

# CATALOG OF MEASUREMENT EQUIPMENT AND NON- DESTRUCTIVE TEST



## PORTABLE ULTRASONIC FLAW DETECTORS

### DGT-FD850



1. The maximum sampling rate of up to 640MHz, the measurement resolution 0.1mm, minimum range 2mm.
2. Operating frequency 0.5MHz ~ 20MHz, sensitivity margin of up to 62dB, low frequency there is a better signal to noise ratio.
3. High brightness, high-resolution (800x480) color TFT LCD display, the best reading test results.
4. High-performance pulse square wave generator with adjustable options, and the probe to achieve the best match (non-inductive coil probe can be achieved excellent incentive), high attenuation material either detect or thin work pieces can bring optimal performance.
5. Small size, light weight, battery, can work for more than eight hours.
6. With LAN network interface, remote instrument control and data transmission. When the instrument is as a square wave transmitter, it can provide control of the instrument parameters.
7. Two-dimensional incremental encoder interface for accurate position detection imaging (B, TOFD sweep).
8. Simultaneous analog RF waveform output, output impedance 50Ω, can be used as source data acquisition and probe tests.
9. High-speed USB interface to an external U disk data storage and dump.
10. Built-in charging function; battery and DC power supply automatically detects the display; charging, automatic switching power supply, charging temperature dual protection.
11. A variety of software features, covering all aspects of testing; unique originality universal knob to adjust the way to make testing more easily worry; humanized menu design, Chinese and English language menus
12. Automatic test probe frequency, automatically optimizing the width of the square wave, with the probe and optimal instrument.
13. Images of the thickness of the alarm function, waveform storage function and a variety of continuous waveform measurement mode.
14. Fixed index measuring instruments function and waveform envelope function to achieve the peak memory.

# PORTABLE ULTRASONIC FLAW DETECTORS

## DGT-FD850



Items	Parameters
Transmitted Pulse	Square wave, Emitter voltage of 25V ~ 400V continuously adjustable, stepping 25V, continuously adjustable width 30ns ~ 1000ns, Continuously adjustable width 30ns ~ 1000ns, Stepping 5ns. Under 400V/200V, both edges of less than 10ns, Automatic optimization for high-frequency excitation pulse.
Work Mode	Single, double, penetration
Launch Damping	400, 100Ω
Operating Frequency	0.5 ~ 20MHz, broadband and narrowband two types
Gain Range	0.0 ~ 110.0dB
Gain Step Value	0.1, 1.0, 2.0, 6.0 dB. 0.1dB gear acceleration provides intelligent regulation
Velocity Range	1000 ~ 20000 m / s. Continuously adjustable in steps of 1, 10, 100m / s. Built-in 8 velocity values commonly used materials
Detection Range	2.0 ~ 14000mm (longitudinal wave in steel). Continuous adjustable, step value 0.1, 1, 10, 100mm
Detection Methods	Positive half wave, negative half wave, full-wave, RF
Alarm	Two-way real-time hardware-driven alarm signal Optional: gate alarm (into the wave, wave loss), the thickness of the alarm, DAC curve Alarm, AVG curve alarm, the alarm signal optional buzzer (sound), light-emitting diode (light)
Display	7-inch high-resolution TFT color LCD screen, big screen, dot-matrix 800×480
Pulse Shift	-45 ~ 9999mm
Probe Zero Value	0 ~ 999.99μs
Pulse Repetition Frequency	25~1000Hz, automatic or manual adjustment mode
Vertical Linearity Error	≤3%
Level Linearity Error	≤0.3%
Sensitivity Margin	> 62dB (200Φ2 flat bottom hole)
Resolution	> 36dB
Dynamic Range	≥32dB
Rejection	(0-99) %, does not affect the linearity and gain
RF Output Impedance	50Ω
Electrical Noise Level	<10%
Probe Interface	BNC or Lemo
Data Port	USB interface
Power	High-capacity lithium battery, no memory effect; 220V AC (with adapter).
Working Time	Continuous work more than eight hours
Ambient temperature	-30 °C ~ 50 °C
Relative humidity	(20-95) % RH
Weight	1.4kg (including battery)

