

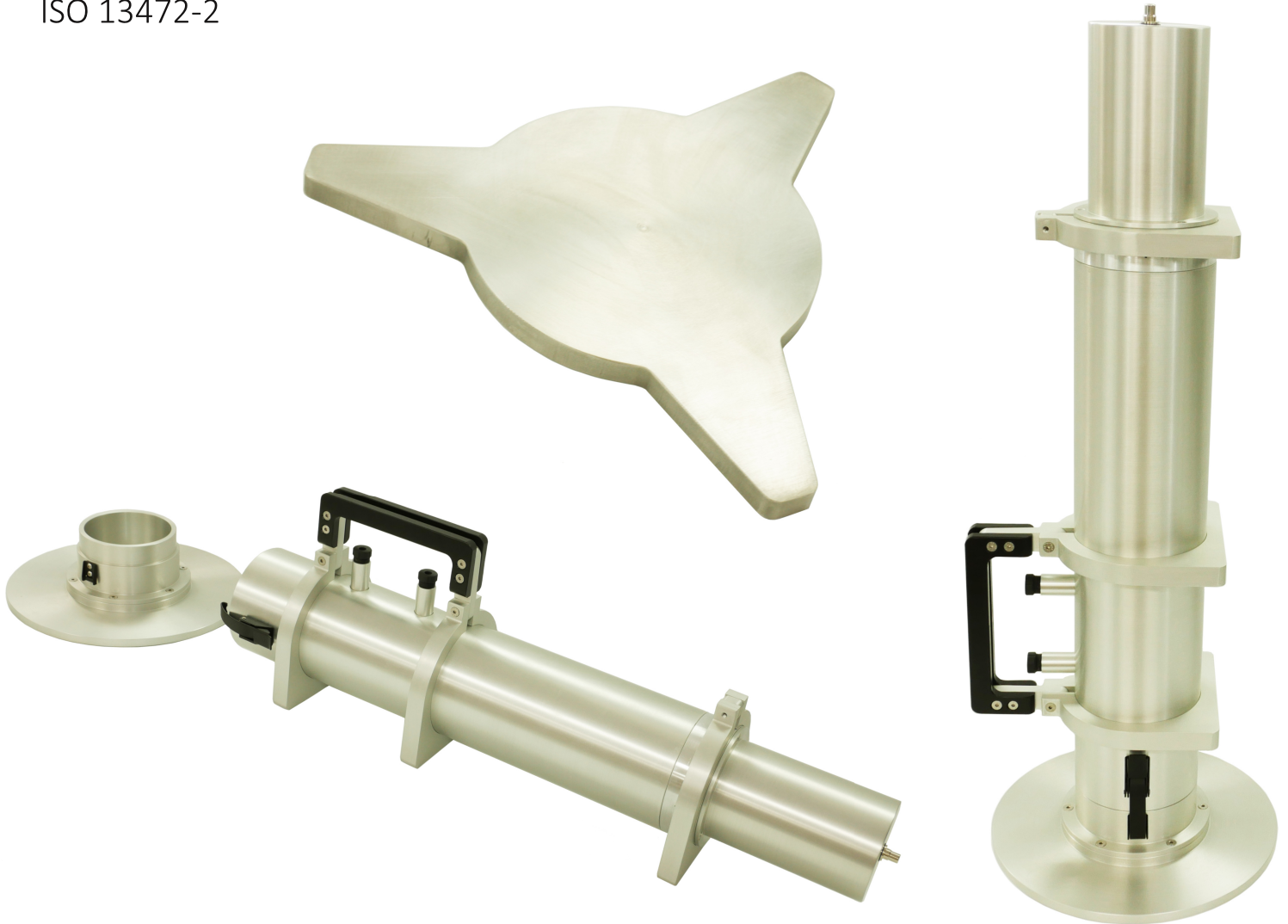
# TUBE

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## Road Sound Absorption Impedance Tube

ISO 13472-2



Mecanum's road sound absorption (RSA) impedance tube is specially designed for measuring the sound absorption coefficient of pavements (for example, asphalt) in third octave bands from 250 to 1600 Hz.

