

ANECHOIC CHAMBER

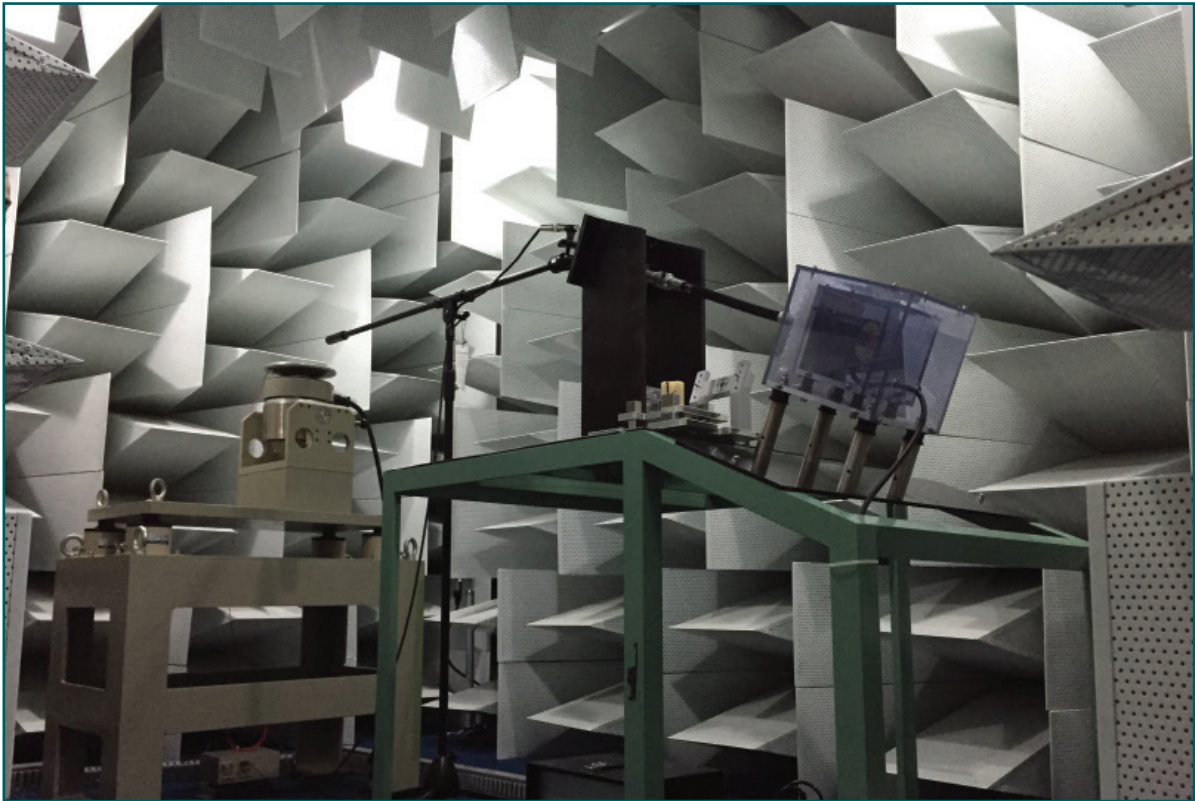
We are proud helping you to solve your noise problem with our best products and services.

ANECHOIC CHAMBER

Introduction

An Acoustic Anechoic Chamber is a room in which there are no echoes. Used to test and determine the noise decibel ratings for products such as fan for computer, power supply etc. Anechoic chambers are commonly used in acoustics to perform experiments in nominally free field conditions. This means that all sound energy will be traveling away from the source with almost none being reflected back. Common anechoic chamber experiments include measuring the transfer function of a loudspeaker or the directivity of noise radiation from industrial machinery.

ISTIQ Anechoic Chambers are also generally very quiet chambers, with typical noise levels in the **10-20 dBA** range.



Design Guidelines

When designing an anechoic chamber as an acoustic treatment system, there are several factors that should be taken into account considered to maximize design in terms of performance and cost. A number of things to consider considerations include:

- Acoustic Environment into which machine needs to be the anechoic chamber
- Noise level to be achieved i.e. - at 1 or 3 meters away
- Heat rejection of the equipment to be enclosed
- Maintenance accessibility requirement
- Numbers and size for observation windows
- Ventilation requirement and arrangement within the room
- Lighting and power points
- Overall Dimension of the enclosure
- Consideration on the aesthetic look



Fully Anechoic Chamber

A fully anechoic chamber, also known as an echo-free room, is typically a box-in-box structure. 99% of all sound energy over a defined frequency band is absorbed by the walls, floors, and ceilings, thus simulating a measurement set-up floating high up in the air, free of reflection and background noise.