# PORTABLE ULTRASONIC FLAW DETECTORS



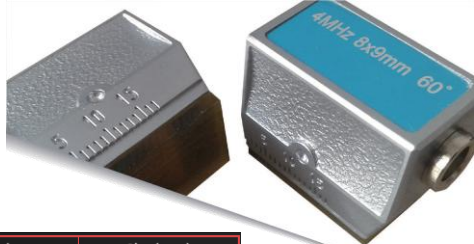
## DGT-FD800

1. Automated display precise flaw location (Depth d、 level p、 distance s、 amplitude、 sz dB、  $\phi$ )
- 2.2. Automated switch three staff gauge ((Depth d、 level p、 distance s);
- 3.3. Automated calibration of transducer Zero-point, Angles, Front edge and material Velocity ;
- 4.4. Convenient to make and use DAC\TCG and AVG to evaluate the echo, the curve can be modified and compensated
- 5.5. 6dB DAC functions;
- 6.6. 100 independence setup, any criterion can be input freely, we can work in the scene without test block;
- 7.7. Big memory of 1000 A graph
- 8.8. Automated gain and gain scan;
- 9.9. Peak Hold and Peak Memory ;
- 10.10. B scan;
- 11.11. AWS D1.1
- 12.12. Automated make video of test process and play; use upan, the length of video is unlimited.
- 13.13. Powerful pc software and reports can be export to excel;
- 14.14. Li battery, continue working time up to 10 hours;
- 15.15. The embeded software can be online updated;

Measuring range (mm)	0--10000
Vertical linearity error	$\leq 3\%$
Horizontal linearity error	$\leq 0.1\%$
Sensitivity margin	$\geq 62\text{dB}$
Dynamic scope	$\geq 34\text{dB}$
Resolution	$\geq 36\text{dB}$
Frequency range (MHz)	0.5 --20
Gain (dB)	0 --120
Velocity	1000 --15000
Measurement mode	single、 dual、 THRU
Reject	0-80%
Pulse shift ( $\mu\text{s}$ )	-20--+3400
Zero	( $\mu\text{s}$ ) 0.0--99.99
Port type	BNC
Operating temperature	-20--50
H×W×D(mm)	240×156×50
Weight (kg)	1.0(with Battery)

# PORTABLE ULTRASONIC FLAW DETECTORS

## TRANSDUCERS/PROBES



Transducer	Connector	Angle	Size(mm)
Angle Beam Transducer	Lemo00	30°, 45°, 60°, 70°, 80°	6x6, 8x9, 10x10 13x13, 14x16, 18x18 20x20, 20x22 30x30
Straight Beam Transducer	Lemo00 Lemo01	0°	Φ5, Φ8, Φ10, Φ12 Φ14, Φ16, Φ20 Φ25, Φ30
Dual Straight Beam Transducer	Lemo00	0°	Φ8, Φ10, Φ12 Φ14, Φ20 Φ25, Φ30

# PORTABLE ULTRASONIC FLAW DETECTORS

## CABLES



Single Cables	
Connectors	Length(m)
Lemo00 to Lemo00	2.0
Lemo00 to Lemo01	2.0
Lemo00 to Microdot	2.0
Lemo00 to BNC	2.0
Lemo01 to Lemo01	2.0
Lemo01 to Microdot	2.0
Lemo01 to BNC	2.0
BNC to Microdot	2.0
BNC to BNC	2.0
Dual Cables	
Dual Lemo00 to Dual Lemo00	2.0
Dual Lemo00 to Dual Mini-Lemo	2.0
Dual Lemo00 to Dual Lemo01	2.0
Dual Lemo00 to Dual Microdot	2.0
Dual Lemo00 to Dual BNC	2.0
Dual Lemo01 to Dual Microdot	2.0
Dual BNC to Dual Microdot	2.0



## PORTABLE ULTRASONIC FLAW DETECTORS

### CALIBRATION BLOCKS

#### V1 CALIBRATION BLOCK

Calibration of shear and compression wave probes. Checking beam angle, emergent point and resolution. Calibration of time base and gain settings.

