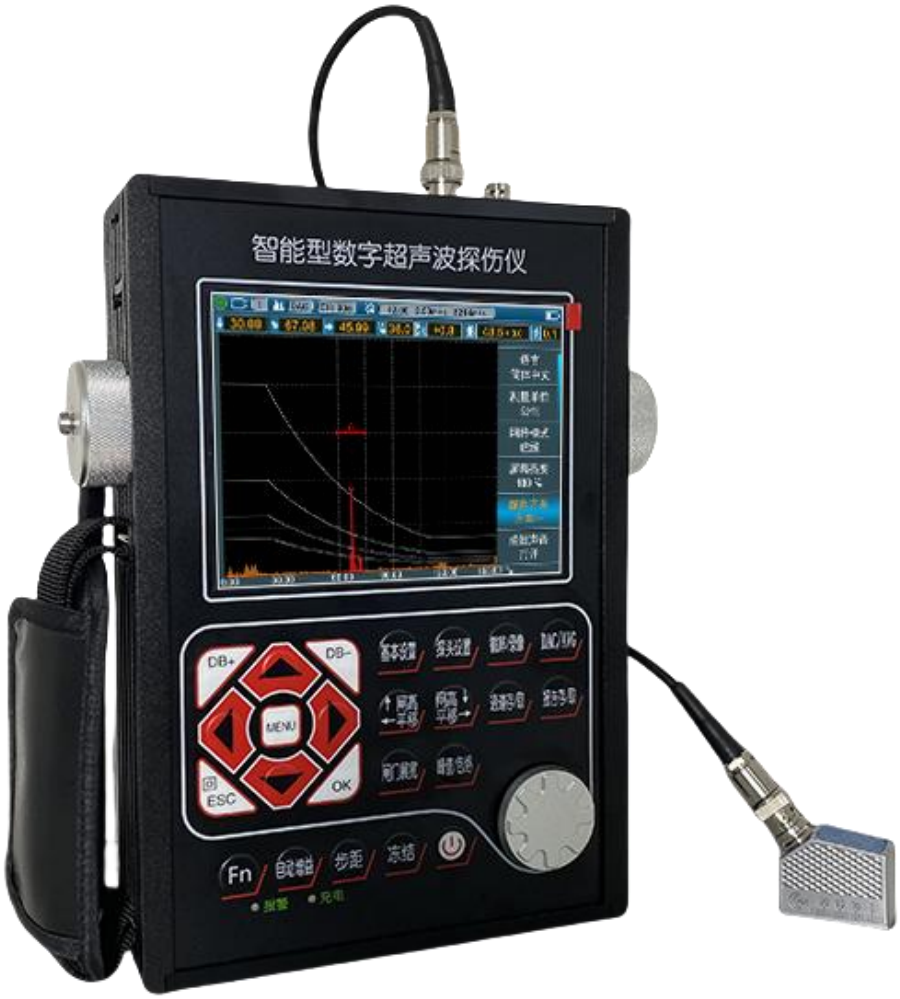
KASON

KASON 650C Ultrasonic Flaw Detector



1 9 YEARS

Development Base of Advanced Testing Machine Of China

Product introduction

This instrument is a portable industrial non-destructive flaw detection instrument that can detect, locate, evaluate and diagnose various defects (cracks, inclusions, pores, etc.) inside the workpiece quickly, conveniently, without damage, and accurately. It can be used both in the laboratory and on engineering sites.

Scope of application: manufacturing, iron and steel metallurgy, metal processing industry, chemical industry and other fields that require defect detection and quality control. It is also widely used in online safety inspection and life assessment in aerospace, railway transportation, boiler and pressure vessels and other fields.

This instrument has a full Chinese display, a master-slave menu, and is designed with shortcut keys and a digital shuttle wheel. It adopts a fully digital true color high-resolution LCD display. The operating interface style can be selected according to the environment. The LCD brightness can be freely set. The interface and waveform display are more delicate and humane. The large-capacity high-performance lithium-ion battery extends the continuous working time of the instrument to more than 12 hours; the instrument is light and portable, can be held with one hand, is durable, and leads the industry trend.

Feature

1. Appearance and structure

All-aluminum metal shell, sturdy and durable, with excellent electromagnetic shielding performance

The 360-degree rotating damping bracket and rubber sheath feel delicate and easy to use.

Tempered glass panel, extremely hard, wear-resistant and scratch-resistant.

2. Display interface

Full Chinese display, master-slave menu, guided operation, and assisted by shortcut keys and digital wheel, making operation convenient.

