

FEATURES:

- **Designed for Engineering-Grade Testing**
- **Provides an Acoustically Controlled Environment for Testing**



An ETS-Lindgren Predictable Field Acoustic Enclosure

ETS-LINDGREN'S PREDICTABLE FIELD ENCLOSURES provide an acoustically quiet environment with high test repeatability. These enclosures are designed to provide acoustical and statistical energy analysis, to optimize the engineering and design requirements needed for an end-product application. To approximate the sound field found in a hemi-anechoic chamber without the use of wedges, the walls and ceiling in a predictable field enclosure are manufactured with several inches of sound absorbing material.

DESCRIPTION

Predictable field enclosures provide an engineering or survey-grade sound field (dependent on enclosure size), for sound power testing. While precision-grade sound power testing requires a hemi or full anechoic chamber, a predictable field enclosure provides an economical solution for engineering or survey grade tests allowed by many standards.

Used primarily for design engineering and product development, predictable field enclosures are also used for sound intensity testing, where their primary function is to control ambient noise and increase measurement accuracy by reducing reflections.

Predictable field enclosures can be installed with or without acoustical floors, however for maximum sound isolation performance, an isolated floor system should be used.

FEATURES

Engineering Level Testing

ETS-Lindgren's predicable field enclosures are a perfect solution for engineering-grade sound power measurements performed in accordance to ISO 3744.

Acoustically Controlled Environment for Testing

ETS-Lindgren's system provides a sound absorptive environment and high noise reduction. These features allow for repeatable and

accurate measurement without the need to worry about interference from outside noise sources.

APPLICATIONS

- Quality Assurance Sound Pressure Level Measurements (Product Line)
- Sound Quality Measurements and Evaluations of Components
- Sound Power and Sound Pressure Measurements of Product Noise Emissions
- Allows Comparative Measurements to be Made with a Reference Design or Reference Sound Source
- Computer Sound Level Emissions
- Pass/Fail Quality Control of Small or Medium Sized Electrical, Audio, or Mechanical Parts
- Engineering Design where a Precision-grade Sound Field is Not Required
- Audio Production
- Critical Listening

Applicable Test Standards

- ISO 3744
- ISO 3746
- ISO 7779
- ANSI S12.54

STANDARD CONFIGURATION

- Modular Steel Isolated Floor
- Modular 6-inch (15.24 cm) Steel Panels
- Ventilation Silencers for Fan or HVAC Connections (Wall or Ceiling Mounting Locations)
- Recessed Incandescent Lighting
- Acoustically Treated Cable Penetrations
- Personnel Door

OPTIONS

- Equipment Mounts (Wall or Ceiling)
- Automatic Door Operator
- Access Hatches
- Exhaust Fan for Gas Evacuation
- Special Door Hardware
- Variable Speed Fan
- Acoustic Mini Wedges™

PHYSICAL SPECIFICATIONS

| MODEL # | CHAMBER DIMS OUTSIDE (L x W x H) | CHAMBER DIMS INSIDE (L x W x H) | ESTIMATED WEIGHT (L X W) | VENTILATION | APPLICATIONS |
|---------|---|---|--------------------------|-------------|---|
| P1 | 2.13 m x 1.52 m x 2.67 m (7 ft. x 5 ft. x 8 ft. 9 in.) | 1.83 m x 1.21 m x 2.29 m (6 ft. x 4 ft. x 7 ft. 6 in.) | 1,753 kg. 3,865 lbs. | 200 CFM | Quality Control Comparative Analysis, Sound Power and Sound Pressure of Small Parts |
| P2 | 2.74 m x 2.13 m x 2.67 m (9 ft. x 7 ft. x 8 ft. 9 in.) | 2.44 m x 1.83 m x 2.29 m (8 ft. x 6 ft. x 7 ft. 6 in.) | 2,501 kg. 5,514 lbs. | 200 CFM | Sound Power and Sound Pressure of Auto and Computer Parts and Small Parts |
| P3 | 3.35 m x 2.74 m x 2.67 m (11 ft. x 9 ft. x 8 ft. 9 in.) | 3.05 m x 2.44 m x 2.29 m (10 ft. x 8 ft. x 7 ft. 6 in.) | 3,387 kg. 7,466 lbs. | 300 CFM | Engineering Test of Small Electrical and Mechanical Parts |
| P4 | 3.96 m x 3.5 m x 2.67 m (13 ft. x 11 ft. x 8 ft. 9 in.) | 3.66 m x 3.05 m x 2.29 m (12 ft. x 10 ft. x 7 ft. 6 in.) | 4,352 kg. 9,607 lbs. | 300 CFM | Engineering Test of Small Electrical and Mechanical Parts |
| P5 | 4.57 m x 3.96 m x 2.67 m (15 ft. x 13 ft. x 8 ft. 9 in.) | 4.57 m x 3.96 m x 2.67 m (14 ft. x 12 ft. x 7 ft. 6 in.) | 5,663 kg. 12,485 lbs. | 300 CFM | Engineering Test of Small Electrical and Mechanical Parts |
| P6 | 5.18 m x 4.57 m x 3.33 m (17 ft. x 15 ft. x 10 ft. 11 in.) | 4.88 m x 4.27 m x 3.05 m (16 ft. x 14 ft. x 10 ft.) | 7,811 kg. 17,221 lbs. | 500 CFM | Engineering Test of Small Electrical and Mechanical Parts, Audio Component Testing |