

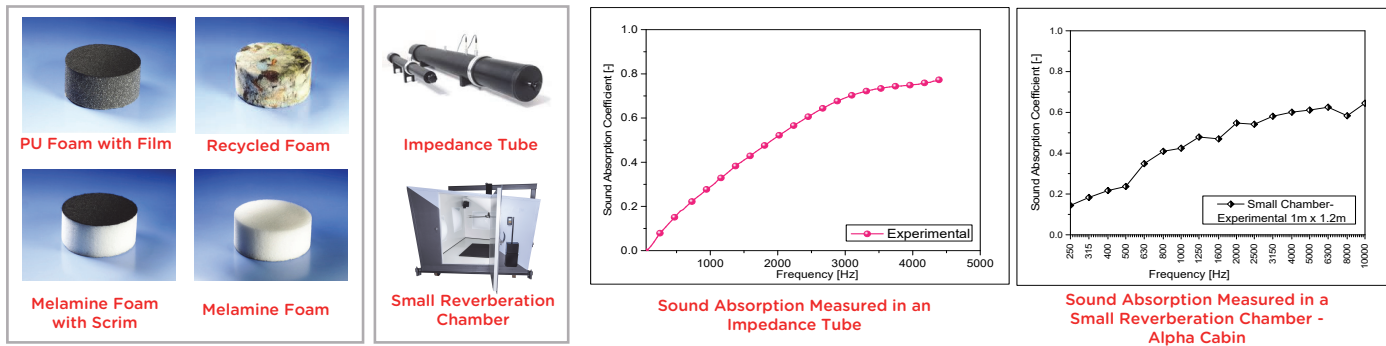
Sound Absorption Testing

It is defined as the ratio of the sound energy reflected by a surface to the sound energy incident upon that surface.

Test Components - Headliners, Luggage mat, Seats, Engine Encapsulation, Floor Carpets, Hood insulation, Wheel Liners, Package Trays etc.

Test Standards

- ISO 10534-2 Determination of sound absorption coefficient and impedance in impedance tube-Transfer function method
- ISO 354 Measurement of a sound absorption coefficient in a reverberation room
- ASTM C423 Standard test method for sound absorption coefficients by reverberation room method
- SAE J2883 Laboratory Measurement of random incidence sound absorption using a small reverberation room



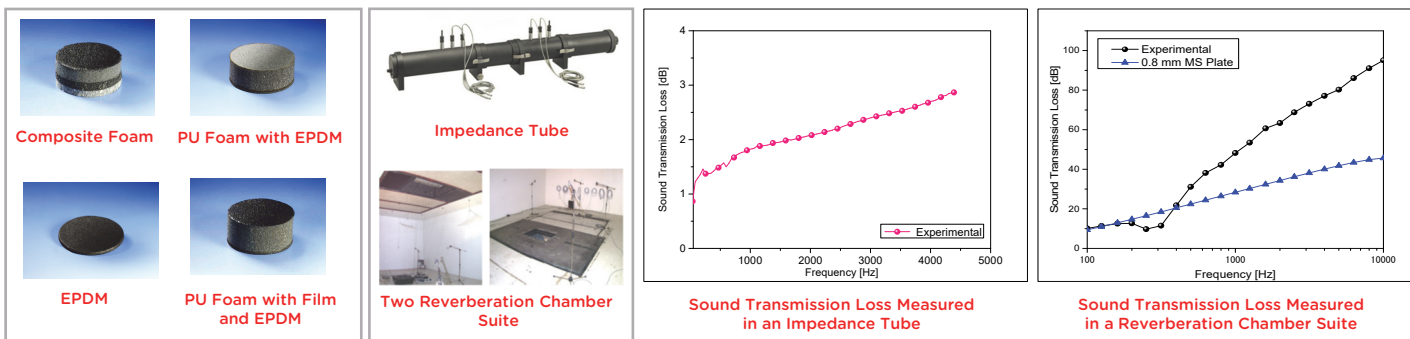
Sound Transmission Loss Testing

It is defined as the ratio of sound power incident on a material to the sound power transmitted through the material.

Test Components - Dash Insulators, Hood Insulator, Floor Carpet, Windshield etc.

