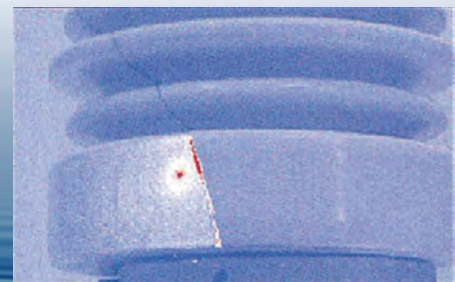
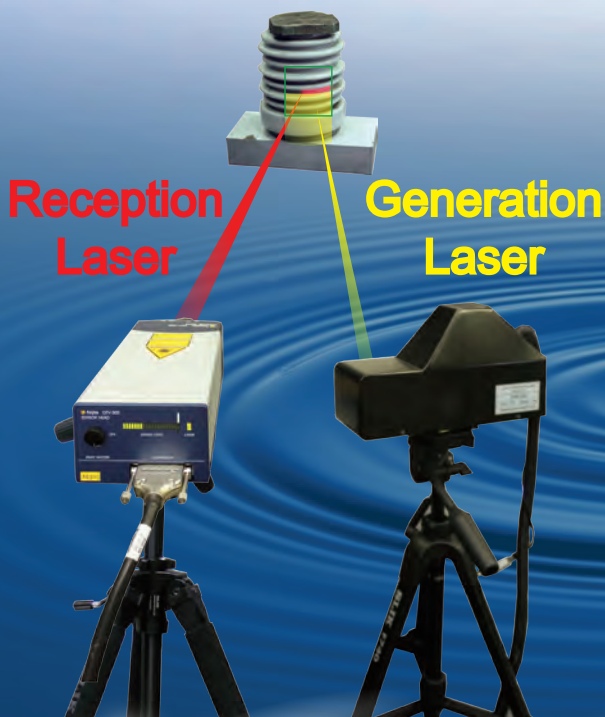


Laser Ultrasonic Visualizing Inspector

LUVI-LL2



Noncontact Inspection via Watching Ultrasound

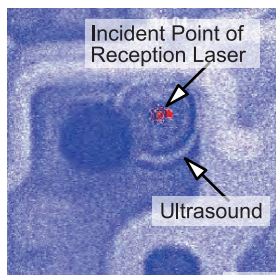
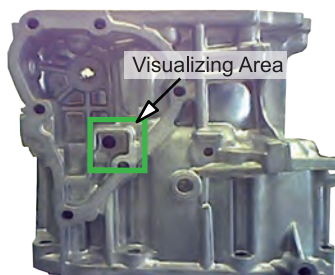


Stationary Image of Ultrasonic Maximum Amplitude

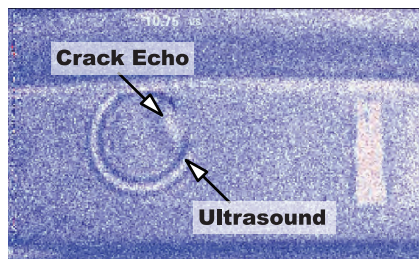
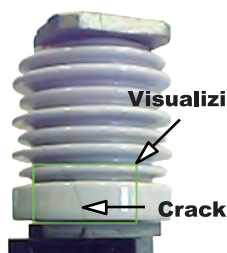


