

MFD-6K/10K

Ultrasonic Flaw detector







Overview:

MFD-6K MFD-10K and are portable industrial non-destructive flaw detectors, which can rapidly, easily and accurately inspect, locate, evaluate and diagnose various defects (crack, inclusion and pinhole, etc.) in a workpiece without destruction. They can be used both in a lab and field. The instrument can be widely used in any fields that need defect inspection and quality controlling e.g. manufacturing industry, iron & steel metallurgical industry, metalworking, chemical industry, etc., also be broadly used in the active safety inspection and service-life evaluation in such fields as aerospace, railway transportation and boiler pressure vessels, etc. It is an essential instrument for non-destructive inspection industry.

When the ultrasonic wave propagates in a workpiece, one can detect the defect in it by the influence on the propagation of ultrasonic wave based on the acoustic characteristic demonstrated by the defect in the material. Based on this principle, by using ultrasonic wave the operator can measure such defects as crack, pinhole and inclusion in different materials.

Features:

- Probe automatic calibration
- DAC and AVG are automatically formed, and can be corrected and compensated
- Freely switch to four kinds of standards (depth D, level P, distance S, amplitude H)
- Functions such as Auto-gain and peak memory improve detection efficiency
- ullet Automatically calculate the ϕ value equivalent defects
- 13 built-in testing standards are available
- Storage: 980 pieces of A-scan images and data
- Power supply: rechargeable Li-ion battery, standby time more than 15hours
- The width and intensity of launch pulse are adjustable
- With the durable shell ,oil-proof, water-proof and dust-proof
- PC software is available for data analysis, management and reports printing
- Time records: track and store records of testing date, time
- With power outage protection, stored data will not be lost
- Testing parameters can be automatically tested or preset
- With digital suppression, no effects for the gain and linearity
- Gain Compensation: Correcting dB attenuation caused by surface roughness, surface curvature, distanttesting of thick piece and other factors
- Two input methods: Angle and K values
- Echo frequency analysis
- Power indicator
- Strobe Audible and visual alarm
- DAC Audible and visual alarm
- Screen lock and unlock



Parameter	Value	
Model	MFD-6K	MFD-10K
Operating Frequency	$0.5 \mathrm{MHz}{\sim}15 \mathrm{MHz}$	$0.5 \mathrm{MHz}{\sim}20 \mathrm{MHz}$
Scan Range (mm)	0-6000mm	0-10000mm
Velocity Range (m/s)	1000~15000	100~20000
Vertical linearity error	≤3%	≤2%
Dynamic Range	≥32dB	≥35dB
Horizontal linearity error	≤0.2%	≤0.1%
Testing sensitivity	≥62dB (Depth 200mm, Φ2 flat	≥65dB (Depth 200mm, Φ2 flat
	bottom hole)	bottom hole)
Measuring channel	50	100
Storage	500	980
TCG curve	No	Yes
B Scan	No	Yes
PC Connection	Yes	Yes
Video	No	Yes
Gain Range (dB)	0~110	0~130
Standard Probes	Straight probe: 2.5MHz, diameter 20mm, cable Q9-Q9 Angle probe: 4MHz, 60 degree, 8*9 mm, cable Q9-C5	
Dimensions	240×160×40mm	
Weight	1.2kg	
Power supply	Li battery 7.4V 4800mAh	
Operation environment	Temperature: -20°C ~50°C, Humidity:20% ~90%RH, Out of strong magnetic field and corrosion	
Optional accessories	Cables, Calibration blocks, Coupling agent	

Different cables for probes:

