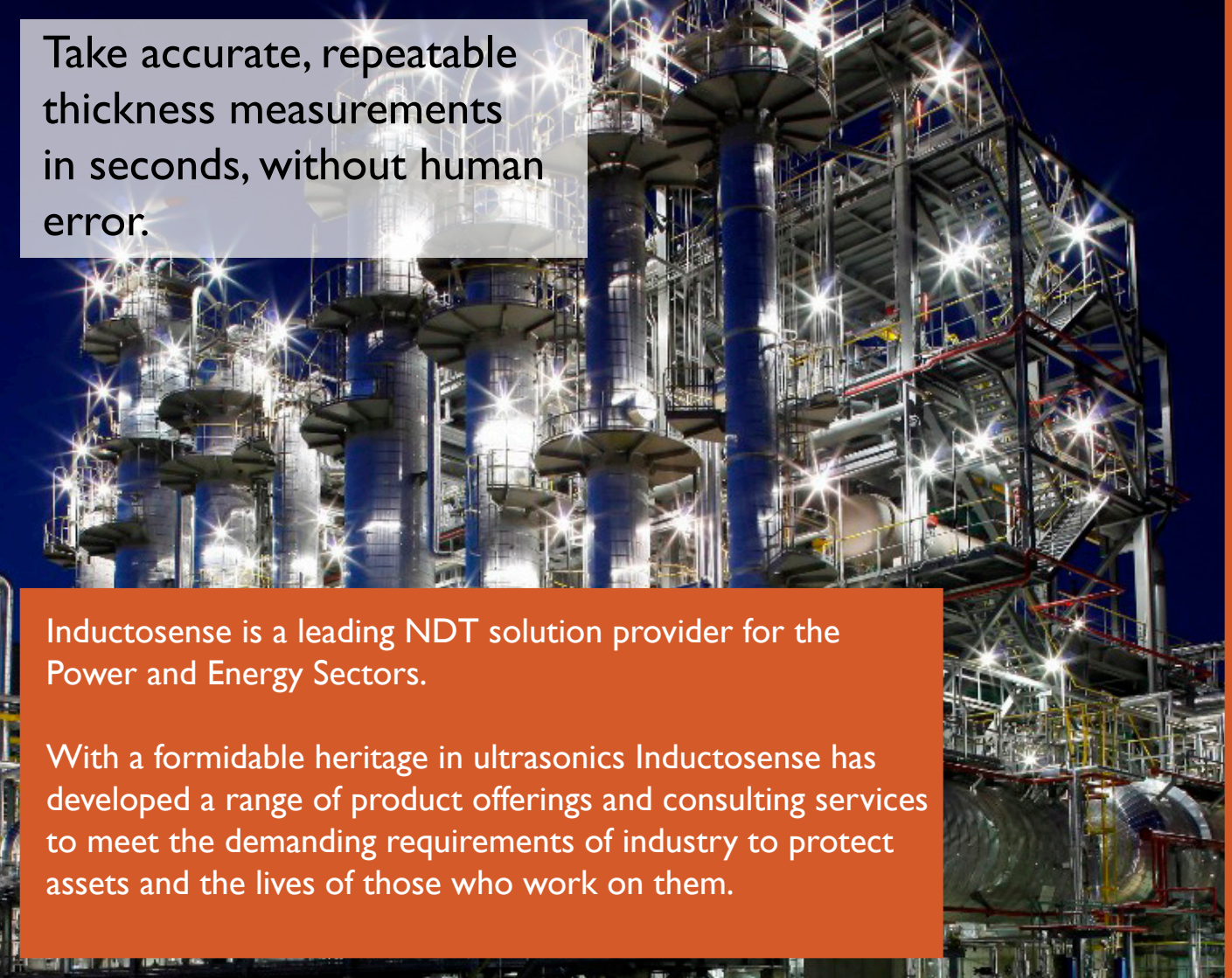
inductosense

smart monitoring for
integrity management



Take accurate, repeatable thickness measurements in seconds, without human error.

Inductosense is a leading NDT solution provider for the Power and Energy Sectors.

With a formidable heritage in ultrasonics Inductosense has developed a range of product offerings and consulting services to meet the demanding requirements of industry to protect assets and the lives of those who work on them.

Proactive management of corrosion saves money

Asset managers can focus on operational delivery whilst actively planning maintenance schedules around factual trending data.

The Inductosense Wireless And Non-Destructive (WAND) sensors can be deployed at thickness measurement locations to provide accurate monitoring and enable trending of corrosion/erosion rates.

WAND Sensors are permanent,ly installed. They can be fixed beneath insulation layers, composite wraps or coatings and they require no batteries nor external wiring.

