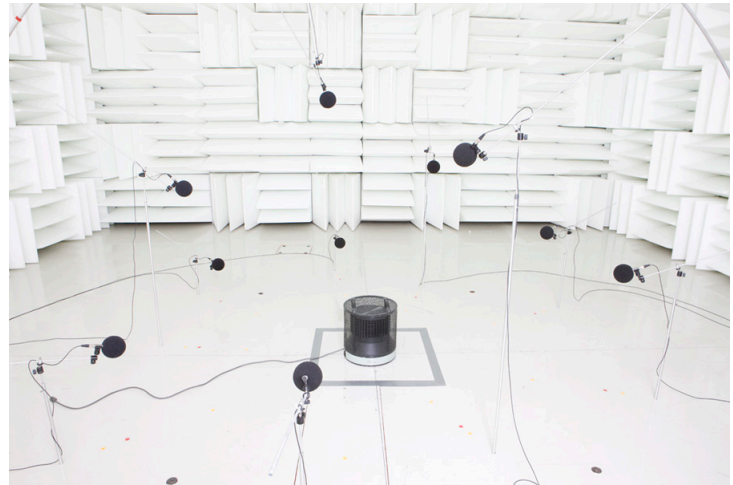


Features:

- 80 Hz to 20 kHz
- 1 m to 2 m Radius Hemispherical Free Field (Custom Sizes Also Available)
- Precision-Grade Testing
- Engineering-Grade Testing
- Noise Emission Testing
- Low-Noise Testing



An ETS-Lindgren Hemi-Anechoic Test Chamber

ETS-LINDGREN'S HEMI-ANECHOIC CHAMBERS provide a precise free-field environment used to measure sound sources over a reflecting plane. Typical measurements include product noise testing, sound source frequency response, and sound source directivity.

An ETS-Lindgren hemi-anechoic chamber provides engineered features that achieve outstanding performance results and goals without compromising acoustical concepts and budgets.

DESCRIPTION

Hemi-anechoic chambers are used to perform precision- and engineering-grade testing on a wide variety of devices ranging from handheld units to large vehicles and equipment. ETS-Lindgren's hemi-anechoic chambers have a high-performance wall panel system that

provides the low-noise environment required to test today's low-noise products. A precision-grade free-field environment is a product of the hemi-anechoic chamber's sound absorption system that consists of white melamine wedges installed on a patented clip system that provides fast wedge installation and removal. Unlike other wedge solutions, melamine wedges provide a bright and fiber-free working environment.

FEATURES

Frequency Range

ETS-Lindgren offers a wide range of standard hemi-anechoic chambers to meet client needs. Standard chamber models have low-frequency cut off points of 80 Hz, 100 Hz, 150 Hz, and 250 Hz. Custom chamber designs to meet other performance specifications are available.

Free-Field Region

Standard ETS-Lindgren hemi-anechoic chambers have free-field regions with a 1 m to 2 m radius. Custom size free-field regions are available.

Precision-Grade Testing

ETS-Lindgren's standard hemi-anechoic chambers are designed to comply with ISO 3745 free-field limits for both broadband and pure tone testing.

Engineering-Grade Testing

The high-quality test environment in an ETS-Lindgren hemi-anechoic chamber provides low environmental correction factors (K_2) values for ISO 3744 sound power testing.

APPLICATIONS

ETS-Lindgren hemi-anechoic chambers are designed for applications that require precise acoustic measurements need to optimize product design and performance of:

- Information Technology Equipment (e.g. computers, server racks, and routers)
- Pumps
- Compressors
- Small and Large Appliances
- Fans
- Industrial Equipment and Components
- Automobile Components
- Vehicles (e.g. automobiles, tractors, motorcycles, etc.)
- Components

Applicable Test Standards:

- ISO 3745
- ISO 3744
- ISO 7779
- ANSI S12.55
- ANSI S12.54
- ANSI S12.10

STANDARD CONFIGURATION

- Modular steel isolated floor or concrete isolated floor (Depends on size and lowest frequency of interest)
- ETS-Lindgren's patented wedge clip system (wall and ceiling only)
- Ventilation silencers for HVAC or fan applications (wall, ceiling, or internal mounting)
- Sealed incandescent pendant lamps
- Test-In-Progress light
- Acoustically treated cable penetrations (1 inch and 2 inch)
- Engineered and designed to host-site ambient conditions
- Design based on performance data that conforms with ISO 3745 free-field requirements

OPTIONAL EQUIPMENT

- Equipment mounts (wall or ceiling)
- Removable floor wedge basket carts for conversion to a full-anechoic environment
- Automatic door operator
- Access hatches
- Exhaust fan (gas evacuation)
- Transmission loss aperture
- Fiber optic lighting
- Special door hardware
- Floor recesses (cable trough, turntable mounts, etc.)

FIELD VERIFICATION

ETS-Lindgren can perform an on-site chamber performance verification of interior ambient noise levels and free field quantification.

- Pre-sale site noise survey that determines required noise reduction to meet ambient design goals. (The cost of the site survey can be applied toward the purchase price of the chamber.)
- Identification and risk analysis of airborne and structure-borne threats
- Measure and evaluate host conditions
- Can combine measurement hardware and software with the chamber for a complete turn-key solution