Full digital true color LCD display with a resolution of 640X480, the interface and waveform display are more delicate and user-friendly.

There are 4 operating interface styles to choose from, and the LCD brightness can be freely set.

3. Screenshot and PDF flaw detection report

Take real-time screenshots of all pages and flaw detection reports and save them as BMP images to a USB flash drive, which can be set to color or grayscale images.

Export the flaw detection report as a PDF file and save it to a USB flash drive for easy archiving and printing.

All contents of PDF files can be customized according to user needs.

BMP images and PDF files can be viewed in real time on your computer or mobile phone.

4.Detection range

Zero interface incidence: 0~15000mm (in steel, longitudinal wave), continuously adjustable

5. Emit pulses

Pulse amplitude: 100V, 200V, 250V, 300V, 350V, 400V, 450V, 500V graded selection, suitable for a wide range of probes

Pulse width: continuously adjusted within the range of (0.0.~0.510)μs to match probes with different frequencies

Probe damping: 50Ω, 150Ω, 250Ω, 500Ω optional to meet different working requirements for sensitivity and resolution

Working method: single crystal straight probe, single crystal oblique probe, double crystal straight probe, double crystal oblique probe, penetrating flaw detection

6. Amplify reception
Hardware real-time sampling: high-resolution 16-bit AD sampling, sampling speed 320MHz, high waveform fidelity
Detection mode: positive half wave, negative half wave, full wave, radio frequency detection
The filter frequency band (0.2~20) MHz is automatically matched according to the probe frequency, without manual setting.
Gate reading: Single gate and double gate reading modes are optional; peak reading within the gate
Gain: The total gain is 110dB, with step values of 0, 0.1dB, 1dB, 2dB, and 6dB. The unique fully automatic gain adjustment and scanning gain functions make flaw detection fast and accurate.

7. Gate alarm
Gate A and Gate B have the same functions. The door position, door width, and door height can be adjusted at will. You can choose to set the wave incoming alarm or wave losing alarm; and it is accompanied by LED light display.

8.Data storage
The instrument has a built-in mass memory, so data and files will not be lost due to a power outage. It supports 500 groups of flaw detection parameter channels and 1,000 groups of flaw detection reports. The combined parameters of various probes and instruments can be pre-adjusted, and flaw detection standards for various industries can be freely set. The flaw detection channel and flaw detection report can be exported through the USB interface or U disk, and unlimited amounts of flaw detection information can be stored through the U disk.

9.Recording function
The instrument supports recording the flaw detection process and saving it as a video file, which can be played back through the instrument or special software. This machine supports a maximum of 10 video files, each video file can be up to 5 minutes long. There is no limit to the number and duration of recordings via USB flash drive. Video recording and playback of the flaw detection process provides great convenience for learning flaw detection, and also facilitates saving of the flaw detection process for future analysis.
Playback supports pause, fast forward, rewind, and stop functions

10.Flaw detection function
Flaw detection standards: built-in commonly used flaw detection standards in various industries, which can be called directly, convenient and fast
Automatic calibration: automatic calibration function of probe zero point and probe angle (K value); automatic measurement function of sound speed
Wave peak memory: retrieve the highest wave of defects in real time and record the maximum value of defects
Defect positioning: real-time display of defect level, depth (vertical), and sound path position
Defect quantification: real-time display of defect equivalent dB value or equivalent size
Defect characterization: The echo envelope waveform facilitates manual empirical judgment.
Surface correction: used for flaw detection of curved workpieces, which can display the circumferential position of defects in real time
DAC/AVG: The curve is automatically generated, the sampling points are not limited, and compensation and correction can be performed. The curve automatically floats with the gain, automatically expands with the sound path, and automatically moves with the delay. Can display the AVG curve of any aperture.
AWS D1.1: American Welding Society standard, providing a dynamic reflector "deficiency rating" for various AWS weld inspection applications. It can avoid manual calculation and improve detection efficiency.

Crack height measurement: Use endpoint diffracted waves to automatically measure and calculate crack height.
In-door broadening: enlarging echo details to facilitate echo analysis
Continuous recording: real-time recording of waveforms, storage and playback
Waveform Freeze: Freeze the waveform displayed on the screen to facilitate defect analysis
Echo coding: Display 1~9 echo display areas in different colors to facilitate the determination of defect locations
Peak Marker: Capture and mark peaks in real time
B-type scanning: real-time scanning and cross-sectional display, which can display the shape of workpiece defects and make the detection results more intuitive.

11.Real time clock
Tracking and recording of real-time flaw detection date and time, and record storage.