**MEASURING SYSTEM**

**Test Bench**

- 100 mm tube complying with ISO 13472-2
- IEPE Microphones (2)
- 24-bit acquisition system (DAQ) with embedded low distortion audio amplifier
- Calibration plate
- Special adapter for sealing impedance tube base
- Ruggedized transportation case

Properties	2 Mics
Absorption Coefficient	x
Reflection Coefficient	x
Surface Normalized Impedance	x

**TUBE-X Software**

- Special ISO 13472-2 module:
  - Third octave band computation in 250-1600 Hz frequency range
  - Zero absorption correction calculation from measurement with the calibration plate
- Fully controls the procedure (from calibration to measurement) with report generation
- Corrects errors due to weather conditions, internal tube dissipation, mounting rings, mounting grids and automatically controls the sound pressure level inside the tube
- Additional features: microphone acoustic center measurement module, comparison project and merging tools, averaging module, air cavity simulation tool, acoustic penetration depth tool

**OPTIONAL ACCESSORIES**

- Verification and calibration plate
- ENVIRO weather station
- Special wax for sealing the adapter to the soil

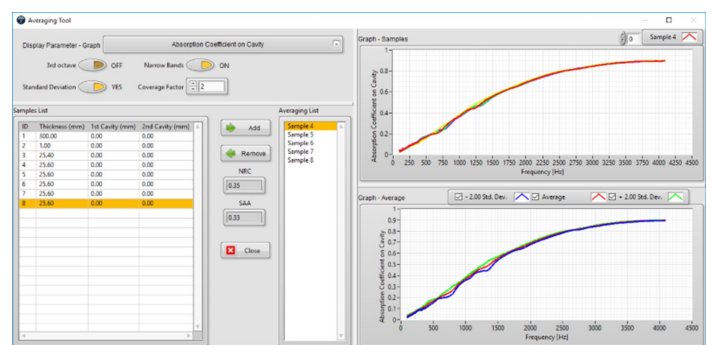
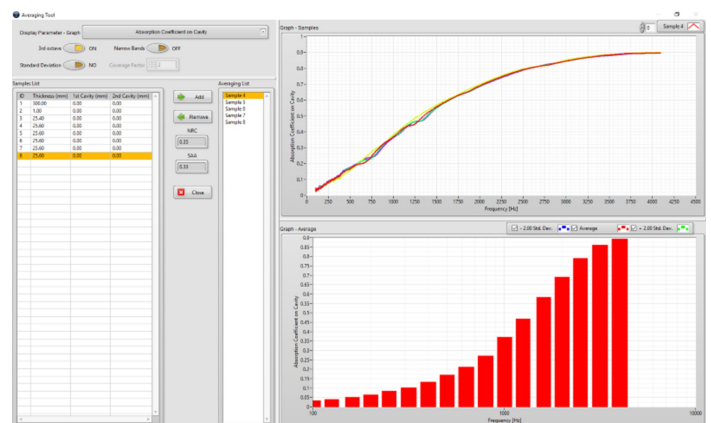
**TECHNICAL DATA**

**Tube**

- Dimensions: 750 (L) x 280 (W) x 300 (H) mm
- Mass: 10 kg
- Material: CNC machined aluminum, clear anodized
- Neodymium speaker with RCA connector

**Instrumentation**

- Power supply: 100-240 VAC 50/60 Hz 60 W
- Communication: USB 2.0 Type A
- Dimensions: 234 (W) x 223 (D) x 141 (H) mm
- Input: 4 channels 102.4 kHz / 24-bit channel
- Output: 1 channel 96 kHz / 24-bit channel
- 15 W low distortion audio amplifier
- IEPE ¼ " TEDs microphones



**WARRANTY & SUPPORT**

All Mecanum characterization systems are covered by a one-year limited warranty and technical support. Valid only on manufacturing defects and does not cover damage due to abuse or improper use of the equipment.

Please note that the technical aspects of our equipment may be subject to change without notice