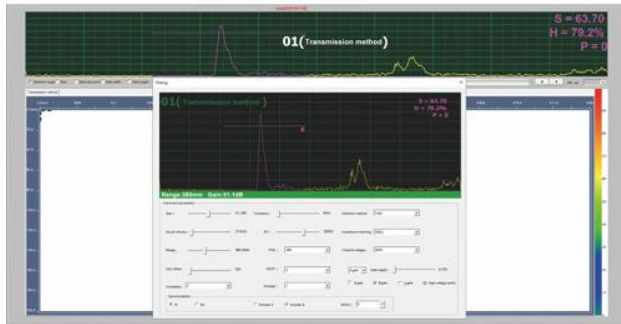


AIR-COUPLED ULTRASONIC DETECTOR

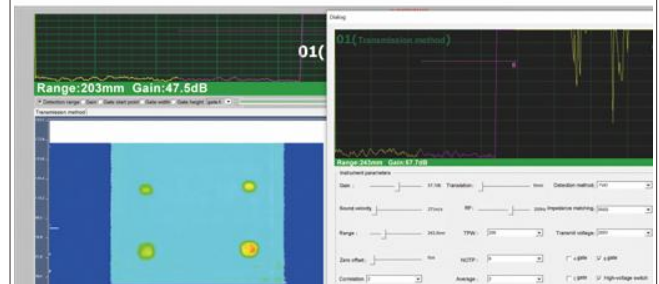
CODE UFD-AW□□□

CUSTOMIZED ACCORDING
TO WORKPIECES

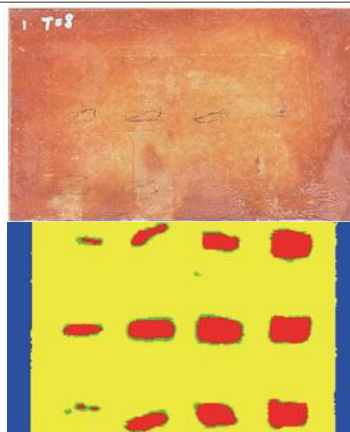
- Suitable for all types of aerospace composites, lithium batteries, water-repellent or slightly porous materials, as well as non-metallic materials that are susceptible to damage or intrusion of foreign objects
- Non-contact ultrasonic detection without coupling agent, detection distance from a few millimeters to several tens of millimeters
- Inspection of thin, rough or curved workpieces, which are less affected by the inspection surface
- Can withstand certain high and low temperature material testing
- A-scan, B-scan, C-scan imaging available
- Multi-channel automated scanning devices can be adapted to the size of the parts to be scanned



software parameter setting interface



scanning measurement function interface



scanning display interface

SPECIFICATION

| | | |
|---------------------|--------------------------------|---|
| Accept parameters | sampling frequency/bit depth | 100MHz/14bits |
| | receiver bandwidth | 35kHz~2MHz |
| | gain range | 0~120dB, step 0.1dB |
| | gain linearity | cumulative error within every 20dB $\leq \pm 1\text{dB}$; cumulative error within every 60dB $\leq \pm 2\text{dB}$ |
| | equivalent input noise | 1.5nV/ $\sqrt{\text{Hz}}$ |
| Launch parameters | number of channels | unlimited combinations |
| | transmission frequency range | 50kHz~2MHz (adjustable pulse count) |
| | transmission voltage amplitude | highest 400V (customizable 800V) |
| | transmission voltage waveform | square wave |
| | maximum output power | 2kW (400V), 4kW (800V) |
| Probe parameters | pulse repetition frequency | 15~1000k |
| | frequency range | 50kHz~2MHz (adjustable pulse count) |
| | relative sensitivity | $\leq 30\text{dB}$ |
| | resolution | $\leq 2\text{mm}$ |
| | focusing method | fixed focus or electronic deflection focusing |
| Hardware parameters | scanning range | 280×180mm (customizable) |
| | maximum scanning speed | 800mm/s |
| | repeatability | 0.1mm |
| | detection method | positive-wave、negative-wave、RF-wave、full-wave |
| | impedance matching | 200Ω, 500Ω |
| | operating temperature | 0~40°C, relative humidity: $\leq 85\%$ |
| | power supply | 220V, 50Hz |
| | dimensions (L×W×H) | 600×520×800mm (customizable) |

STANDARD DELIVERY

| | |
|------------------------|------|
| Main unit | 1pc |
| Mechanical system | 1pc |
| Control system | 1pc |
| Data processing system | 1pc |
| Ultrasonic transducer | 2pcs |