Air-coupled Ultrasonic Testing System (In-line)
## GSCAN TYPE.AERO

Ultrasonic testing by air-coupled method is best applicable for Li-ion batteries, CFRP components with honeycomb structure or other materials for which water cannot be used as contact medium.

Existing ultrasonic testing methods require contact medium like water to transmit ultrasonic waves to scan objects, but water cannot be used for a scan object for which rust or deterioration is concerned. Using low frequency probes, high power pulser/receivers, signal amplifier and noise filters, air-coupled ultrasonic testing becomes possible without contact medium. Just install onto the production conveyor a mount fixing multiple probes arranged in parallel to enable automatic scanning of flaws inside of steel plates, board shape construction materials and so on. With robots integrated in the system, large aero-space components can be inspected in a short time.
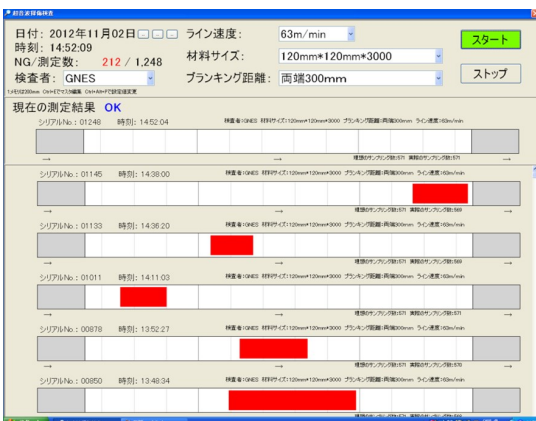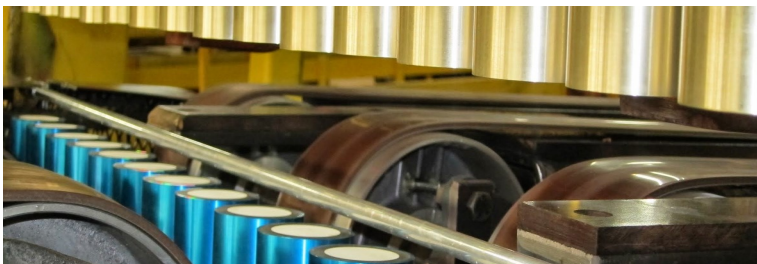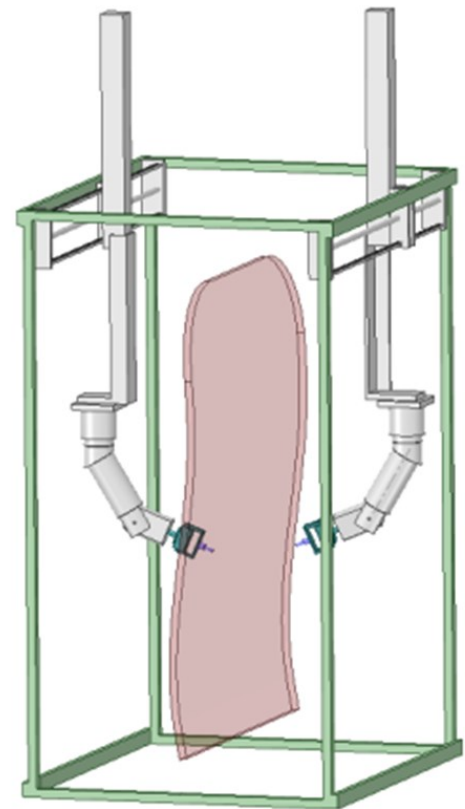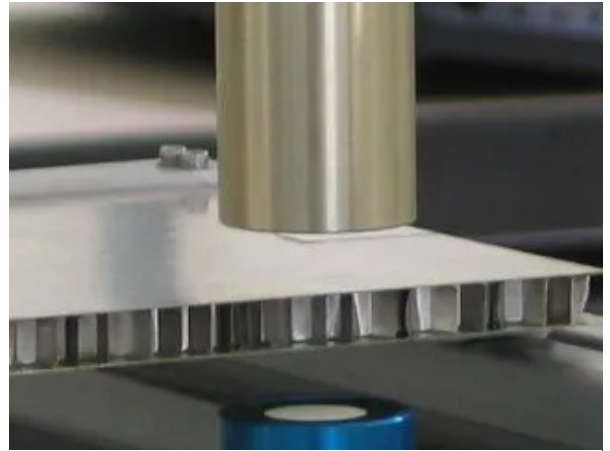

Easy to judge OK/NG, position or distribution of flaws!

