

Acoustic Enclosures Small Device Test Enclosures

FEATURES:

- Acoustically Controlled Test Environment
- Survey and/or Engineering Grade Measurement
- Applicable Test Standards:
 - -- ISO 3744
 - -- ISO 3746
 - -- ISO 532B
 - -- ISO 11201
 - -- GM W7293



Acoustic Systems Small Device Test Enclosure Shown With Optional Equipment

ETS-Lindgren's Acoustic Systems Small Device (SD) Test Enclosures

provide a free-field environment for making survey and engineering grade measurements on small devices. SD test enclosures are an affordable option when precision grade testing is not required, including testing the acoustic (sound power, sound pressure) levels of automotive components, computer hard drives, fans, pumps, and small mechanical and electric assemblies.

Testing can be conducted using either a single microphone, or a small array of microphones. SD enclosures can also be used with vibration test equipment when required. Four sizes of SD enclosures are available to accommodate most small test objects.

FEATURES Controlled Test Environment

The SD series isolates and controls acoustic energy to provide the ideal testing environment of small electronics, computer equipment, hearing aids and automotive components.

Survey/Engineering Grade Design

With minimum 10.2 cm (4") thick acoustic walls and sound absorbing floor and ceiling, the SD test enclosures are ideal for making survey and engineering level measurements on small devices.

Applicable Test Standards

SD series test enclosures meet ISO 3744, ISO 3746, ISO 532B, ISO 11201, GM W7293, and test standards.

APPLICATIONS

- Automotive Components
- Quality Assurance/Comparative Analysis
- Testing of Telephone Handsets or Mounted Transducers for Noise Quality
- Insertion Measurements of Hearing Aids
- Evaluation Testing of Microphones or Preamplifiers for Noise Cancellation, Conductivity and Noise Emissions
- Testing Noise Emissions of Small Parts or Components

- Head & Torso Testing (SD3)
- IT Product Noise Testing

STANDARD CONFIGURATION

- Acoustic Walls, Ceiling, and Floor
- Acoustically Engineered Roof Integrated Ventilation System
- Light (SD1, SD2, SD3 Only)
- Sound Absorbing Perforated Steel Interior (Walls and Ceiling)
- Panelized Floor (Reflective)
- Floor Vibration Rails, SD2 & SD3
- Floor Vibration Pads, SD & SD1
- Cable Ports
 - -- 1 ea. 5.1 cm (2 in.)
 - -- 1 ea. 2.5 cm (1 in.)
- Acoustic Door with Window

OPTIONS

- Test Stands (Not Available on SD3)
- Absorptive Mini Wedges
- Interior Perforated Floor
- Stainless Steel Liner
- Light (SD Only)
- Ventilation Silencers (SD3 Only)



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PRODUCT FEATURES AND OPTIONS

MODEL #	CHAMBER DIMS OUTSIDE (L x W x H)	CHAMBER DIMS INSIDE (L x W x H)	FEATURES	OPTIONS	APPLICATIONS	SOME Applicable Standards
SD	91.4 cm x 86.4 cm x 91.4 cm (36 in. x 34 in. x 36 in.)	71.1 cm x 66.0 cm x 71.1 cm (28 in. x 26 in. x 28 in.)	For Testing > 500 Hz Solid Steel Floor	Test Stand 5.1 cm (2 in.) Melamine Foam	Quality Control Comparative Analysis	ISO 3744 ISO 3746
	,	,	Cable Ports (2)	Perforated Interior Floor Skin		ISO 532B
			Vibration Pads (4)	Stainless Steel Liner		ISO 11201
			AS-A504 Walls	Light (1)		
SD1	111.8 cm x 111.8 cm x 111.8 cm	91.4 cm x 91.4 cm x 91.4 cm	For Testing > 500 Hz	Test Stand	Sound Power and	ISO 3744
	(44 in. x 44 in. x 44 in.)	(36 in. x 36 in. x 36 in.)	Solid Steel Floor	5.1 cm (2 in.) Melamine Foam	Sound Pressure of	ISO 3746
			Cable Ports (2)	Perforated Interior Floor Skin	Auto Parts,	ISO 532B
			Vibration Pads (4)	Stainless Steel Liner	Computer Parts, and	ISO 11201
			AS-A504 Walls Light(1)		Small Parts	GMW7293
SD2	152.4 cm x 152.4 cm x 162.6 cm	121.9 cm x 121.9 cm x 132.1 cm	For Testing > 500 Hz	Test Stand	Engineering Test of	ISO 3744
	(60 in. x 60 in. x 64 in.)	(48 in. x 48 in. x 52 in.)	Solid Steel Floor	5.1 cm (2 in.) Melamine Foam	Small Parts	ISO 3746
			Cable Ports (2)	Perforated Interior Floor Skin		ISO 532B
			Vibration Rails (2)	Stainless Steel Liner		ISO 11201
			AS-A506 Walls			GMW7293
			Light (1)			MS14011
SD3	127 cm x 127 cm x 241.3 cm	106.7 cm x 106.7 cm x 213.4 cm	For Testing > 250 Hz	5.1 cm (2 in.) Melamine Foam	Head & Torso Testing	ISO 3744
	(50 in. x 50 in. x 95 in.)	(42 in. x 42 in. x 84 in.)	Solid Steel Floor	Verification Silencers	Speech Intelligibility	ISO 3746
			Cable Ports (2)		Codec Scoring	ISO 532B
			Vibration Rails (2) AS-A504 Walls		End to End Signal Integrity	ISO 11201
			Light (1)			

PHYSICAL SPECIFICATIONS

MODEL #	CHAMBER DIMS OUTSIDE (L x W x H)	CHAMBER DIMS INSIDE (L x W x H)	ESTIMATED WEIGHT (L X W)	DOOR DIMS (L X W)	WINDOW DIMS (L X W)	PANEL Type and Depth
SD	91.4 cm x 86.4 cm x 91.4 cm	71.1 cm x 66.0 cm x 71.1 cm	352.9 kg.	61.0 cm x 50.8 cm	30.5 cm x 30.5 cm	AS-A504
	(36 in. x 34 in. x 36 in.)	(28 in. x 26 in. x 28 in.)	778 lb.	(24 in. x 20 in.)	(12 in. x 12 in.)	10.2 cm (4 in.)
SD1	111.8 cm x 111.8 cm x 111.8 cm	91.4 cm x 91.4 cm x 91.4 cm	618.2 kg.	61.0 cm x 61.0 cm	30.5 cm x 30.5 cm	AS-A504
	(44 in. x 44 in. x 44 in.)	(36 in. x 36 in. x 36 in.)	1363 lb.	(24 in. x 24 in.)	(12 in. x 12 in.)	10.2 cm (4 in.)
SD2	152.4 cm x 152.4 cm x 162.6 cm	121.9 cm x 121.9 cm x 132.1 cm	872.3 kg	91.4 cm x 91.4 cm	30.5 cm x 30.5 cm	AS-A506
	(60 in. x 60 in. x 64 in.)	(48 in. x 48 in. x 52 in.)	1923 lb.	(36 in. x 36 in.)	(12 in. x 12 in.)	15.2 cm (6 in.)
SD3	127 cm x 127 cm x 241.3 cm	106.7 cm x 106.7 cm x 213.4 cm	1123.1 kg	81.3 cm x 203.2 cm	50.8 cm x 76.2 cm	AS-A504
	(50 in. x 50 in. x 95 in.)	(42 in. x 42 in. x 84 in.)	2476 lb.	(32 in. x 80 in.)	(20 in. x 30 in.)	10.2 cm (4 in.)