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





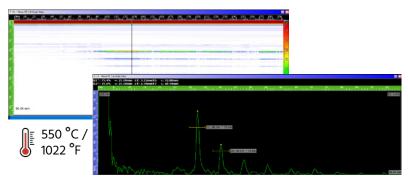


HotSense™

- 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		

^{*}See duty cycle chart for use. Requires compatible couplant

For other specification requirements please contact our sales team

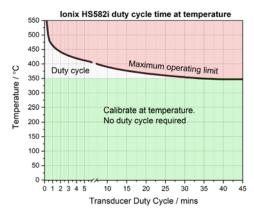
MEASUREMENT RANGE

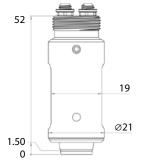
PARAMETER	VALUE	NOTES
Range in steel	1 to 500 mm / [0.04 to 20"]	with compatible gauge
Echo to echo range	2.5 to 50 mm / [0.1 to 2"]	in steel

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