#### DSC DISTANCE/ SENSITIVITY CALIBRATION BLOCK

Straight Beam: distance, amplitude. Angle Beam: index point, sound path angle (45°-70°), distance, sensitivity.

#### PHASED ARRAY BLOCK TYPE B

The Phased Array "Type B" Calibration Block is used as baseline block to determine long-term instrument performance changes, generate DAC curves, and evaluate linear/ angular resolution, focusing ability and beam steering capability.

#### V2 CALIBRATION BLOCK

Small calibration block for on-site checking of miniature shear wave probe index, time base, beam angle and gain, engraved reference mark scales from 35 to 75 degrees.

#### MINIATURE ANGLE BEAM (ROMPAS) CALIBRATION BLOCK

Straight Beam: distance angle beam, index point, sound path angle (30°-70°).

#### PHASED ARRAY BLOCK TYPE A

The Phased Array "Type A" Calibration Block is used during the initial setup and calibration of a phased array ultrasonic unit. It can be used to perform tasks such as beam angle verification, calibration for wedge delay, sensitivity calibration, performing DAC/TCG for thickness up to 50 mm, and crack sizing.



## PORTABLE ULTRASONIC FLAW DETECTORS

### CALIBRATION BLOCKS

#### DC DISTANCE CALIBRATION BLOCK

Straight Beam: distance, amplitude.  
Angle Beam: index point, distance.

#### DS DISTANCE/ SENSITIVITY CALIBRATION BLOCK

Straight Beam: distance, horizontal  
linearity, sensitivity.

#### IIW BEAM PROFILE BLOCK

Angle Beam: beam profile  
(45°, 60°, 70°), probe angle.

#### SC SENSITIVITY CALIBRATION BLOCK

Angle Beam: sound path angle  
(45°, 60°, 75°), sensitivity.

#### RC (AWS) RESOLUTION CALIBRATION BLOCK

Angle Beam: resolution (45°, 60°, 70°).

#### ASME BASIC CALIBRATION BLOCK

Used for establishment of primary  
reference responses for UT examination  
of welds.



## PORTABLE ULTRASONIC THICKNESS GAUGE

### DGT-TG130

Measuring Range(Steel)	0.7mm-225.0mm with 5MHz Transducer			
	5.0mm-300.0mm with 2MHz Transducer			
Operating Temperature	-10 -- 60℃			
Lower Limit Steel Pipes	Φ20mm*3.0mm			
Display Resolution (Selectable)	0.1mm/0.01mm or 0.01/0.001inch			
Data Output	RS232 Output for Printer or PC			
Measuring Accuracy	±1% thickness+0.1mm			
Sound Velocity	1000m/s—9999m/s			
Power Supply	2pcs AA Batteries 1.5V			
Battery Life	100 hours without backlight			
Dimensions	152mm×74mm×35mm			
Weight	370g			
Transducer Specifications				
Transducer	Measuring Range (Steel)	Contact Area Diameter	Frequency (MHz)	Operating Temperature
TSTU32	5.0-300.0mm	22mm	2	-10 -- 60℃
5PΦ10	0.7-225.0mm	10mm	5	-10 -- 60℃





## PORTABLE ULTRASONIC THICKNESS GAUGE

### DGT-TG140

Measuring Range	0.75mm~300.0mm (0.03inch~11.8inch)
Units	Metric / Imperial unit selectable
Sound Velocity Range	1000m/s~9999m/s (0.039~0.394 in/μs)
Display Resolution	0.01mm or 0.1mm (lower than 100.0mm) 0.1mm (more than 99.99mm)
Accuracy	± (0.5%Thickness+0.04) mm, depends on materials & conditions
Data Memory	5 files (up to 100 values for each file) of stored values 5 Sound Velocity of stored values
Power Source	2pcs 1.5V AA size batteries 250 hours typical operating time (LED backlight off)
Outline Dimensions	150mm×74mm×32mm
Workpiece Surface Temperature	- 10 ~ 60 °C
Minimum Thickness Value Capture Capacity	With a minimum thickness value capture capacity
Measurement Cycle	4 times / SEC, scanning of single point measurement mode 20 times per second
Weight	238 g



## PORTABLE ULTRASONIC THICKNESS GAUGE

**DGT-TG320/321/322/330/331/332**

Model	320	321	322	330	331	332
Measuring range(mm)	0.7~300					
Resolution(mm)	0.1		0.01	0.1	0.1	0.01
Accuracy(mm)	±(0.5%H+0.04) mm, H is thickness					
Velocity range(m/s)	5920	1000~9999		5920	1000~9999	
Velocity measurement	√					
Storage	N		2000 Groups	N		2000 Groups
Shell	Plastic			Metal		
Operating temperature	-10°C~60°C					
Dampness	20%~90%					
Dimensions	130×70×25mm					
Power supply	2 AAA alkaline batteries					
Weight	200g			420		
Standard Delivery	Main unit, Probes, Couplant bottle					
Optional Accessories	Probes, Couplant					



## PORTABLE ULTRASONIC THICKNESS GAUGE

DGT-TG342/352

Model	342	352
Measuring range(mm)	0.75~300	
Resolution(mm)	0.01	
Accuracy(mm)	$\pm(0.5\%H+0.04)$ mm,H is thickness	
Velocity range(m/s)	1000~9999	
Velocity measurement	$\sqrt{\quad}$	
Operating temperature	0°C~40°C	
Dampness	20%~90%	
Dimensions	230×86×46mm	
Power supply	Rechargeable NI-MH battery	Rechargeable Lithium battery
Printer	Build-in High-speed Thermal Printer, Width for printer paper:44.5±0.5mm	
Weight	400g	
Standard Delivery	Main unit,2 probes(Φ10、Φ8),Couplant,Charger, Paper for printer	
Optional Accessories	Probes, Couplant, Paper for printer, 4 steps calibration block for 352	



## PORTABLE ULTRASONIC THICKNESS GAUGE (WITH THROUGH COATING FUNCTION) DGT-TG400

Measuring Range (Steel)	Pulse-Echo mode: (0.65-600) mm (in Steel) Echo-Echo mode: (3-30) mm
Display	4.5 digits LCD with EL backlight
Sound Velocity Range	(1000-9999) m/s
Resolution	0.1mm/0.01mm
Accuracy	$\pm (0.5\% \text{ Thickness} + 0.01) \text{ mm}$ , depends on materials and conditions
Memory	up to 20 files (up to 99 values for each file) of stored values
Power Source	Two "AA" size, 1.5 Volt alkaline batteries. 100 hours typical operating time (EL backlight off)
Communication	USB1.1
Outline dimensions	150mm×74mm×32 mm
Weight	245g
Operating Temperature	- 20°C - + 60°C
Storage Temperature	-30°C - + 70°C
Relative Humidity	$\leq 90\%$



## PORTABLE ULTRASONIC THICKNESS GAUGE

### DGT-TG500

Operating Principle	I-E(interface-echo) mode with single-crystal delayed probe E-E(echo-echo)mode with single-crystal delayed probe
Measuring Range	1.5-20mm (I-E mode) 0.3-10mm (E-E mode)
Unit and Display Resolution	mm-0.001, 0.01, 0.1 inch-0.0001, 0.001, 0.01
Probe Zero Adjustment	1-point Calibration 2-point Calibration
Measuring Error	$\pm 0.005\text{mm}(<3\text{mm})$ ; $\pm 0.05\text{mm}(<20\text{mm})$
Display	128×64 dot-matrix LCD screen with EL backlight (42mm×57mm)
Measuring Update Rate	4Hz in standard measurement mode
Material Velocity Range	1000-9999m/s, 0.0394-0.3937in/us
Data Logger Capacity	Up to 500 readings can be divided into a maximum of 5 files(user-selectable)
Operating Language	English
Power Supply	Two 1.5V AA Alkaline batteries, warning with low voltage
Operating Time	Up to 200 hours with alkaline batteries (without backlight) depending on operating mode
Auto-shut off	After 5 minutes of non-use -10°C to +50°C(Specification to -20°C/-4°F on request)
Size	149mm×73mm×32mm (H×W×D)
Weight	200g including batteries



