

U-View Software

U-View is an ultrasonic testing software, which is specially designed for multi-axis auto-scanning systems. It integrates motion control, ultrasound excitation, data acquisition and imaging together. The main features are as follows:

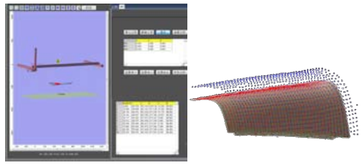
➢ Friendly User Interface



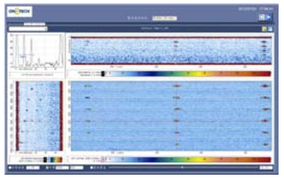
➢ Simple Operation Process



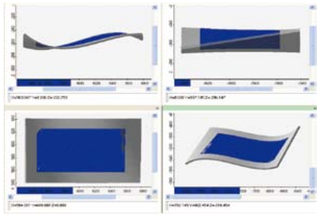
➢ 2.5D/3D Drawings Imported and Scanning trajectories simulation

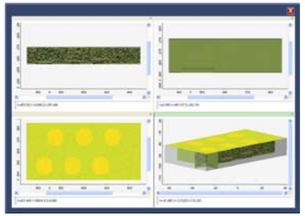


➢ Real-time A/B/C/D Scans Display, Store and Review

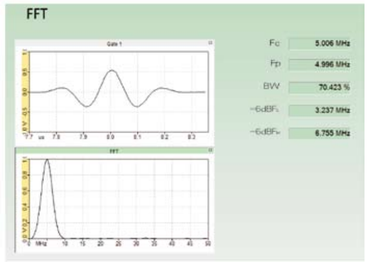


➢ 3D Data Reconstruction

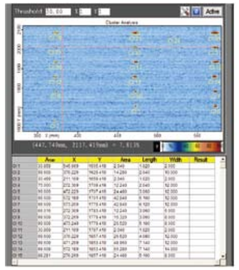




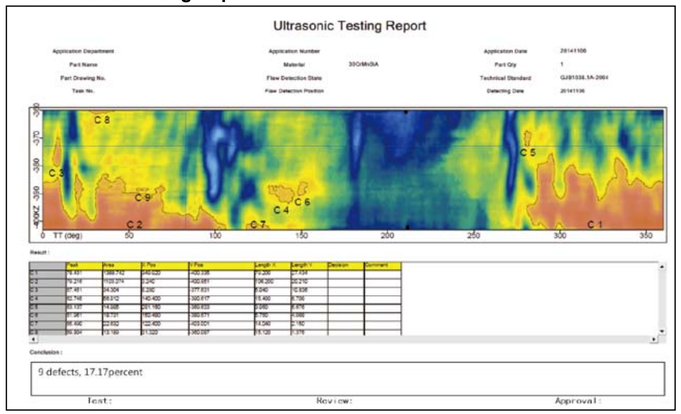
➢ FFT Measurement



➢ Cluster Analysis



➢ Customized Testing Report



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ON-TECH

Distributed and Sold by MATRIX MATRIX U/E TECHNOLOGIES LTD

Modular Multi-Axis Water-Spray Through Transmission Ultrasonic Testing System X4

Product Model:ACIS-04





Smart Solution, Smart Integrator





Main Functions:

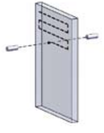
- Through Transmission for 2D/2.5D pieces and Pulse-echo for 3D pieces
- Defect-positioning function, easy to analyze defects
- Real-Time A/B/C/D scans display
- Available for data storage and review
- Excellent detection capability for all types of defects

Structural Features:

- Modular design makes it convenient for maintenance and modification
- Floating structure makes it run smoothly at high speed
- Low noise electric system minimized electromagnetic interference
- Limit device and probe anticollision device ensure the system running safely
- High performance servo motor makes the system preciser and faster
- Hand-Controller makes operation more convenient



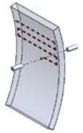
2D Piece Pulse-Echo Inspection



Water-Spray Through Transmission Inspection For Plates



2.5D Piece Pulse-Echo Inspection



Water-Spray Through Transmission Inspection For 2.5D Pieces



3D Piece Pulse-Echo Inspection

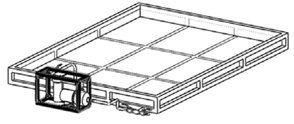
System Configuration:

EU-14 Conventional Multi-Channel Ultrasonic Instrument:



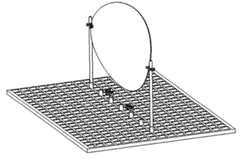
- A high-performance ultrasonic instrument, data transport by Ethernet
- Available for Pulse-echo, TOFD and immersion test.
- High pulse repetition frequency (20KHz)
- Protection Grade: IP67

Water Tank:



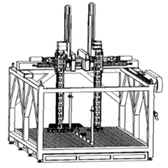
- Independent modular design
- Filtration capacity is 20um
- Filter cartridge replaceable

Fixture Device:



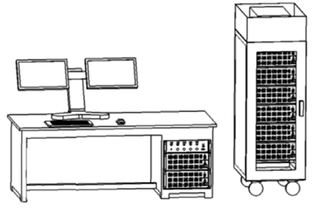
- Use several clamping rods to fix piece
- Available for 2.5D and 3D pieces

MZ-04 Mechanical System:



- Close loop servo with position coding feedback
- Linear axes driven by high precision ball guide screws
- High precision linear guide trail

Electrical Motion Control Module:



- Standard OT-03A operation table
  - Anti static operation table
  - Bilateral guide rail design
  - Available for multiple sets of standard chassis expansion
- High-performance IPC
- MC-series motion controller
  - Up to 8-axis servo motor control
  - Ethernet interface for communication
  - Servo power output protection

Specifications:

- Voltage:25~200V
- Pulse Width:20ns~500ns
- Impedance:50Ω-660Ω,step:8Ω
- PRF:1Hz~20KHz
- Gain:-12~70dB
- Bandwidth:0.75~25MHz
- Sampling Frequency:100MHz
- Number of Channels:2/4/8
- View:A,B,C,D-scan
- Data Analysis:
  - Cluster Analysis--- Defects exceed standard will be marked and Auto-statistics
  - Histogram Analysis--- Count the points distribution of C-scan
  - Bonding rate Calculation---Calculate the bonding rate of the piece
  - FFT--- Measure the central frequency, peak frequency and bandwidth of the probe
- Palette-- gray, color, warm color, RF symmetry and user defined palette
- Operation Table:L*W*H=2000mm×800mm×750mm
- Scanner:L*W*H=2500mm×3600mm×1000mm
- Maximum Speed: X-Axis 400mm/s,Y1-Axis 400mm/s,Y2-Axis 400mm/s, Z1-Axis100mm/s, Z2-Axis100mm/s,A1-Axis 90deg/s, B1-Axis 90deg/s,B2-Axis 90deg/s
- Mechanical Precision:X-axis/Y1-axis/Y2-axis/Z1-axis/Z2-axis 0.1mm, A1-axis/B1-axis/B2-axis 0.1deg
- Positioning Precision:X-axis/Y1-axis/Y2-axis/Z1-axis/Z2-axis ±0.05/300mm,A1-axis/B1-axis/B2-axis 0.1deg
- Power:110-260V AC/32A/50Hz

