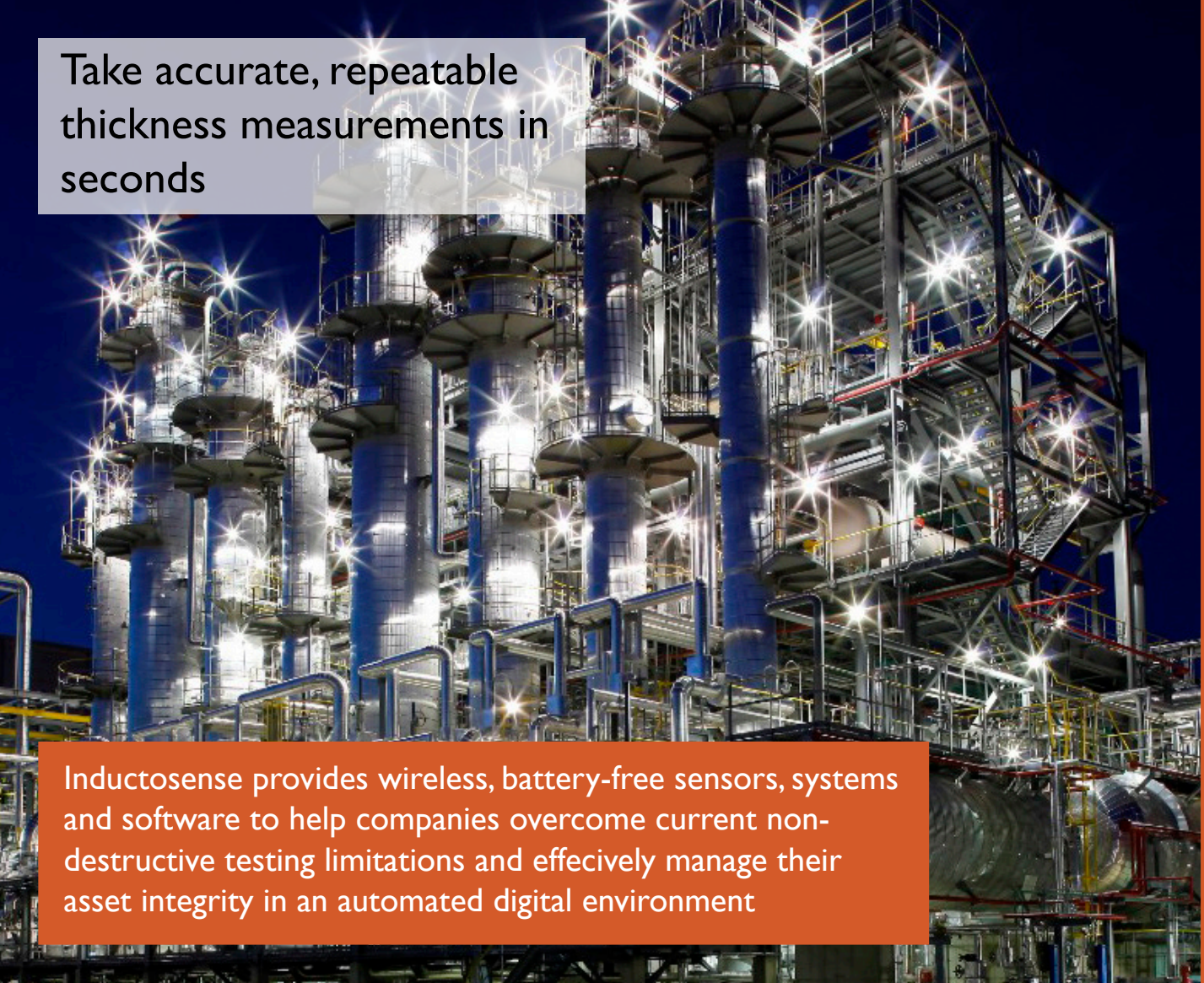




wireless, battery-free
sensing solutions for
asset integrity





Take accurate, repeatable
thickness measurements in
seconds

Inductosense provides wireless, battery-free sensors, systems and software to help companies overcome current non-destructive testing limitations and effectively manage their asset integrity in an automated digital environment

Accurate corrosion monitoring saving costs and enabling predictive maintenance

Asset managers can focus on operational delivery whilst actively planning schedules around wall thickness trend 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 permanently 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 nor coupling gels.

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

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

Features	Benefits
Permanent installation	Accurate, repeatable measurements, enabling wall-thickness trending and predictive maintenance
Battery-free and wireless	Intrinsically safe, easy to install without maintenance
Simple and fast measurements	Reduced costs; anyone on the asset can collect the data
RFID tagged sensors	Data is acquired from exactly the same location each time
Embeddable under materials	Save costs of removing insulation and coatings to take readings

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

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

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



WAND Sensor

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




The WAND sensor comes with an RFID tag that is detected by the data collector during the measurement process.

In addition a coating can be applied over the sensor to protect it from the environment.

The sensors are installed using an adhesive.

Sensor Properties

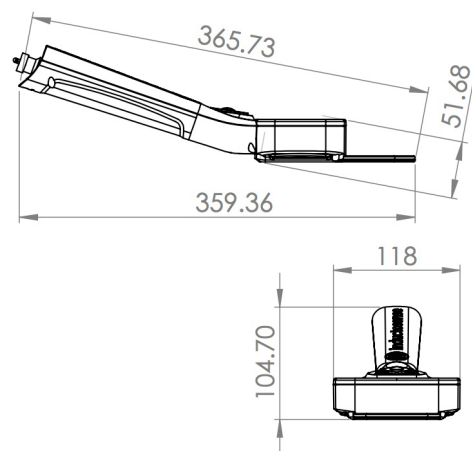
System Properties	Specification
Sensor Size	65mm diameter; 1 mm thick
Sensor weight	6.5g
Sensor Attachment Method	Adhesive (Epoxy)
Certification	IECEX ATEX:  II I G Ex ia IICT4 Ga (-40°C ≤ Ta ≤ +130°C)
Operating frequency	5 MHz*
Minimum thickness	4 mm*
Maximum thickness	150 mm
Minimum pipe diameter	90 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 contact us for non-standard requirements

Data Collector Properties

Properties	Specification
Probe weight	600g
Power Supply	12V
Data output	Lemo connector to USB
Battery Type	Li-ion
Signal Acquisition time	<1 second
IP Rating	IP54
Thickness Calculation	First arrival and peak to peak
RFID Reader	EU or US - detection of sensor tags and user ID
Certifications	CE and FCC
Accessories	<ul style="list-style-type: none"> Lanyard Protective bumper User ID cards Calibration sample Protective carry case

Dimensions (mm)



WAND Data Collector

Thickness Reading

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

Robust
Simple to operate
Reliable

Take repeatable readings everytime. We remove the human error from ultrasonic thickness measurements

Ultrasonic A-scan



RFID/location

IDM Software

The Inductosense Data Management (IDM) software offers a powerful analysis tool capable of presenting trend data from individual sensors or groups of sensors installed within a facility.

The data collected by the data collector is uploaded on site or following an inspection. As each sensor is RFID tagged its unique reading is stored specifically to enable the calculation of wall thickness and corrosion rates over time.



- 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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