## PORTABLE ULTRASONIC COATING THICKNESS GAUGE

**DGT-CTG210/211/220/221/222/232**

Model	210	211	220	221	222	232
Operating principle	Magnetic induction (Fe)	Eddy Current (NFe)	Magnetic induction (Fe)	Eddy Current (NFe)	Fe and NFe	Fe and NFe
Measuring range (μm)	0~1250μm					
Probe	Settled		Changeable			
Shell	Plastic					Metal
Accuracy	$\pm [ (1\sim3\%)H+1 ]$					
Low range resolution (μm)	0.1μm					
Min curvature of the min area (mm)	Convex1.5 Concave9					
Diameter of the min area (mm)	Φ7					
Critical thickness of substrate (mm)	0.5					
Memory	500 Groups measured data					
Dimensions	115×70×30mm					
Power supply	AAA Alkaline battery					
Standard configuration	Main Machine, 5 calibration specimens (50μm、100μm、200μm、500μm、1000μm), Fe or NFe probe, Fe or NFe substrate. Two probes for 222&232.					
Optional Accessories	Probes, Specimens					



## PORTABLE ULTRASONIC COATING THICKNESS GAUGE

DGT-CTG242/262

Model	242	262
Operating principle	Magnetic induction or Eddy current (Fe or NFe)	
Measuring range (μm)	0~1250μm	
Accuracy	±[ (1~3%)H+1]	
Low range resolution (μm)	0.1μm	
Min curvature of the min area (mm)	Convex1.5	Concave9
Diameter of the min area (mm)	Φ7	
Critical thickness of substrate (mm)	0.5	
Operating temperature	0°C~40°C	
Magnetic field	No strong magnetic field environment	
Memory	500 measured data	
Dimensions	230×86×46mm	
Printer	Build-in High-speed Thermal Printer, Width for printer paper:44.5±0.5mm	
Power supply	Rechargeable NI-MH battery	Rechargeable lithium-battery
Standard configuration	Main unit,5 specimens (50um、100um、200um、500um 1000um), Charger, paper for printer, Fe or NFe probe,Fe or NFe substrate	
Optional Accessories	Probes, Specimens, Paper for printer	



## PORTABLE ULTRASONIC COATING THICKNESS GAUGE

DGT-CTG250A/251A/252A

Model	250A	251A	252A
Operating principle	Magnetic induction	Eddy current	Magnetic induction or Eddy current
Measuring range (μm)	0~1250μm		0~6000μm
Accuracy	$\pm[(1\sim3\%)H+1]$		
Low range resolution (μm)	1μm		
Min curvature of the min area (mm)	Convex1.5 Concave20		
Diameter of the min area (mm)	Φ10		
Critical thickness of substrate (mm)	0.5		
Memory	320 Groups		
Operating temperature	0°C~40°C		
Dampness	20%~90%		
Magnetic field	No strong magnetic field environment		
Dimensions	150×55.5×23mm		
Power supply	AAA Alkaline battery		
Weight	120g		
Standard configuration	Main unit, 2 Calibration specimens (S1, S2), Fe and NFe substrate		





## PORTABLE ULTRASONIC COATING THICKNESS GAUGE

**DGT-CTG250/251/252/253**

Model	250	251	252	253
Operating principle	Magnetic induction (Fe)	Eddy current (NFe)	Magnetic induction and Eddy current (Fe and NFe)	Magnetic induction (Fe)
Measuring range (μm)	0~1250μm			0~6000μm
Accuracy	±[ (1~3%)H+1]			
Low range resolution (μm)	1μm			
Min curvature of the min area (mm)	Convex1.5 Concave20			
Diameter of the min area (mm)	Φ10			
Critical thickness of substrate (mm)	0.5			
Operating temperature	0°C~40°C			
Dampness	20%~90%			
Magnetic field	No strong magnetic field environment			
Dimensions	150×55.5×23mm			
Power supply	AAA Alkaline battery			
Weight	120g			
Standard configuration	Main unit, 2 Calibration specimens (S1, S2), Fe and NFe substrate			

