

QFD 200 Ultrasonic Flaw Detector

<https://www.worldoftest.com/ultrasonic-flaw-detector>

Best Application:

Determine Flaws in material

Application

The Ultrasonic Flaw Detector - QFD 200 is a redesigned version of Qualitest's well known SUD 10 Ultrasonic Flaw Detector. The Ultrasonic Flaw Detector - QFD 200 has all the familiar features of the SUD 10 flaw detector and is offered with an improved LCD screen, modern (USB) computer connection, compact design and more economical price package.



Features

- Automated calibration of transducer Zero Offset and/or Velocity
- Automated gain, Peak Hold and Peak Memory
- Automated display precise flaw location (Depth d, level p, distance s, amplitude sz, dB φ)
- Automated switch three staff gauge ((Depth d. level p. distance)
- Ten independence setup, any criterion can be input freely, we can work in the scene without test block
- Big memory of 300 A graph and 30000 thickness value.
- B scan
- USB communication interface
- The embedded software can be updated online
- Li battery, continue working time up to 8 hours
- Other assistant function
- Display freeze
- Automated echo degree
- Angles and K-value
- Lock and unlock function of system parameters
- Dormancy and screen savers
- Electronic clock calendar
- Two gates setting and alarm indication
- High-speed capture and very low noise
- DAC, AVG, B Scan; Solid metal housing (IP65)
- Automated make video of test process and play
- Provides high contrast viewing of the waveform from bright, direct sunlight to complete darkness and easy to read from all angles
- Powerful pc software and reports can be export to excel



Technical Specifications

Parameter	Technical Data
Scanning range (mm)	Scanning range (mm):2.5~10000 Steps: 2.5, 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000, 2000, 3000, 4000, 5000, 6000, 7000, 8000, 9000 and 10000. Step:0.1mm (2.5 mm~99.9mm),1mm (100mm~10000mm)
Display delay (μs)	D-delay (μs):-20~+3400 Stage: -20, -10, 0.0, 10, 20, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000, 1500, 2000, 2500, 3000, 3400. Step: 0.1 (-20μs~999.9μs), 1 (1000μs~3400μs)
Probe delay (μs)	P-delayt: 0.0~99.99 Step: 0.01
Sound velocity in material (m/s)	Sound velocity in material: 1000~9999 7 fixed sound velocities: 2260, 2730, 3080, 3230, 4700, 5900, 6300 Step: 1
Working method	Single probe (P/R), double probes (transceiver), transmission (transmission probe)
Frequency ranges (MHz)	Low frequency 0.2-1, middle frequency 0.5-4, high frequency 2-20, three steps optional
Gain (dB)	0~110 Step: 0.0, 0.2, 0.5, 1, 2, 6, 12
Linear suppression	0%~80% of screen height, step: 1%
Vertical linear error	Less than 3%
Level linear error	Less than 1% within scanning range
Detection sensitivity margin	≥60dB
Dynamic scope	≥32dB
Alarm	Traveling-wave alarm, evanescent wave alarm
Monitoring gate	2 gates, represents with horizontal thick line with adjustable start point, width and height. <ul style="list-style-type: none"> - Start point (mm): horizontal pixel 0~208, with display value relating to scanning range. - Step: mm quantity corresponding to one pixel (relating to scanning range) - Width (mm): horizontal pixel 4~212, with display value relating to scanning range. - Step: mm quantity corresponding to one pixel (relating to scanning range) - Height: vertical scale 2%~90% - Step: 1%
Display	LCD Display
A-Scan display	Full screen or part A-Scan display of freezing and defreezing A-Scan filling

Installation Requirements

Power 100 Hz -240 Hz~50 Hz /60Hz

