# HotSense™ high-temperature ultrasonic thickness gauging transducers

Reduce inspection time with no duty cycling and robust calibration

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

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





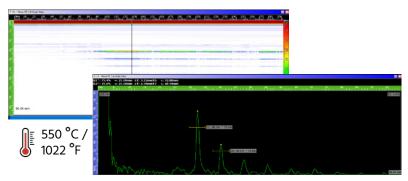


# HotSense™

- Built on the award winning HotSense™ultrasonic platform powered by the proprietary Ionix HPZ piezo-ceramic, and offering increased heat resilience
- Dual element thickness gauging transducer for use through -55 to +550 °C [-67 to +1,022 °F] wide temperature range for in-service assets
- Reduce inspection time with no duty cycling or cooling up to +350 °C [662 °F]
  maximising productivity and minimising down-time or outages with in-service
  inspection

## **APPLICATION**

- **Measure remaining wall thickness** from 1 to 500 mm with compliant thickness gauges on hot assets, in-service, without shutdown or isolation
- Better data from easier and more accurate calibration at asset temperature
- 2X increased wear resistance for the most extreme environments and applications including scanning and corrosion mapping
- Range of accessories available, including port inspection wand and safety guards for the most extreme temperatures
- Compatible with industry standard ultrasonic gauges and flaw detectors
- Compliant to EN 12668:2 and ASTM E/1065 to meet existing asset integrity UT procedures



hotsensell® Powered by ionix





# **HS 582i TRANSDUCER SPECIFICATION**

PARAMETER	VALUE	UNIT
Surface temperature range*	-55 to +550 / [-67 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	Weatherproof Stainless steel construction	-
Transducer centre frequency	5.0	MHz
Active element diameter	8.0 / [0.315]	mm / [inch]
Wear allowance	1.5 / [0.06]	mm / [inch]
Acoustic characteristics certificate of conformity supplied with each unit		

<sup>\*</sup>See duty cycle chart for use. Requires compatible couplant

For other specification requirements please contact our sales team

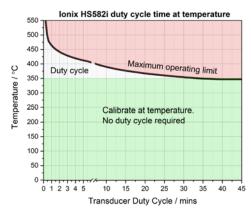
# **MEASUREMENT RANGE**

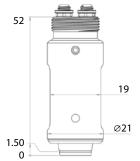
PARAMETER	VALUE	NOTES
Range in steel	1 to 500 mm / [0.04 to 20"]	with compatible gauge
Echo to echo range	2.5 to 50 mm / [0.1 to 2"]	in steel

Compatible with industry standard UT gauges and flaw detectors

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

## **OPERATIONAL RANGE**





Dimensions in millimetres

## **CERTIFICATION**

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





To see the HS582i in action scan the QR code









For accessories, including HT guards, port inspection wands and couplant dispenser, please contact our sales team





Want to discuss your demanding environment needs?