# PORTABLE ULTRASONIC COATING THICKNESS GAUGE

## DGT-CTG300



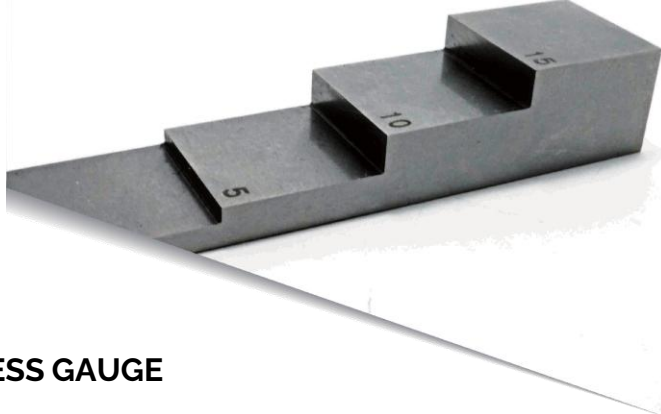
Measuring range	0-1250μm, depends on probes, MAX 10mm for the probe F10.					
Working principle	Magnetic & Eddy					
Substrate	FE / NFE base					
Resolution	0.1μm					
Display	128x64 LCD with backlight					
Accuracy	±2%H+1um    Note: H is thickness reading					
Memory	5 files x 100 values					
Unit switch	Metric (μm) Imperial (mil)					
Working temperature	Operation Temp.: -10~50°C    Storage Temp.: -30~70°C					
Power	AA battery 2pcs					
Weight	340g					
Size	115×67×31mm					
Transducers						
Model		F400	F1	F1/90	F10	N1
Working principle		Magnetic				Eddy
Measuring Range (μm)		0-400	0-1250	0-10000	0-1250 (0-40 Chromium plating on copper)	10-200
Resolution(μm)		0.1			10	0.1
Measuring Conditions	Minimal Curvature Radius(mm)	Convex1	Convex 1.5	Straight	10	3
	Basic Materials' Diameter of Minimal Area(mm)	Φ3	Φ7	Φ7	Φ40	Φ5
	Minimum Critical Thickness	0.2	0.5	0.5	2	0.3



## PORTABLE ULTRASONIC THICKNESS GAUGE

### TRANSDUCERS

Model	Frequency (MHz)	Diameter (mm)	Connector	Description
P5EE	5	10	Lemo00	Trough Coating Measurement
P02	2	14		For thick, highly attenuating, or highly scattering materials
P05	5	10		Normal Measurement
P05/90°	5	10		Normal Measurement
P07	7	6		For thin pipe wall or small curvature pipe wall measurement
P10	10	4		Thin work piece: For thin pipe wall or small curvature pipe wall measurement
PHT5	5	10		For high temperature (lower than 550°C) measurement.



## PORTABLE ULTRASONIC THICKNESS GAUGE

### 4/5/7/10-STEP BLOCKS

#### 4 STEPS TEST BLOCKS

Dimensions 80x20mm

4A type steps thickness:  
6.25mm, 12.5mm, 18.75mm, 25mm

4B type steps thickness:  
5mm, 10mm, 15mm, 20mm

#### 5 STEPS TEST BLOCKS

Dimensions 100x20mm

5A type steps thickness:  
2.5mm, 5mm, 7.5mm, 10mm, 12.5mm

5B type steps thickness:  
2mm, 4mm, 6mm, 8mm, 10mm

#### 10 STEPS TEST BLOCKS

Dimension 200x20mm

10A type steps thickness:  
2.5mm, 5mm, 7.5mm, 10mm, 12.5mm,  
15mm, 17.5mm, 20mm, 22.5mm, 25mm

10B type steps thickness: 2mm, 4mm,  
6mm, 8mm, 10mm, 12mm, 14mm,  
16mm, 18mm, 20mm

