Dual element thickness gauging transducer** for use in extreme environments
- **-20 to +550 °C** [-4 to +1,022 °F]wide measurement temperature range for all in-service assetsin-service assets
- **No cooling** required. Increase your productivity between calibrations and reduce duty cycling to maximise scan time.
- **Stable signal** for maximum reliability and repeatability
- **Enhanced wear resistance** for the most extreme environments and applications
- **Compatible** with industry standard ultrasonic inspection hardware

APPLICATION

- Map remaining wall thickness on hot assets, on-stream, without the need to shutdown or isolate
- Measure remaining wall thicknesses from 2.5 to 50 mm thick with commercial flaw detectors
- Compatible with recommended high-temperature ultrasonic couplants
- Robust stainless steel construction
- Range of accessories available, including guards, high-temperature cabling and probe holders for the highest-temperatures

SOLUTIONS

- On-stream mapping of high-temperature assets to reduce failure and un-planned outages and shutdowns.
- Increase safety with reduced exposure and man-hours at asset
- Support asset integrity and corrosion management programs (including
- RBI, FFS & FEA) with high-temperature remaining wall thickness
- Compliant to EN 12668:2 and ASTM E/1065 to meet your existing asset integrity UT procedures

hotsense® | Powered by ionix

ix

HS582i AUT

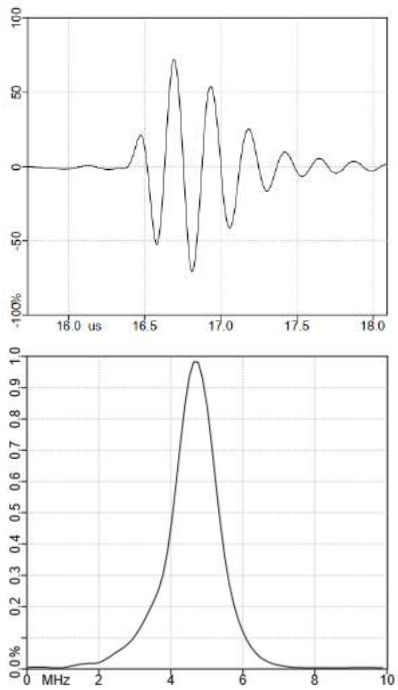
ISO 9001 Certified ExVeritas UKAS MANAGEMENT SYSTEMS 8613

HS 582i TRANSDUCER SPECIFICATION

PARAMETER	VALUE	UNIT
Surface temperature range*	-20 to +550 / [-4 to +1022]	°C / [°F]
Storage temperature	-55 to +80 / [-67 to +176]	°C / [°F]
Tip diameter	11 / [0.434]	mm / [in]
Custom geometries available on request		
Connector type	Dual UNF 10/32 Microdot	-
Ruggedisation	IP 68 Stainless steel construction	-
Transducer centre frequency	5	MHz
Active element diameter	8	mm
Wear allowance	1.5	mm
Compatible with UT flaw detectors and thickness gauges		
Acoustic characteristics certificate of conformity to EN 12668:2 supplied with each unit		

*Contact time should be limited to < 10 seconds above 350 °C
For other specification requirements please contact our sales team

TYPICAL ULTRASONIC RESPONSE



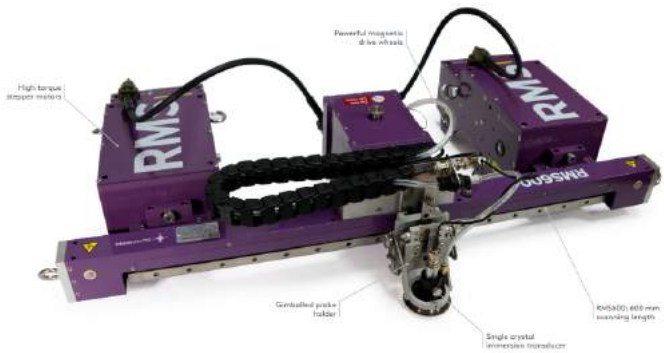
CERTIFICATION

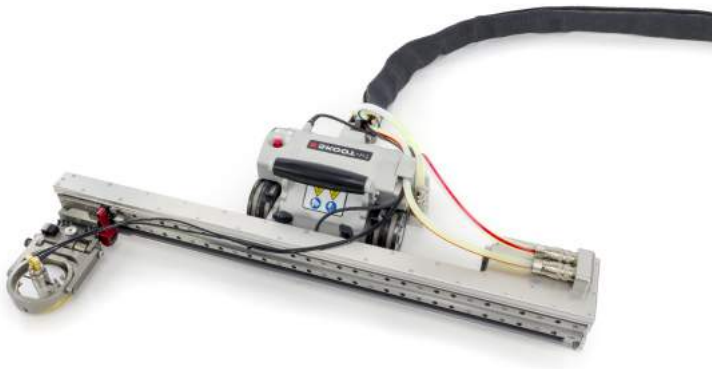
Meets the requirements of EN 12668:2 and ASTM E/1065 CE IP 68

COMPATIBLE SCANNER SPECIFICATION

PARAMETER	VALUE
Circumferential scan diameter	4" NPS to fl
Scan grid	0.5 to 150 mm in 1 mm steps
Scan arm length	up to 600 mm
Max scan speed	up to 730 mm/s
Surface Temperature	up to 350 °C
Power requirements	100-240 VAC 50/60 Hz
Scan control	
Inspection surface	Ferrous metals - magnetic wheel mounts

Contact Ionix to order, for further information or to find a solution for your application





Ionix recommends ECHO ultrasonics for high-temperature couplants

Want to discuss your demanding environment needs?

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