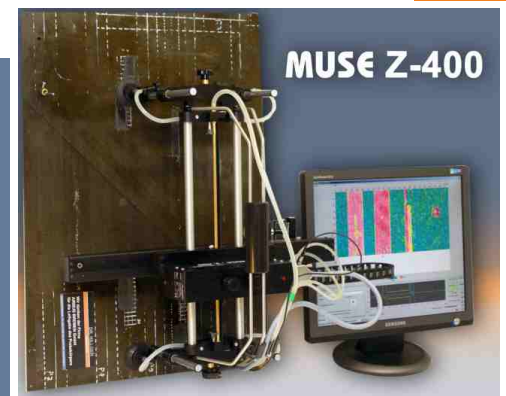


MUSE Mobile Ultrasonic Equipment

New: Manipulator Z400

The **MUSE**, a portable ultrasonic imaging system, was developed for in-field inspections of light-weight structures. The **MUSE** consists of a motor-driven manipulator, a water circulation system for the acoustic coupling and a portable ultrasonic flaw detector (USPC 3010). The **MUSE** provides images of internal defects (A-, B-, C- and D-scan).



Applications

- Ultrasonic imaging
- In-Service-inspections
- Indication of defects
- Inspections of aircraft components

Highlights

- Automatic ultrasonic testing
- Motor driven manipulation system with vacuum pads
- Probe holder for "local immersion technique" with water circulation system
- Ultrasonic flaw detector with built-in motor controller



MUSE-Manipulator Z400 with transducer fixture

- High scanning speed up to 1000mm/s
- Mechanical resolution 200 µm
- Scanning area 434 mm x 275 mm
- Vacuum pads as holders on curved and/or vertical flats
- Powerful motors
- Low power consumption
- Reference technique provides exact re-positioning
- Cardan probe holder



Water-circulation System with pumps

- Water circulation system with water tank (~ 1 litre)
- Suction- and pressure pumps for water circulation
- Electronic control of the pressure pump
- Easy handling and carrying
- Additional suction pump for vacuum pads

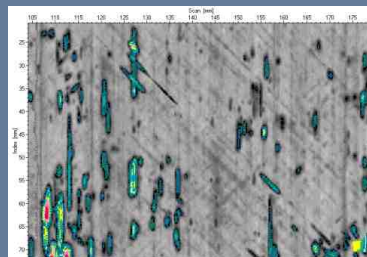


Ultrasonic flaw detector with built-in motor controller

- Portable system for Ultrasonic imaging
- A-, B-, C-, D- and F- scans
- 35 MHz bandwidth and avalanche pulser provide high resolution
- 12bits 200Msamples/s digitizer
- Built-in motor controller for manipulation
- Built-in PC for evaluation and documentation
- TFT-colour display
- User-friendly Hillgus-software



Cardanic fixed transducer adapter with built-in focused immersion transducer



A focal transducer and an optimized signal processing provide high resolution; indication of porosity in a CFRP-component, left: C-scan, right: B-scan with layer echoes and undulations