10C type steps thickness: 1mm, 2mm,  
3mm, 4mm, 5mm, 6mm, 7mm, 8mm,  
9mm, 10mm

#### 7 STEPS TEST BLOCKS

Dimension 140x20mm

7A type steps thickness:  
3mm, 12.5mm, 24mm, 30mm, 36mm,  
42mm, 48mm

7B type steps thickness:  
1mm, 1.5mm, 2mm, 4mm, 6mm, 8mm,  
10mm

# ROUGHNESS GAUGES



VERVAL GROUP OF COMPANIES



## SURFACE ROUGHNESS TESTERS

### DGT-SRT200A

The maximum driving trip	17.5mm/0.7inch
Indicating error	Not more than $\pm 10\%$
Variation of indication	Not more than 6%
The measured profile	Roughness, waviness, the original contour
Parameter	Ra (0.005 $\mu\text{m}$ -16 $\mu\text{m}$ ) , Rz (0.02 $\mu\text{m}$ -160 $\mu\text{m}$ ) , Rq, Rx, Rt, Rp, Rv, R3z, R3y, RzJIS, Rsk, Rku, Rsm, Rmr.
Filter	RC,PCRC,Gauss,ISO13565
The sampling length L	0.25mm,0.8mm,2.5mm,8mm
Evaluation length L	(1-5)l
Internal storage capacity	100 groups of original data
External input / output interface	USB
Electric source	Built-in rechargeable lithium ion battery or external power adapter
The performance index of sensor	
The detection principle	Current induction
Measuring range	160 $\mu\text{m}$
Tip radius	5 $\mu\text{m}$
Tip material	Diamond
Stylus force	4mN(0.4gf)
Stylus angle	90°
The guide head vertical radius	45mm



## SURFACE ROUGHNESS TESTERS

### DGT-SRT300(HIGH PRECISION)

Measuring Range	Z-axis (vertical)	160μm
	X-axis (horizontal)	17.5mm
Resolution	Z-axis (vertical)	0.01μm/±20μm
		0.02μm/±40μm
		0.04μm/±80μm
Measuring Items	Parameters	Ra Rz==Ry(JIS) Rq Rt==Rmax Rp Rv R3z R3y Rz(JIS) Rs Rsk Rku Rsm Rmr Rpc, Rk, Rpk, Rvk, Mr1, Mr2
	Standard	ISO, ANSI, DIN, JIS
	Graph	Supporting curve, roughness profile, direct contour
Filter		RC, PC-RC, Gauss, D-P
Sampling length (lr)		0.25, 0.8, 2.5mm
Evaluation length (ln)		Ln=lr×n n=1~5
Sensor	Measuring Principle	displacement differential inductor
	Stylus	Natural diamond, 90 cone angle, 5μm tip radius
	Dynamometer	<4mN
	Guide head	Carbide, the sliding direction radius 40mm
	Sliding Speed	lr=0.25, Vt=0.135mm/s, lr=0.8, Vt=0.5mm/s lr=2.5, Vt=1mm/s, Return, Vt=1mm/s
Indicator Error		no more than ±10%
Indication Fluctuation		no more than 6%
Power		Built-in lithium-ion rechargeable battery, charged by DC5V, 800mA charger
Dimension		158×63.5×46mm
Weight		About 300g

## SURFACE ROUGHNESS TESTERS

### DGT-SRT432



Roughness parameter	Ra, Ry, Rq, Rz, Rt, R5m, R5, Rp, Rv, R3z, RSk, Rmax, Rmr
Measuring range	Ra:0.005-16μm Rz:0.02-160μm
Resolution	0.001μm
Sample length/Range	0.25mm, 0.8mm, 2.5mm/±20μm, ±40μm, ±80μm,
Evaluation length	1.25mm, 4mm, 5mm/Option from 1L-5L (L means the sample length)
Standard	ISO, DIN, ANSI, JIS, FCC, CE
Filtering methods	RC, PC-RC, GAUSS, D-P,
Accuracy	±5%
Repeat ability	<2%
Sensor	Piezocrystal
Radius of sensor stylus	5μm
Stylus angle	90°
Memory	100 Groups
Power supply	Rechargeable Lithium-Ion battery
Operating temperature	0 °C ~40 °C
Weight	440g
Dimensions	119×47×65mm
Standard configuration	Main Unit, Standard sensor, standard block, Power adapter



