

EMA1000

EMAT Thickness Gauge

Electromagnetic ultrasonic high-temperature thickness gauge

必昂特®
BeyoNDT

● Can through coating up to 4mm

● No need grinding, no need couplant

● Coating range: 0-12mm

● Maximum detection temperature up to 800°C

● Shell drop resistance

● Measuring range is 1-250mm

● High resolution color screen, high speed waveform display

● Results with A/B scan



Product introduction

EMA1000 electromagnetic ultrasonic thickness gauge is specially developed for measuring steel pipes, rolled plates, bars and other products made of steel, aluminum and other metals. No pre-cleaning of surfaces or coupling agents are required for operation. 4 mm coatings are permeable. The device can also measure the thickness of coatings on metals.

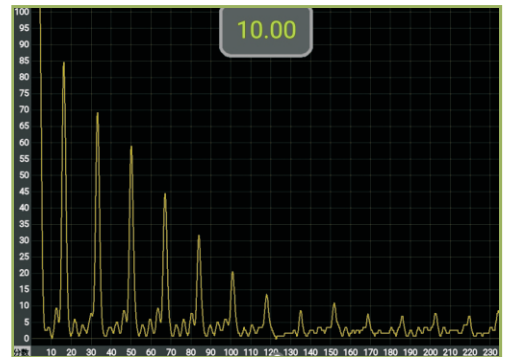
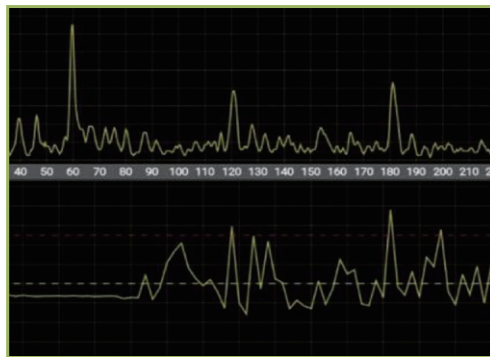


Technical parameters

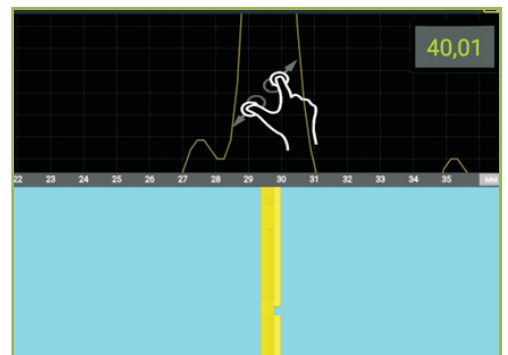
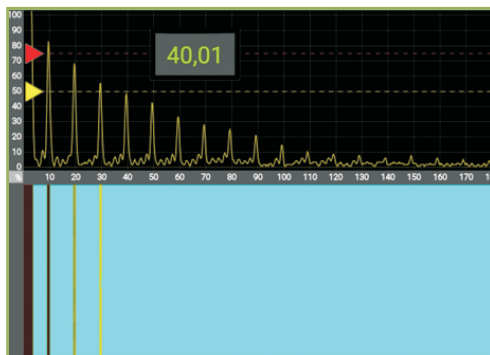
Measuring range of metal thickness:	1~250mm
Accuracy:	0.01mm
Measurement error:	≤0.08mm
The maximum lift-off between the sensor and the detected object is:	4mm
The thickness measurement range of non-conductive coating is:	0~12mm
The measurement error of non-conductive coating thickness is:	0.1 mm±3%
Angle of deflection of the sensor relative to the surface of the detected object:	±25°
Detecting the minimum curvature radius of the object surface:	≥8mm
The number of measurements per second is:	16times
Acoustic speed:	1000-9999m/s, Steps of 1m/s
Storage:	50000 results
Frequency	4MHz
Continuous running time without charging :	>7h
Working environment temperature range:	-20~+50°C
Using room temperature sensor to detect the surface temperature of the object:	-20~+80°C
Using high temperature sensor to detect the surface temperature of object:	-20~+800°C
Language:	Chinese/English

Software Introduction

A Scan



B Scan



AI 163

Acoustic Fault Locator

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Product Introduction

Partial discharges in electrical installations and gas leaks in pipes will excite the air to produce sound or ultrasound. AI163 acoustic fault locator can locate ultrasonic source remotely and without contact, so as to locate the position where the electric power facility generates partial discharge, the pipeline has gas leakage and the like.

Technical Parameters

Sound imaging:	sound visualization, large-scale one-time discovery of problem points
PRPD diagram:	signal mapping, intuitive and effective identification of partial discharge characteristics
Partial discharge type:	intelligent classification, easy and efficient completion of inspection work
Photographing/video recording:	taking acoustic imaging pictures or recording acoustic imaging videos
Working mode:	single sound source, multiple sound sources and sensitive multi-mode switching
Regional focusing:	eliminate the interference outside the region and improve the positioning accuracy
Number of microphones:	163
Microphone type:	Digital MEMS
Microphone sensitivity:	-26 dBFS (1 kHz, 94 dB SPL)
Microphone SNR:	64.3 dB (A)
Sound sampling rate:	200 kS/s/ch synchronous sampling
Frequency range:	2kHz-100kHz
Acoustic refresh rate:	25FPS real-time refresh
Test distance:	The farthest distance is 0.3-130m related to the sound source size

Online M1

EMAT Pipeline Online Monitoring System

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Product Introduction

Online M1 electromagnetic ultrasonic online corrosion monitoring system is a non-immersion monitoring system. Due to the use of electromagnetic ultrasonic nondestructive testing method, the probe and the metal part are allowed to be lifted off by 3mm~4mm during measurement, so it is not necessary to clean the testing object and there is no damage to the testing object itself. In addition, the system can also monitor the thickness change of the coating at the same time, so as to help users better judge the corrosion situation and remaining service life of the testing object.

Technical Parameters

Measurement range:	1~250mm
Measurement display accuracy:	0.01mm
Measuring radius range:	8mm
Number of channels:	Single 1-4 channels optional
Communication transmission mode:	LoRaWAN
Power supply:	lithium battery power supply
Duration of charging once:	2-3 years
Temperature range of probe:	-20~300°C
Working environment temperature:	-20~80°C
Probe fixing method:	glue or clamp