

HANDHELD ULTRASONIC FLAW DETECTOR

COMPACT, LIGHTWEIGHT, EASY TO CARRY, HIGH-PRECISION, HIGHLY SENSITIVE, DUST-PROOF, WATERPROOF, AND EASY TO HOLD











APPLICATION AREA

Metal industry, chemical equipment, aerospace, etc

WIDELY APPLICABLE, HIGH DETECTION EFFICIENCY









METAL INDUSTRY CHEMICAL EQUIPMENT AEROSPACE







STEEL STRUCTURE POWER INDUSTRY

SHIPBUILDING INDUSTRY

MAIN FUNCTIONAL FEATURES

- 1.The multifunctional shuttle, combined with directional keys and multiple shortcut keys, makes the new menu operation more efficient:
- 2.A/B dual gates automatically trap echoes, with one click quick calibration for sound speed, delay, and angle:
- 3. Fully foolproof automatic recommendation parameter values, simply set and quickly use:
- 4.Gate O quickly and automatically searches for waves, saving 460 sets of data:
- 5.DAC curve standard quick selection, automatic height adjustment of evaluation line, quantitative line, and rejection line:
- 6.One click quick activation of peak memory and envelope functions;
- 7.One click full screen zoom in of waveform area, one click quick screenshot of display area
- 8.400MHz hardware real-time sampling, combined with recording and playback function, with realistic and delicate flaw detection graphics
- 9.A 20MHz broadband low-noise amplifier that can be used with various probes to achieve high sensitivity and resolution in non-destructive testing, with a compact size,
- 10.Waterproof and earthquake resistant, especially suitable for field and elevated aerial inspection operations.

BUILT IN MULTIPLE INTERNATIONAL STANDARDS

EASY AND EFFICIENT OPERATION EXCELLENT PERFORMANCE



WS3 digital ultrasonic flaw detector is a new generation of practical flaw detector developed by us, with multiple international standards built in, adhering to the concept of excellent product performance



INTELLIGENT DEFECT ANALYSIS WITH AUTOMATIC ALARM FOR EXCEEDING LIMITS

QUANTIFY AND ANALYZE DEFECTS DIRECTLY THROUGH CURVES

Display the depth, sound path, and horizontal position of defects through ADG/DAC



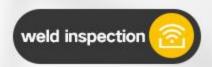
FULL SCREEN FLAW DETECTION WITH HIGH SENSITIVITY DETECTION

SUPPORT FULL SCREEN DISPLAY FOR MORE INTUITIVE DETECTION

Has high flaw detection sensitivity and can penetrate deep into metal materials



WELD SEAM INSPECTION IS MORE INTUITIVE



The built-in American Welding Society (AWS) steel structure weld qualification method allows for the setting of weld shape parameters, and a weld schematic diagram can be visually displayed during inspection Defect location and echo path.





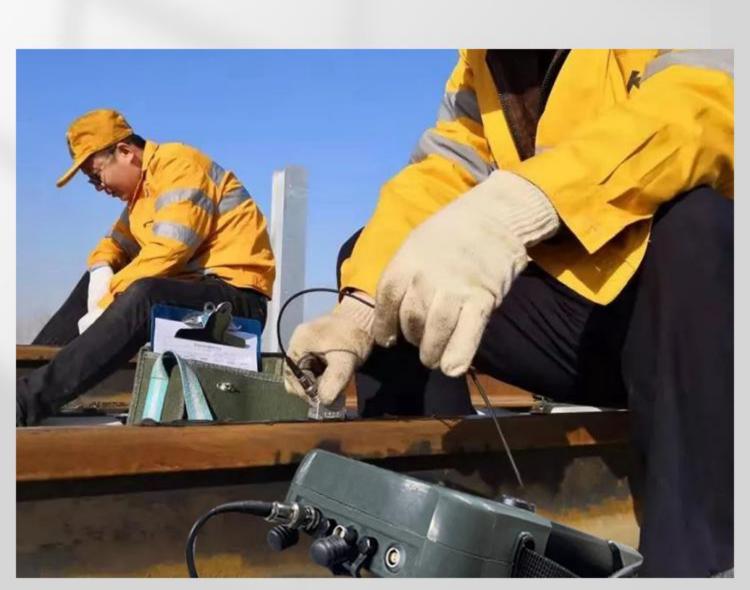
Weld seam inspection is a widely used application in testing, so the instrument is specially designed with a "weld seam diagram submenu". When in use, it can not only accurately calculate the position parameters of defects and display them, but also mark the specific location of defects in the weld seam diagram at the bottom of the screen after correctly inputting the weld seam parameters and probe position, which is clear and intuitive.

