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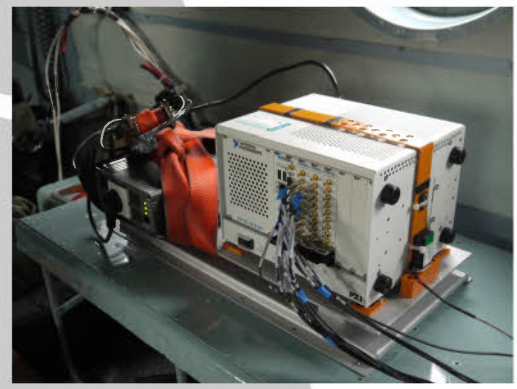
OPERATIONAL TESTS

Strain gauge measurements:

- Strain gauge measurements of flight loads,
- Stress and strain measurements in constructions, facilities, machines, etc.,
- Load, strength and fatigue analysis .

Equipment:
Real-Time Controller NI CompactRIO-9022:

- Embedded controller runing LabVIEW Real-Time for deterministic control, data logging, and analysis,
- 533 MHz processor, 2 GB nonvolatile storage, 256 MB DDR2 memory,
- Dual Ethernet ports with embedded Web and file servers for remote user interfacing,
- Hi-Speed USB host port for connection to USB flash and memory devices,
- RS232 serial port for connection to peripherals; dual 9 to 35 VDC supply inputs, -20°C to 55 °C operating temperature range.



Simultaneous Bridge Module NI 9237:

- 24-bit resolution, ±25 mV/V analog inputs with RJ50 connectors, 4 simultaneously sampled analog inputs; 50 kS/s maximum sampling rate,
- Programmable half- and full-bridge completion; up to 10 V internal excitation,
- Smart-sensor (TEDS) compatible,
- 1,000 Vrms transient isolation,
- -40°C to 70°C operating range.

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OPERATIONAL TESTS

Vibration measurements and analysis:

- Flight vibration measurements,
- Vibration measurements of vehicles, floating objects,
- Laboratory measurements of vibration,
- Vibration measurements of civil engineering constructions,
- Vibration measurements of working machines, rotating equipment, installations,
- Vibration analysis,
- Vibro-acoustic analysis,
- Vibration isolation of machines and equipment,
- Vibroacoustic diagnostic.

Equipment:

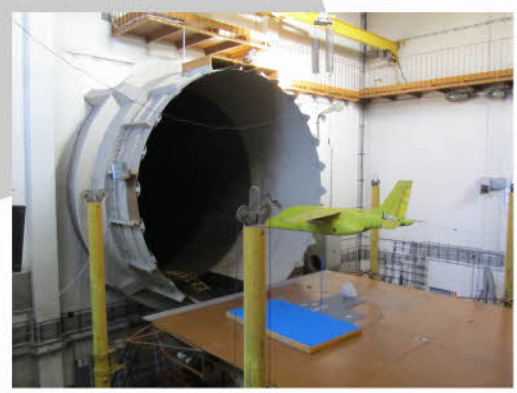
- 24 simultaneously sampled vibration-optimized analog inputs at up to 102.4 kS/s,
- Frequency range: ~0,5Hz - 10kHz,
- Measured acceleration range: +/- 50g,
- 0°C to 50°C operating range,
- AC/DC power supply.

Noise measurements:

- Environmental noise measurements,
- Aircraft noise measurements (inside and outside the aircraft),
- The noise measurements of machinery and equipment,
- Traffic noise measurements.

Objectives:

- Assessment of the level of noise and its environmental impact,
- Reduction of noise.



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