

# **QUAM Ultrasonic Thickness Gauge**

**QUAM TG520** 

# TG Series: High Performance, Low Price

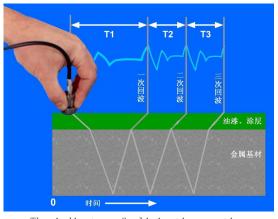
QUAM TG Series Ultrasonic Thickness Gauge will be the best choice for accomplishing measurement. It fits many kinds of metal, such as steel, cast steel, aluminum, plastic ,China glass, glass fiber and any other good conductors of ultrasonic.

TG520 could measure the thickness of metal covered with coating, the thickness of metal base will be showed.

Advanced Auto Probe Zeroing Calibration and Echo-Echo mode are applied on QUAM TG series. Taking more accurate measuring result and higher production rate to you.

QUAM TG Series is creative, it will supply a superior experience for users.





The indicater of eliminating coating

# $\begin{array}{c|c} No & 0 & \text{MAX} & 10.00 \\ \hline \text{Fil 0} & .00 & \\ \text{EE} & 10 & .00 \\ \hline \begin{array}{c} \hline 1 & 300.0 \\ \hline 1 & 0.00 \end{array} \end{array} \begin{array}{c} \text{MIN} & 1.00 \\ \hline \end{array}$

Measuring Interface

# 10.00 mm

#### **OPERATION**

- Inco Style Menu
- Showing different data modes
- Stroll Bars Indicates Function
- Free to change : Huge front and normal

#### **FUNCTION**

USB for Storage, Plug and Play

Covenient to read thickness values

Massive Data Memory-100,000 data sets

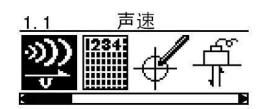
1000 files could be saved, every file could memory

1000 data sets

Statistic Function

Online statistic :Max Min, Standard Devraation

Document Statistic: Max Min Average, mean square error



Menu

# Probe Connection/Coupling Indicator

#### **OPERATION**

Accurancy: 0.1/0.01mm or 0.01/0.001 inch resolution

Exra-long standby time : 200 hours.

# Performance index

#### Working principle

Ultrasound (ultrasonic pulse echo / echo echo)

#### **Detection range**

Normal mode: 0.75-400mm

Penetrate the coating : 2-25mm

(Depending on the probe, the measured material and surface condition)

#### Resolution

0.1 mm (> 100 mm) / 0.01 mm (< 100 mm)

#### Indicator

 $\pm$  (0.5%H+0.01) mm

#### **Velocity**

 $1000^9999 \, \text{m/s}$ , Preset 5 commonly used material velocity

#### Calibration

Through the realization of real-time calibration probe zero unique automatic zerocalibration technique

#### V range correction

Aut

# Probeconnection indicating

Yes

#### Coupling condition

Cue signal coupling intensity; measured value displayed solid / hollow change, visual indication of whether the normal measurement

#### Appearance size

 $165 \times 82 \times 30$  mm

#### Weight

250g (Including battery)

#### Work environment

Temperature: -20°C~70°C

Humidity: 5%∼90%

The environment without strong vibration, no strong magnetic field, non corrosivemedium and serious dust.

#### Measuring Range:

Normal : 0.75~400mm

Coating: 2-25mm

#### **Excitation pulse**

150V Negative spike

#### Receiving system

**Gain** High / low / automatic

#### Frequency

bandwidth

0.5-15MHz

#### **Display**

#### LCD dot matrix display

High contrast 128X64

Beatiful characters

Number, Symbol, High Brightness EL

Backlight

#### Refresh rate measurement

Single point measurement of 5 times per second, 25 times / sec scan mode

#### Measured value / alarm

### Measured value display

3 custom measurement display area, can choose online statistics or sound

#### Statistical data

Online Statistics: maximum, minimum,

standard deviation

Document statistics: maximum / small

value, mean, variance

**Alarm** Acousto optic alarm

threshold

### Storage

Data set 1000 Sets

The thickness values

1000sets/Group Linearity

#### **USB Storage**

Connection USB is allowed, convenient to read thickness values

LEMO

#### Input and output

probeconnection

00 (C5) x2

#### Communication

RS232/USB

#### Language

Chinese/ English

Unit mm/inch

#### Power Source

Battery 1.5V AAA x 4

#### Working time

Can work continuously for 200 hours (standard test conditions)

#### Standard Package

Host 1 Instructions 1
Probe 1 Packingbox 1
Battery 1 couplant 1

#### ... Probe of Our Thickness Gauge

Model	Automatic zero	Measurement	USB	Penetrate the coating	Statistical function	Storage
		precision				Capacity
Upad X100	V	0. 1/0. 01mm	X	X	Online statistics	100 Groups
Upad X200	V	0.1/0.01mm	V	X	Online statistics / data statistics	500 Groups
Upad X300	V	0. 1/0. 01mm	V	V	Online statistics / data statistics	1000 Groups

## ... Probe of Our Thickness Gauge

Application	Mode	Rate	Probe Diameter	Measuring range	Minimum diameter
Standard application	DA301S	5 MHz	10mm	0.75mm~400.0mm (Steel)	Ф20mm×3.0mm
Standard application	DA301S/90	5 MHz	10mm	0.75mm~400.0mm (Steel)	Ф20mm×3.0mm
Thick Wall	DA303S	2 MHz	22mm	3.0mm~300.0mm (Steel)	20mm
Thin wall	DA312S	7 MHz	6mm	0.75mm~80.0mm (Steel)	Ф15mm×2.0mm
High temperature	HT400S	5 MHz	14mm	3~200mm (Steel)	30mm
High attenuation	DA408S	2 MHz	22mm	40mm ↓ (Grey cast iron HT200)	20mm

# ...Commonly used material velocity

Water 1 and		Sound velocity	Sound velocity		
Material type		inch/us	m/s		
Aluminum	Aluminum	0. 250	6340-6400		
Steel, common	Steel, common	0. 233	5920		
Steel, stainless	Steel, stainless	0. 226	5740		
Brass	Brass	0. 173	4399		
Copper	Copper	0. 186	4720		
Iron	Iron	0. 233	5930		
Cast Iron	Cast Iron	0. 173-0. 229	4400-5820		
Lead	Lead	0.094	2400		
Silver	Silver	0.142	3607		
Gold	Gold	0. 128	3251		
Titanium	Titanium	0. 236	5990		
Tin	Tin	0.117	2960		
Nickel	Nickel	0. 222	5639		
Porcelain	Porcelain	0. 230	5842		
Rubber, vulcanized	Rubber, vulcanized	0.091	2311		
Water	Water	0.058	1473		

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