12. Communication interface
The USB2.0 high-speed communication transmission interface supports U disk mode and data connection mode, which makes it convenient and fast to back up data to a PC. You can also use special software to upload and download data through USB.

13.Battery module
High-capacity lithium battery module, continuous working time reaches more than 12 hours.

14.Display waveform
You can set the waveform color, waveform fill and peak mark within the gate

15. Repeated transmission frequency
The maximum repeated emission frequency of this machine can be set to 2000Hz, or it can be upgraded to a higher frequency according to user needs. In principle, the upper limit can be achieved based on the detection range, sound speed and emission width.

16.Upgrade procedure
It only takes two steps to complete the upgrade function. Users can upgrade the program to the latest version by themselves. The upgrade will not cause a black screen or damage to the machine.

Technical Parameters

examination range:	(0~15000)mm
working frequency:	(0.2~20)MHz
Sound speed range:	(100~20000)m/s
repeat frequency:	(20~2000)Hz
Dynamic Range:	≥36dB
Vertical linearity error:	≤1.5%
Horizontal linearity error:	≤0.1%
Resolution:	>42dB(5P14)
Sensitivity margin:	>65dB (deep 200mmΦ2 flat bottom hole)
Digital suppression:	(0~80)%, does not affect linearity and gain
Electrical noise level:	≤10%
Probe type:	Straight probe, oblique probe, dual element probe, penetration probe

Gate:	Wave entry gate, wave loss gate; single gate reading, double gate reading, peak trigger, edge trigger
alarm:	Buzzer alarm, LED light alarm
power supply:	Direct current (DC) 9V; lithium battery can work continuously for more than 12 hours
Dimensions:	263×170×61(mm)
Host weight:	1.92kg
Ambient temperature:	(-10~50)℃
Relative humidity:	(20~95)%RH
Note: The above indicators are measured when the probe frequency is 2.5MHz and the detection mode is full wave.	

Standard configuration

1	Host	1 set
2	straight probe	1 piece
3	Angle probe	1 piece
4	Power Adapter	1 piece
5	BNC probe cable	1 piece
6	USB flash drive	1 piece
7	Shoulder strap	1 piece
8	user's Guide	1 piece
9	Certificate	1 piece
10	Warranty Card	1 piece
11	Test Report	1 piece
12	Instrument box	1 set

19 YEARS

Professional focused on testing equipment

KASON is established in 2003,owns more than 8000 square meters factory.has a professional sales teams, modem enter prise technology center,scientific and technological research and development team.

Machines passed the European CE authentication,American FDA certificate and and ISO 9001.

Products sold to USA, Canada, Australia, Europe, Africa etc,more than 130 countries and supply OEM service for many customers

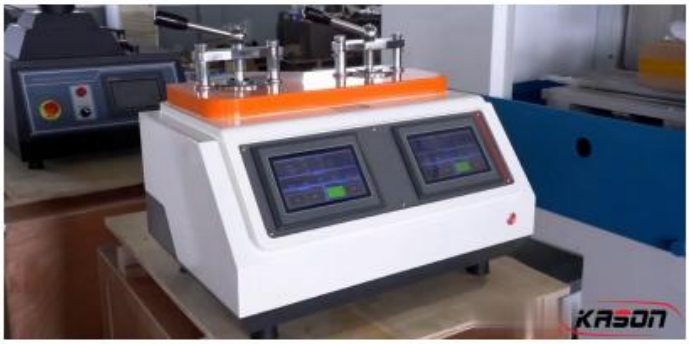
PROFESSIONAL TEAM

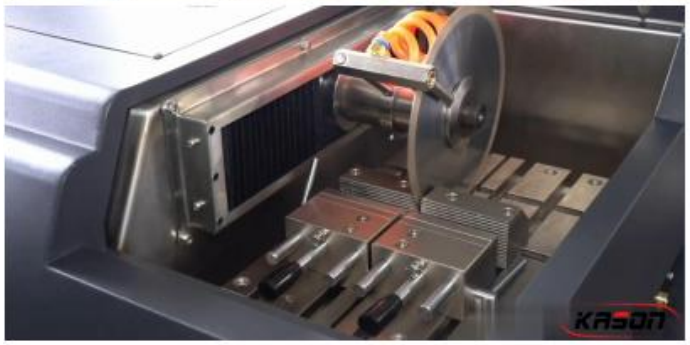
KASON has a professional sales teams, modem enter prise technology center,scientific and technological research and development team.





METALLGURGICAL PRODUCT SHOW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