Semi Anechoic Room Chamber

The hemi-anechoic space is used to perform accuracy and engineering class tests on a wide range of devices, ranging from handheld units to large vehicles and equipment. Hemi-Anechoic provides the environment with the low noise required to test low noise products today. Precision grade free field environment is the product of hemi-anecho space sound absorption system.



Anechoic Box Chamber

Carefully controlled acoustic properties provide a stable and quiet environment for measurements.

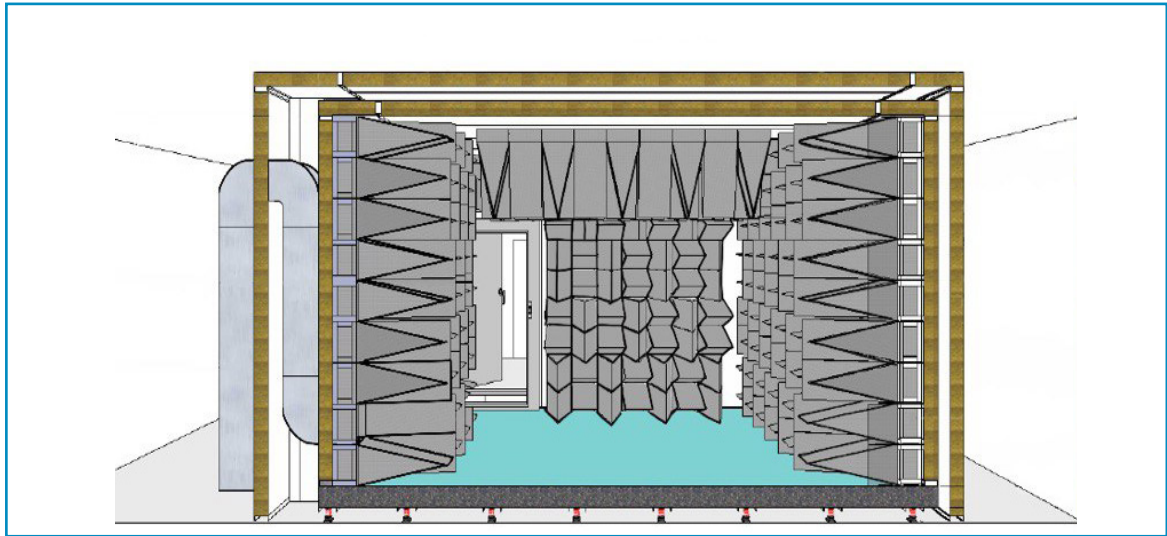
- Suitable for use in testing and developing small size precision instruments.
- Wedge-shaped absorber layer provides high sound absorption efficiency.
- Wall reflections are damped for enhanced measurement accuracy

Portable Anechoic Chamber

Portable Anechoic Chambers (PACs) provide an optimal acoustic environment within which to perform a range of R&D tests related to the effect of noise and vibration on product performance and can reliably establish quality control benchmarks of mechanical and electric components and component systems. PACs also provide the ideal environment to test and evaluate a range of performance metrics and sound output levels of small audio devices such as cell phones, tablets, and laptop computers.



Features



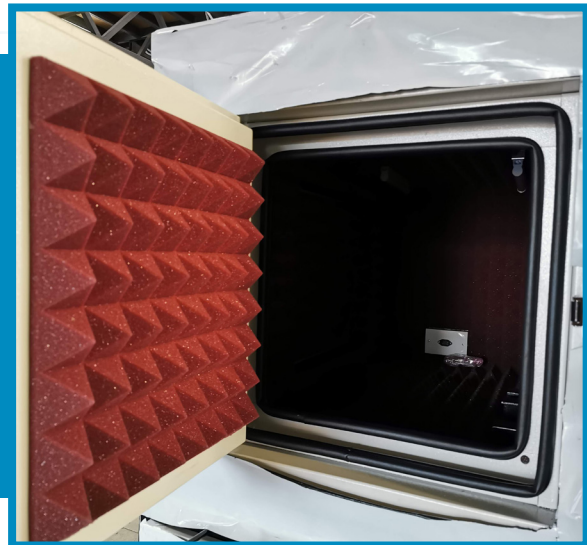
Accessory

- cctv
- Jack Panel
- Wiring
- Foam wedges
- Ventilation
- Fan
- Automation

Type of internal finishing

- Flat surface finish.
- Metal perforated wedges.
- Foam wedges.
- Glass wool wedges.

Size and length depend on the required cut off frequency and internal sound level.



Application

ISTIQ ANECHOIC CHAMBER is excellent for sound attenuation and sound resistance performance in certain environments that require voice control transmission through anechoic space.

ISTIQ Anechoic Chambers are ideal for testing and developing a wide range of products, including:

- Small household appliances
- Telecoms equipment
- Medical
- Automotive
- Speakers