## SURFACE ROUGHNESS TESTERS

### DGT-SRT451



Roughness parameter	Ra, Rz, Rq, Rt
Measuring range	Ra:0.05-10.0μm Rz:0.1-50μm
Resolution	0.01μm
Cut-off lengths	0.25mm / 0.8mm / 2.5mm
Evaluation length	1.25mm / 4mm / 5mm
Tracing length	6mm
Standard	ISO, DIN, ANSI, JIS, FCC, CE
Accuracy	±6%
Repeatability	<3%
Sensor	Piezocrystal
Sensor stylus arc radius and Angle	Radius of sensor stylus:10.0±2.5μm    Angle:90°
Sensor stylus force and its change rate	Sensor stylus forc: ≤0.016N; change rate: ≤800N/m
Pressure of sensor head	≤0.5N
Power supply	Rechargeable 3.7V Lithium-Ion battery
Operating temperature	0 °C ~40 °C
Weight	200g
Dimensions	106×70×24mm
Standard configuration	Main Unit, Standard sensor, Model for multi-standard groove, Power adapter, Calibration block

## SURFACE ROUGHNESSTESTERS

### ACCESSORIES



#### STANDARD SENSOR

Measure the width greater than 2mm, groove depth less than 3mm groove, or step height of less than 3mm the surface roughness.

#### SENSOR FOR DEEP GROOVE

Measure the width greater than 3mm, groove depth less than 10mm groove.

#### SENSOR FOR SMALL HOLE

Measure the width greater than 5mm surface roughness.

#### STANDARD BLOCKS

Ra: 0.4, 0.8, 1.6, 2.0.

#### SENSOR FOR CURVED SURFACE

Measure the width greater than 3mm radius of curvature of concave and convex surface of the workpiece surface.

#### EXTENSION BAR

It can stretch out 50mm sensor.

#### LATERAL SENSOR

It can be used to turn at right angles to the sensor measurements.

#### MEASURING PLATFORMS

More information please contact us.

# X RAY FAULT DETECTORS



TRADING COMPANY

**OUR MAIN PRODUCTS  
ARE INDUSTRIAL  
X-RAY MACHINES.**

SINCERE SERVICE



## X-RAY FLAW DETECTORS

### Portable X-ray Flaw Detectors

- XXQ series are with **directional glass x-ray tube**.
- Portable X-ray flaw detector is made up by x-ray generator, controller, connecting cable, power cable and accessories.
- The intelligent design for controllers, the tube voltage and exposing time can be preset, the timer is digital.

The controllers have over-voltage protection, over-current protection, less-current protection and exposing delay function. Strong impact resistance and anti-jamming performance for the complex work environment.

- X-ray generators have over-temperature protection. When the generator is over-temperature, it will shut down the high voltage automatically.
- We have over 30-year-experience on industrial x-ray machines, and the x-ray machines we produce have smaller dimensions, lighter weight, best quality, longer trouble-free cycle and lower maintenance cost.

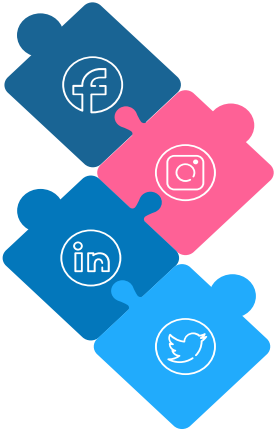
## X-RAY FLAW DETECTORS

- XXQ-3505
- XXQ-3005
- XXQ-2505
- XXQ-2005
- XXQ-1605
- XXQ-1005
- XXH-3505Z
- XXH-3005Z
- XXH-2505Z
- XXH-2005Z
- XXH-1505Z
- XXGH-3505Z
- XXGH-3005Z
- XXGH-2505Z
- XXGH-2005Z
- XXG-3505
- XXG-3005
- XXG-2505
- XXG-2005
- XXG-1605
- DGT-350
- DGT-300
- DGT-250
- DGT-200
- DGT-160



XXQ Series – Directional glass X-Ray Tube
XXH Series – Panoramic glass
XXGH Series – Panoramic ceramic
XXG Series – Directional ceramic
DGT Series – Directional ceramic

# CONTACT



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