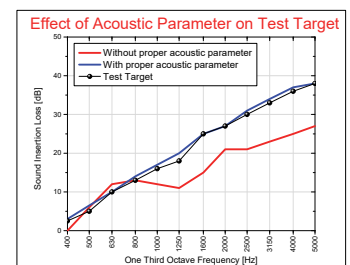
Test Standards -

- SAE J1400 - Laboratory measurement of airborne sound transmission loss
- ISO 10140-2 / ASTM E90- Measurement of sound insulation in building and building elements
- ASTM E2249-2 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions using Sound Intensity



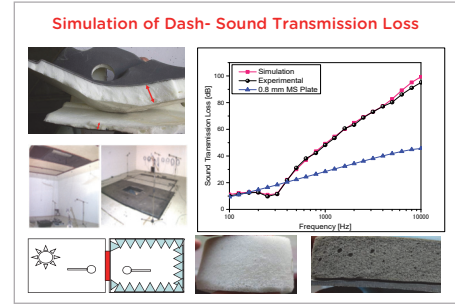
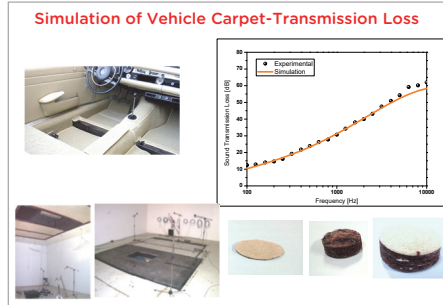
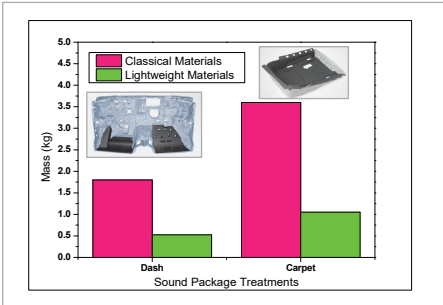
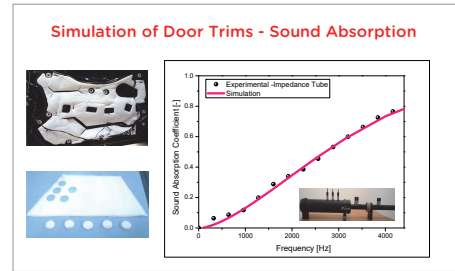
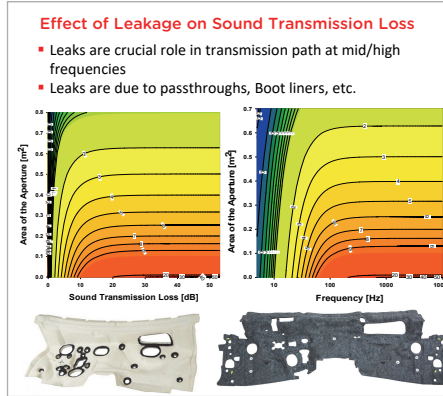
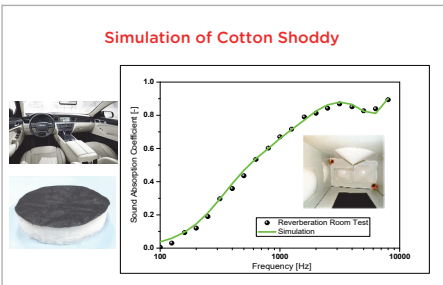
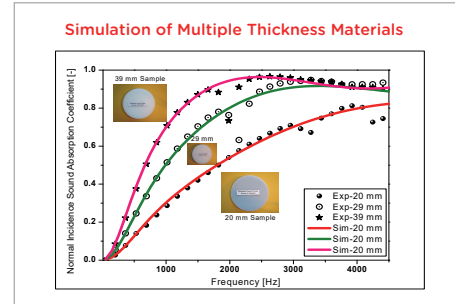
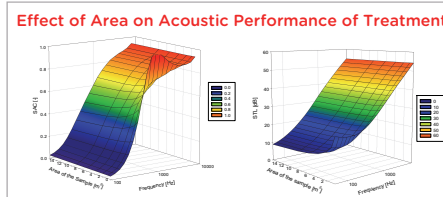
NVH Testing for Acoustic Targets

- Consultancy for achieving absorption, insertion and transmission loss targets
- Master report for effect of acoustics parameters on test targets
- Design of acoustic treatments for meeting test targets



Material Characterization

- Porosity Measurement by Porosity test rig
- Airflow Resistivity Measurement by Flow resistivity rig based on ASTM C522/ISO 9053
- Tortuosity and characteristic lengths by indirect method and Inverse characterization



Oberst Bar Testing-Damping Loss Factor

- Evaluation of damping loss factor of melt sheets, rubber sheets, etc.
- Testing as per ASTM E756, SAE J1637, SAE J3130, Ford, GM standards

Customized Test Facility

- Alfa Acoustics can help in design and development of in-house test facility