Test date/time, inspector, scanning conditions, dimensions of a workpiece and so on can be entered in the screen. When the workpiece is judged NG, it is known by the display of defect sections shown in red as well as the buzzer and the rotating warning light installed on the machine. .

航空・宇宙　　鉄道　　自動車　　素材　　建材　　その他

Air-coupled Ultrasonic Testing System (Off-line)
GSCAN TYPE.AERO

Electrical dual axis deign provides both two-probe ultrasonic transmission method and V reflection method. Air-coupled ultrasonic testing system with open frame makes it easy to operate and mount/unmount workpieces.
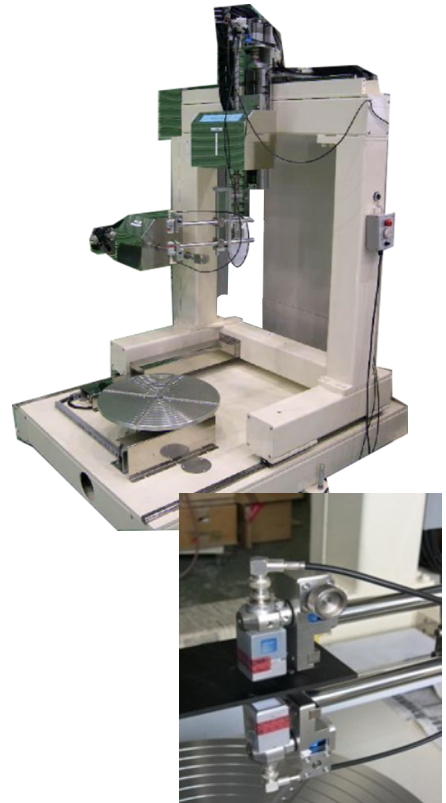
Hardware specifications （Mechanical section）	
Mechanical section（dual axis）	X axis （scan distance）200mm / （resolution）0.1mm
	Y axis （scan distance）200mm / （resolution）0.1mm
Hardware specifications （Pulser/Receiver）	
Frequency	MAX200Hz（*1）
Pulse type	Burst waves
Applied voltage	MAX800V（*1）
Sensitivity	0～80dB
Received frequency band	0.01MHz～7.0MHz
Filter	50kHz、120kHz、400kHz、2MHz、4MHz、5MHz
(*1) depends on scanning conditions	

| Software specifications （standard）	
Controlled axis	X，Y
Scanning mode	X-Y
Display type	Plan view
Display contents	Echo height
Tone gradation	Gradation with 16 colors pallet
	Gradation with 2 color pallet
	Gradation with RYB color pallet
Move to cursor position	Probe moves to the position of crosshair cursor in plan view.
Measurement	Position of crosshair cursor to be measured
	Area designated by square cursor to be measured
Comment	File name, filename extension type, memo
Scan settings	Programmable by PC
Teaching	Teaching between 2 points
Files available	Scan setting files, tone setting files
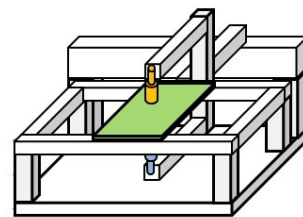
Two probe transmission method
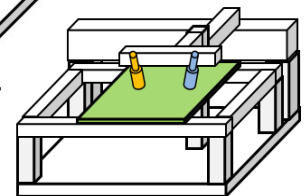
V reflection method

For inspection of Li-ion battery electrolyte filling

With PP sheets with 02mm thickness as artificial flaws attached on the package, scanning a Li-ion battery cell by air-coupled method provided successful inspection result.
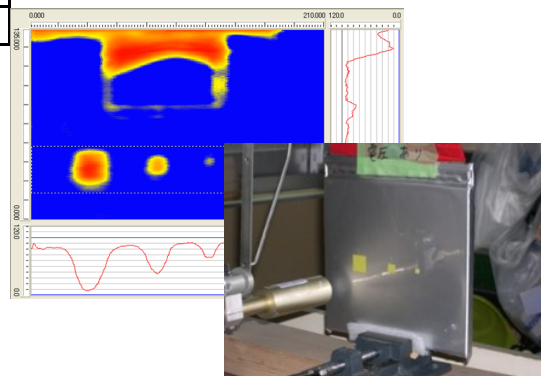
＊Specifications are subject to change without notice. Ask details spec of PC.