Detect through Air !

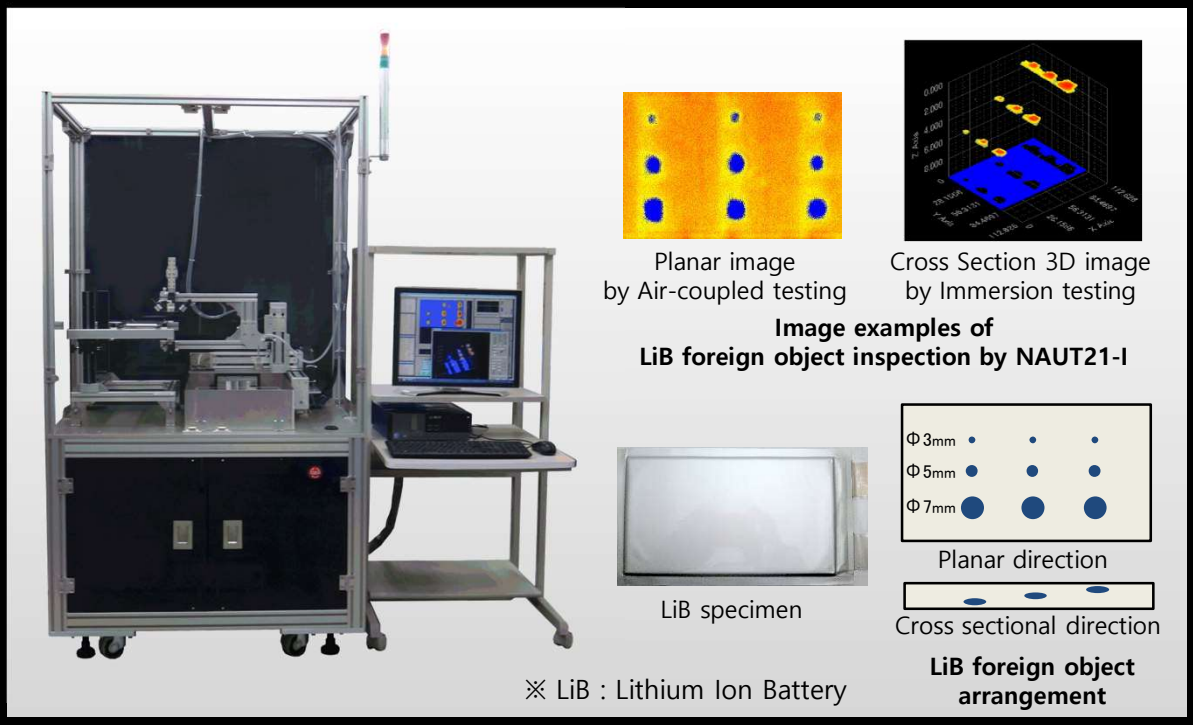
Detect defects by Air coupled ultrasonic waves.
Visualize C-scope image in real time.

Diagnose by Immersion !

Detection of defects in detail by immersion ultrasonic testing.
Visualize in-depth angles in 3D.

Perform Double Roles, Evaluation of Material & System Analysis !

Enable Japan Probe to respond to inspections that were never achieved before.
For example : Lithium ion battery including Solid-state battery, composite material, solar panel, wind power generation blades, brake pad, IC chips, films and so on.



Non-contact Air coupled Ultrasonic Testing system

NAUT21-I

Combination Model of Air Coupled / Immersion
Ultrasonic Testing system
for Evaluation & Analysis of Materials

Patent No. 4903032

We accept your samples for test at no charge !

Search "Japan Probe" on website and request it.

Please watch NAUT21 solution videos !

Ultrasonic Sensor
JAPAN PROBE

Non-contact Air coupled Ultrasonic Testing system

NAUT21-I

Detect through Air ! Diagnose by Immersion !

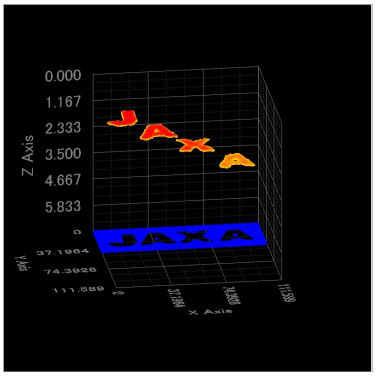
NAUT21-I is an ultrasonic inspection system that uses Japan Probe's Non Contact Air Coupled Ultrasonic Testing (NAUT) technology.

NAUT21-I enables ultrasonic inspection, measurement, evaluation, and analysis in the air and water as combination type of Air coupled and immersion testing.

In the Air coupled method, the inside of the specimen is visualized as a planar image. In the immersion method, it visualizes information in the depth direction in 3D in addition to planar image.

CFRP sample
Provided by: JAXA

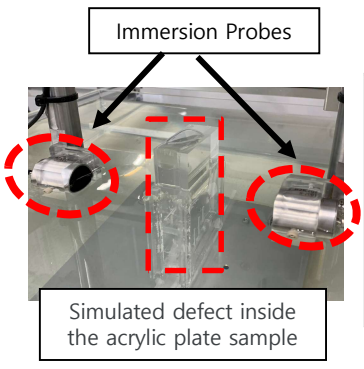
Test result image (C-Scope) by non-contact measurement in the air



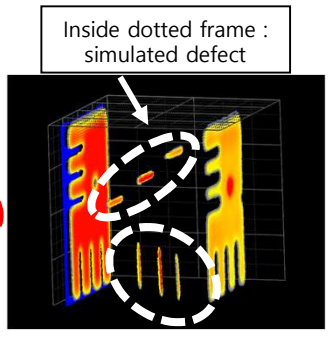
Cross Section 3D image by Immersion testing

■ 3D visualization of defects inside the specimen by Immersion method

Measurements are performed on both side of the specimen by each Immersion method, and the 3D image of defects inside the specimen is created after combining test results by software for easy-to-understand.



Measurement scenery

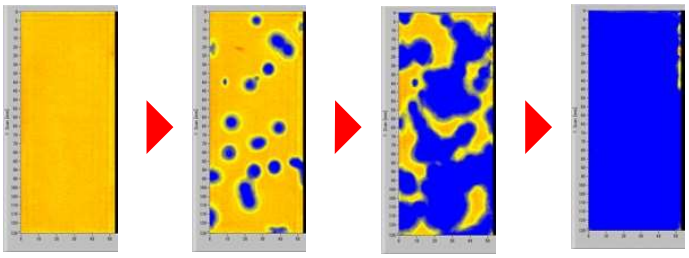


3D image of test result

■ Internal gas generation test by LiB discharge

This is an image of how gas is generated inside the LiB when discharging continues. When gas is generated, the amount of ultrasonic transmission decreases and is displayed in blue.

Measurement scenery



1) Test start
2) After 5 hours and 45 mins.
3) After 5 hours and 55 mins.
4) After 6 hours and 10 mins.

Discharge Test Result (C-scope)

Ultrasonic Sensor
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