Video Image of Ultrasonic Propagation

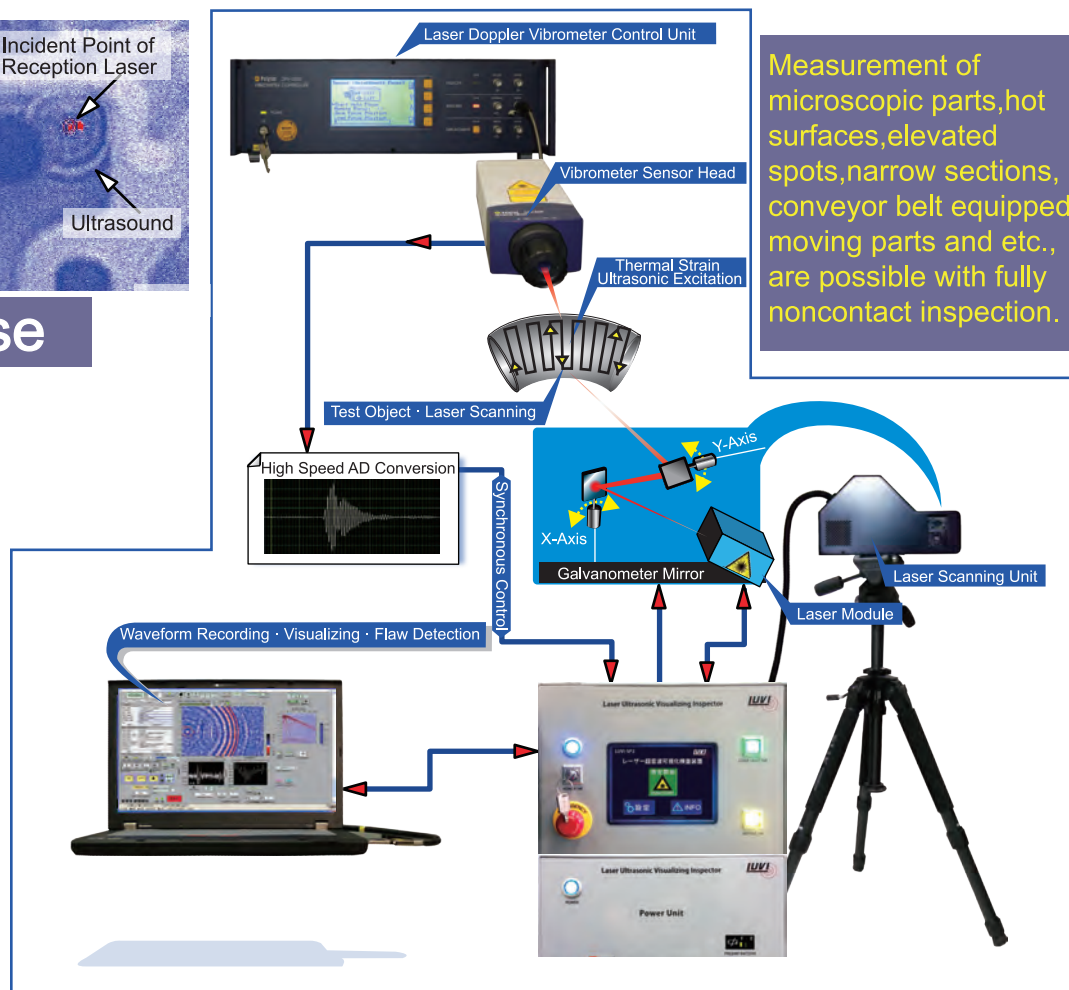
TSUKUBA TECHNOLOGY CO., LTD.



Transmission case



Insulation



Measurement of microscopic parts, hot surfaces, elevated spots, narrow sections, conveyor belt equipped moving parts and etc., are possible with fully noncontact inspection.

Feature

[Instant Flaw Detection by Watching Video]

Watch video image of ultrasound propagated in test object and detect flaw instantly, by irradiating and scanning laser to the test object.

[Available for Complex-shaped Objects]

Due to noncontact scanning, defect detection of complex-shaped objects such as curved surfaces, gaps, and narrow sections is possible.

[Fast Visualizing Inspection and Defect Detection for Wide Area]

Fast visualization for wide area is possible with fast scanning by the combination of laser and galvanometer scanner.

[No Optical Adjustment]

Easy measurement as no optical adjustment is necessary.

[Principal Application]

NonDestructive Testing in industry sector of automobile, airplane, training, ship, steelmaking, oil plant, gas plant, and power plant, material such as Fiber Reinforced Plastic; Elucidation of wave propagation mechanism; Performance evaluation of ultrasonic probe; Evaluation of structural integrity, etc.

Specification

Visualizing Range:	Within 50°
Distance to object:	0.1m~2m(~5m with additional lens)
Scanning Frequency:	Max.2kHz(200×200 points in 20sec.)
Scan Laser Power:	Above 2mJ
Pulse Width:	2ns~50ns
A/D Sampling Rate:	Max. 250MS/s(2GS/s: Option)
Display Image:	Ultrasonic Propagation Image, B-Scope Image (Speed Image), A-Scope Waveform, etc.
Inspection Object:	Crack, Corrosion, Void and Separation of Compound Materials, Metal, Ceramics and Resin, etc.
Max. Thickness:	about 100mm(Metal)
Min. Size of Defect:	0.1mm(5mm Thick Metal)

Laser Doppler Vibrometer

- Laser Wavelength : 633nm, Visible
- Laser Classification : Class 2 Helium-neon, <1mW
- Displacement Measurement : 50nm/V.
- Max. Frequency : 20MHz

Software

- Automatic Creation of Inspection Report
- Web Camera Image Superimposition
- Image Analysis

Option

- Robust Against Ambient Temperature
- Dust Protection
- Battery Unit

Configuration

Power unit	Laser unit	Scan unit	Vibrometer Control Unit	Vibrometer Sensor Head
Dimensions : W×H×D(mm)275×140×345	275×225×375	290×160×85	450×360×150	120×80×345
Weight : 6.7kg	14.2kg	2.5kg	10kg	3.4kg
Max. Electricity Consumption : AC100V/350W				