HL-112 Ultrasonic Hardened Layer

Depth Tester









Circular axis measurement



Crankshaft measurement



Wheel measurement

TECHNICAL PARAMETERS

Model	HL-112
Measurement Range	0.5-40mm
Test Method	Immersion focused ultrasound; Unfocused ultrasound
What can be tested	various types, including casting work-pieces
Optional Available Transducers	 Single Crystal Immersion transducer Single Crystal Unfocused transducer Dual Crystal Unfocused transducer
Resolution	0.001mm
Test Frequency	0.2-35Mhz
Test Repeatability	±0.1mm
High Temperture Test	60°C ~ 100°C
Pulse Repetition Frequency	10-10000Hz adjustable
Dynamic Range	≥38dB
Vertical linearity error	≤1.5%
Horizontal linearity error	≤0.2%
Resolution	220g
Testing sensitivity	>66dB(flat-bottomed hole deep200mmø2)
Rejection	(0~80)%, without affecting the linearity and gain
Gate	Wave-getting gate, Wave-losing gate, Single gate; double gate
Power supply	DC 9V ; AC100 to 240V, 50/60Hz
Pulse amplitude	100V, 200V, 300V, 400V, 500V
Pulse Width	(0.03~0.51) µs
Transducer Damping	50Ω, 100Ω, 150Ω, 400Ω
Wave method	Positive Half-wave; Negative Half-wave, Full-wave, RF
Usage Cost	Few consumable parts, low cost
Service & Support	Short lead time, Fast service response

FUNCTIONS & FEATURES

- Non-Destructive measurement of induction hardened layer depth.
- Measuring the induction hardened layer depth without cutting (instead of testing by hardness or microscope method.)
- Suitable for medium & high frequency quenching.
- Intelligent gate to display the location of layer.
 With Colored B scan function.
- Repetition frequency up to 10 to 10000Hz, highspeed detection, real-time smooth waveform, easy to obtain ideal waves.
- Various probes can be customized according to on-site working conditions.
- High definition highlight display, and user-friendly operation interface.
- The measurement results, all parameters and waveforms can be directly saved, and automatically generate report. Bluetooth wireless transmission, mobile app generates reports and prints on site.
- IP65 protection standard, sturdy and durable, waterproof and dustproof.

APPLICATION

- It can highly improve the testing efficiency on depth of hardening layer by NDT method, instead of testing by hardness or microscope.
- It widely used in measuring gears and shafts in automotive industry and wind turbine industry.
- It widely used in measuring automotive parts, construction machinery, machining tools, internal combustion engine, agricultural machinery and various industrial machinery.