Taking measurements is quick and easy with human error eliminated from the measurement process. No need for accurate alignment, coupling gels or removal of coatings.

We remove the human error from NDT to provide repeatable, reliable data

We offer conventional, fully proven NDT but with a difference...

Features	Benefits
Permanently installed	Accurate, repeatable measurements, enabling thickness trend analysis and proactive maintenance
Battery-free and wireless	Safe, easy to install and maintain
Simple and fast measurements	Reduce the cost of maintaining asset integrity; no need for additional external staff for monitoring
RFID Tagging	Data is acquired from exactly the same location each time - and it is also associated with the user

The WAND system consists of a compact, battery-free ultrasonic sensor and a handheld measurement probe. The WAND sensor is entirely passive and is activated by inductive coupling when the WAND probe is held close-by.

WAND can significantly reduce the time taken to gather data on thickness measurements. High quality, repeatable data provides trend analysis potential allowing managers to make informed timely decisions.

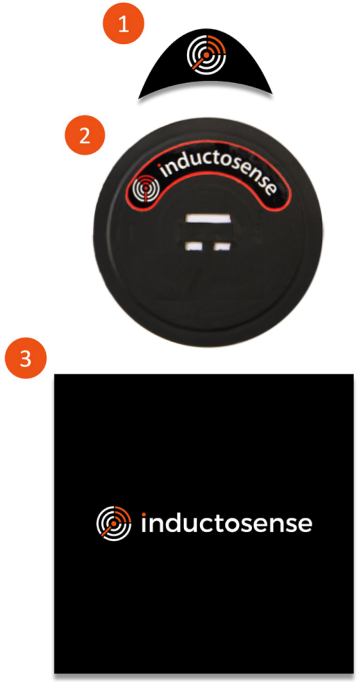
Reliable, accurate data to give you confidence in your asset management decisions

W.A.N.D. Sensor

An ATEX/IECEx approved, ultra-slim wireless and battery-free sensor that fixes permanently to the structure.

65mm
shown actual size

The WAND Sensor assembly consists of up to three parts (excluding the adhesive). 1 An RFID tag, 2 the sensor itself and 3 a coating patch to provide environmental protection in cases when the sensor will be exposed.



Sensor Properties

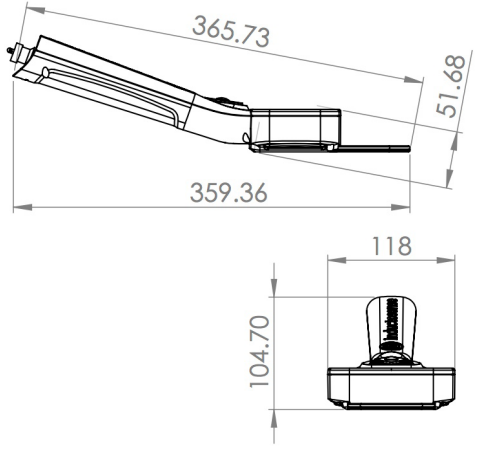
System Properties	Specification
Sensor Size	65mm diameter, 1mm thick
Sensor weight	6.5g
Sensor Attachment Method	Adhesive (Epoxy)
Certification	IECEx ATEX: Ex I G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +130°C)
Operating frequency	5 MHz*
Minimum thickness	4 mm*
Maximum thickness	150 mm
Minimum pipe diameter	90 mm*
Transducer active area	5 x 15 mm*
Maximum measurement temperature	120°C*
Maximum exposure temperature	130°C*
Sensor resolution	< 0.05mm

*Variations of these parameters are possible. Please consuact us for non-standard requirements

Probe Properties

Properties	Specification
Probe weight	600
Power Supply	12V
Data output	Lemo connector to USB
Battery Type	Rechargeable
Standoff probe to sensor distance	50mm
Signal Acquisition time	<1 second

Dimensions (mm)



W.A.N.D. Probe

Designed so that anyone can take an ultrasonic thickness measurement in the field just with the press of a button.

- Robust
- Simple to operate
- Convenient
- Reliable

Take repeatable readings everytime, without fail. We remove the human error from thickness measurement NDT

W.A.N.D. Software

The WAND software offers a powerful analysis tool capable ot presenting trend data from individual sensors or groups of sensors installed within a facility.

The data collected by the hand held probe is uploaded on site or following an inspection. As each sensor is RFID tagged it's unique reading is stored specifically to enable the calculation of point thickness and corrosion rates.

- Trending of data from multiple sensors
- Accurate calculation of corrosion/ erosion rates
- Set thickness thresholds
- Analysis of raw ultrasonic signals
- Export to reports

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