

# ULTRASONIC GAUGES

Your working environment is tough, that's why you need our tools. At CorDEX we make accurate measurement simple, no matter what. Our tools are rugged, safe and simple to operate, even in the most demanding environments.

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# WHY CHOOSE OUR INTRINSICALLY SAFE THICKNESS GAUGE?



## ATEX and IECEx certified for Gas & Dust (Zone 21)

From storage tanks to dust conveyors, UT5000 can measure thickness and detect safely, problems in virtually any explosive environment.



## Ruggedized transducer

Brass wear ring, prevents undue wear on the transducer surface.



## Data storage for download

Store up to 1000 datapoints for download and trending via CorDEX CONNECT database report package.



## Continuous real-time measurement mode

Hunt for those hard to find defects using continuous measurement mode with configurable high or low alarms for each location.



## Measure through paint

Don't remove the paint and expose your metalwork to corrosive environment. UT5000's Echo/Echo mode can see through the painted surface and only measure the metalwork underneath!



## Store multiple readings at one tag location

Store up to 9 readings per RFID tag location, ideal for thickness testing around the circumference of a pipe or valve.



## Built in RFID reader

Embedded 13.5Mhz RFID reader. Link measurements to RFID tag locations for automatic collation and trending within CorDEX CONNECT database report package (included).



## Pre-loaded material velocity table

Don't know the material velocity? Doesn't matter, choose from UT5000s' extensive list of materials or measure and load your own via CorDEX CONNECT™.



## Put your best hand forward

Flip the menus for maximum comfort and usability if your left or right handed.

# UT5000

Non-Invasive, next generation thickness gauge, **UT5000** is the **thickness gauge** of choice for rugged environments.



## PRODUCT OVERVIEW

Specification	
ATEX Certificate No.	Baseefa11ATEX0114
IECEX Certificate No.	IECEX BAS 11.0094
Memory	Stores up to 1000 measurements
Screen	8cm (3.1inch) RGB TFT colour screen with backlight Right/left handed set up
Material Velocity Selection	Preloaded via Drop-Down menu, or user defined.
Transducer	Dual Element
Pulse Rate	Standard transmit pulse rate of 4Hz Adjustable from single shot up to 8Hz
Receiver Bandwidth	1MHz to 15MHz (-3dB points)
Frequency	4MHz, 3mm up to 100mm (0.01in to 3.9in)
Accuracy	+/- 0.05mm (0.01in)
RFID Tag Reader	Operates with 13.54MHz passive tags  Detection range up to 5cm (1.9in)  Supports ISO/IEC 15693-2, ISO/IEC 18000-3 tag formats
Battery Details	Lithium thionyl chloride primary 3.6V cell  100 hours continuous operation with back light restrictions  Low battery warning
Operating Temperature	-10 to +50C (14°F to 122°F)
Weight	1.1Kg (2.4lb)



Multiple calibration and zeroing modes for repeatable accuracy.



On-board data recorder and RFID scanner, store upto a thousand automatically linked to tag location.



Menu "flip" function allows use by both left and right handed technicians.

## FEATURES

**ATEX and IECEX Certified for Zone 1 IIC T4 hazardous areas**

**Features CorDEX CONNECT™**

**Intrinsically safe probe supplied as standard**

**Full Colour, Backlit Screen**

**EchoEcho Technology to measure thickness through painted surfaces**

**Drop-down menus to select the correct material velocity**

**UT5000** Intrinsically Safe thickness gauge with CorDEX CONNECT™ measures metal thickness for Non-Destructive Testing (NDT) and Predictive Maintenance (Pdm) on pipelines and fixed equipment within hazardous locations.

UT5000 is a next generation thickness gauge packed with proven technologies: CorDEX CONNECT™ uses RFID + Software to tag measurements with their location then organises the data, giving the engineer a view of the pipeline at any specific location.

The unique corrosion mode option helps identify spots of thinning; MultiECHO™ technology improves accuracy on uneven surfaces; onboard memory stores up to 1000 readings.

The CorDEX UT5000 is ATEX and IECEX certified for Gas & Dust (Zone 21). From storage tanks to dust conveyors, UT5000 can measure thickness and detect safely problems in virtually any explosive environment. The Ruggedized transducer and Brass wear ring prevent undue wear on the transducer surface and ensure the UT5000 is as tougher than most.

Designed for rugged environments, the shock resistant skin protects a 3.1 inch (8cm) colour screen and has easy-to-feel raised buttons. The intrinsically safe dual-element, 4MHz transducer is adjustable up to 8Hz with accuracy of +/- 0.05mm (0.01inch).



CorDEX reserve the right to make changes to the instrument at anytime and without notice.

# TESTED FOR TOUGHNESS



Some ultrasonic gauges claim to be tough but can it pass the **ToughTEST**? Watch our video and see what stringent tests we put our **UT5000 Ultrasonic Gauge** through.



**DROP**



**DUST**



**WATER**

# ULTRASONIC THICKNESS GAUGES IN POTENTIALLY EXPLOSIVE ENVIRONMENTS.

This white paper covers the basics of Ultrasonic measurement, measurement accuracy, corrosion inspection, and intrinsically safe requirements for hazardous areas.



The use of ultrasonic devices for non-destructive testing (NDT) has become more common in recent years as equipment has increased in capability and decreased in price. The use of ultrasonic NDT devices is attractive because of their non-invasive nature. They don't require a plant shutdown to obtain a measurement. However, deploying this kind of device within a hazardous (classified) location has implications for safe use that even NDT inspectors may not be fully aware of.

Download your **FREE** copy of our '**ULTRASONIC THICKNESS GAUGES IN POTENTIALLY EXPLOSIVE ENVIRONMENTS.**' White Paper today.