FOUR LEVEL NOISE REDUCTION FUNCTION

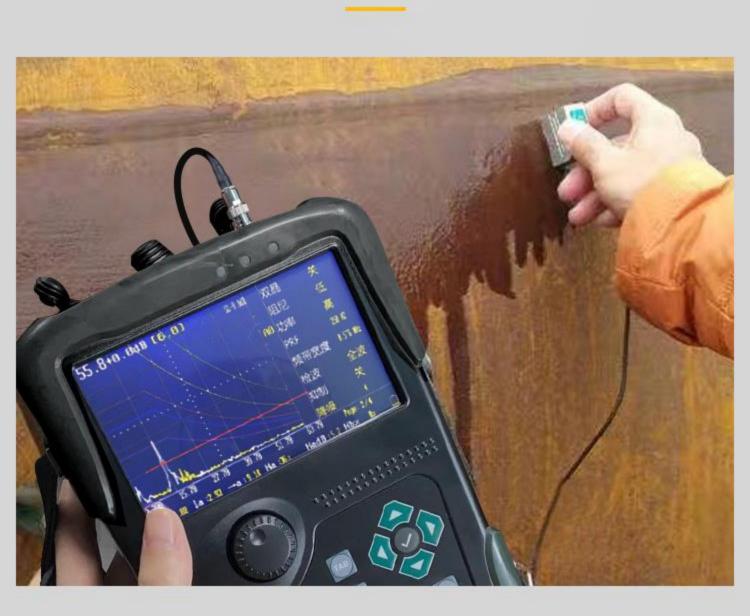
The machine adopts high-performance noise reduction technology internally, reaching the fourth level noise reduction standard



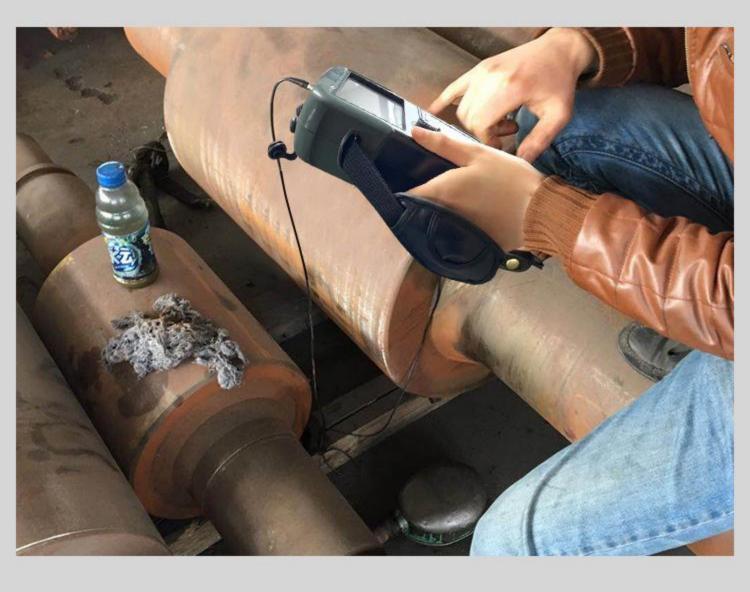
APPLICATION SCENARIOS



RAILWAY INSPECTION AND MAINTENANCE



INSPECTION OF THE OUTER WALL OF METAL STORAGE TANKS



INSPECTION OF LARGE EQUIPMENT METAL PARTS

HUMANIZED DESIGN AND EASY OPERATION

HUMANIZED DESIGN, EASY TO OPERATE, RESISTANT TO CHEMICAL CORROSION AND WRINKLES, REASONABLE BUTTON LAYOUT, AND SIMPLE OPERATION



PRODUCT PARAMETERS

Product Name	Eddy current detector		
Product model	WS3/WS5/WS7		
Detection range	WS3: 0.5~5000mm WS5: 0.5~15000mm WS7: 0.5~25000mm (Steel longitudinal wave), continuously adjustable		
Material sound velocity	1000~15000m/s, Continuously adjustable, commonly used sound speed for quick selection during coarse adjustment		
Pulse shift	-10.0~2000mm		
Probe delay	0.0∼199.9μs		
Launch pulse	400V negative spike pulse		
Damping	High, low		
operation mode	Single probe or dual probe		
Working frequency range	$0.5{\sim}22~\mathrm{MHz}$ (-6dB) , $0.5{\sim}6/3{\sim}22~\mathrm{MHz}$ 2frequency bands		
Repetition frequency	40 / 250 / 1000 Hz Three levels to choose from		
Gain adjustment	0~110 dB, 0.0/0.1/0.5/1.0/2.0/6.0 dB Step adjustment		
detection mode	Full wave/positive half wave/negative half wave/RF		
Alarm gate	A/B two-way gate, capable of setting positive and negative logic and sound and light alarm modes		
Measurement mode	Frontier or peak		
Horizontal linear error	≤ 0.1%		
Vertical linear error	≤ 3%		
Sensitivity margin for flaw detection	≥ 60dB		
dynamic range	≥ 46dB		
Far-field resolution	≥ 30dB		
Sampling rate	Hardware sampling rate 400MHz		
Storage	Can store 460 sets of data		
Replay	Capable of continuous recording and playback of dynamic echoes from non-destructive testing		
Surface correction	Automatic correction of defect position during oblique probe surface flaw detection		
automatic gain	20%~85%, step by 5%		
Menu Language	Simplified Chinese/English		
communication interface	There are two A/B type USB interfaces in total		
display	5.0 "high brightness TFT color LCD screen, 800x480 pixels		
Working environment temperature	-10~+50°C		
Battery specifications	11.1V3900mAh lithium battery, capable of providing continuous power for over 6 hours		
Power supply	AC: 100-240V DC: 15V/4A		
Whole machine weight	About 1.0Kg (including battery)		
Product size	135mm*54mm*205mm		

INSTRUMENT FUNCTION COMPARISON TABLE

Instrument model comparison	WS3	WS5	WS7
Sharp pulse	/	~	~
square wave			~
Weld seam diagram	~	~	~
Continuous storage	~	~	~
RF detection	~	~	~
Available in both Chinese and English	~	~	~
Peak Memory	~	~	~
envelope	V	~	~
Surface correction	~	~	~
Automatic wave amplitude	~	~	V
DAC	~	~	~
AVG	~		~
AWS		~	~
Echo comparison			~
noise reduction		V	~
Shortcut menu/shortcut keys		V	~
Flying shuttle function key		V	

COMPATIBLE WITH MULTIPLE PROBES

FIT MULTIPLE PROBES



INTERNATIONAL DIRECT PROBE



NATIONAL STANDARD TWIN CRYSTAL STRAIGHT PROBE



INTERNATIONAL ANGLE PROBE



WATER IMMERSION PROBE SERIES



DELAY BLOCK PROBE DL



SPOT WELDING PROBE

PACKING LIST

NAME	Model and specifications	Counting units	quantity
host		unit	1
lithium battery	11.1v 3900mAh	piece	1
The power adapter	SPU63-106	ones digit	1
AC power cord	national standard	pair	1
Wrist strap		ones digit	1
Neto customized sponge	FBOO1A026(A/0)	ones digit	1
Instrument carrying case	D4215 Black Box	ones digit	1
Direct probe	N1-2.5P20	ones digit	1
Oblique probe	A2 . 5P9 * 9K2 . 5	ones digit	1
Probe connection cable	Q9-Q9	ones digit	1
storage	USB	ones digit	1
Coupling agent		bottle	1
Packing List		ones digit	1
Factory Inspection Certificate		portions	1
instructions		portions	1
certificate		cards	1
Warranty bill		cards	1





