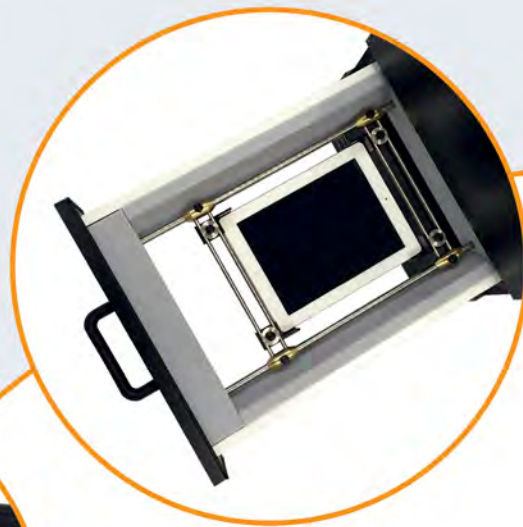


Acoustic Test Chamber

For production line testing

G.R.A.S. AL0030



Simple
Reliable
Repeatable

G.R.A.S.
SOUND & VIBRATION

Production Line Acoustic Test Chamber

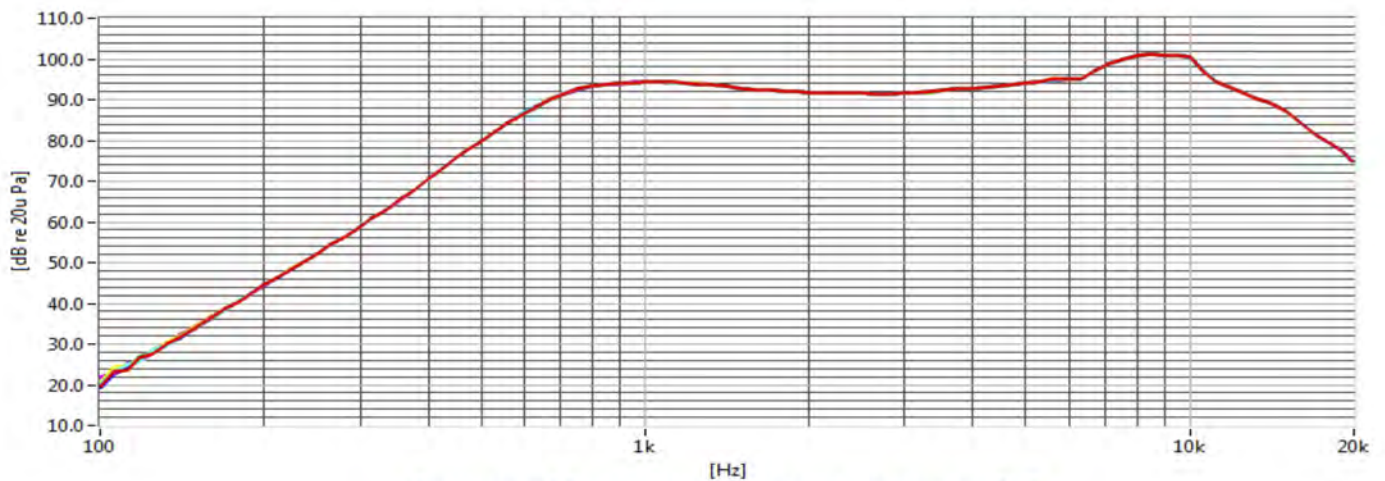
The new flexible production line acoustic test chamber (PLATC) is the latest in the range of anechoic chambers from G.R.A.S. and is built on our vast acoustic experience in the field. It is designed for quick and qualified acoustic test of cell phones, tablet PCs, Bluetooth speaker systems etc., including frequency response, THD, Rub&Buzz and microphone test using optional sound source. The chamber has a number of connections for injecting test and control signals to the Device Under Test.

- Repeatable testing and reliable data
- Easy open/close for quick and safe change of DUT
- Flexible test jig for easy adjustment to new DUT
- Flexible microphone mounting for both front/back side speakers as well as edge-mounted speakers
- High quality, high sensitive 1/4" CCP measurement microphone included (G.R.A.S. 46BL)
- Individually calibrated frequency response*

* Compared to reference measurement in anechoic room



Test jig with DUT and measurement microphone.



Graph shows 10 consecutive measurements on the same DUT.

Reference mic 46BL, 46BE, 46BD



DUT Holder OP0030



DUT Holder OP0031



DUT Holder OP0032



Build your own PLATC

Performance & mounting accessories

The basic chamber acts like a mini anechoic chamber allowing test of acoustic devices without the hassle of going into a full scale anechoic chamber*. The drawer allows quick exchange of device under test without putting physical stress on the operator. A marked and flexible test jig allow for easy adjustment to different size DUT's and for duplicating test setup from one chamber to the next. A large opening at the back of the chamber allows easy access for configuring the test setup. The chamber is standing on four shock and vibration absorbing rubber feet to avoid vibration from other devices to influence the measurements.

The standard PLATC configuration includes the basic suite of accessories needed for immediate audio response testing, with an array of available options allowing you to customize to your testing needs. For special requests contact your local G.R.A.S. sales partner.

*Due to chamber size the anechoic performance is limited at lower frequencies.

Included with your PLATC

In the basic configuration the following are included:

- Acoustic test chamber
- Choice of one reference microphone
- Choice of one set of DUT holders
- Choice of one microphone holder
- One standard input connector panel*
- One cable for microphone

*Standard connector panel include 4 x BNC, 2 x USB and 2 x Mini DIN 4pin for multipurpose use.

Optional equipment

- 44AA Mouth simulator with built-in Power Amp
- 44AB Mouth simulator for external Power Amp
- 43AH CCP Ear simulator for production line testing according to ITU-T P57 3.2 LL
- 43AI CCP Ear simulator for production line testing according to ITU-T P57 3.2 HL

Optional cables

- AA0032 BNC – BNC cable 0.5 meter
- AA0033 BNC – BNC cable 1 meter
- AA0034 BNC – BNC cable 2 meter
- AA0035 BNC – BNC cable 3 meter
- AA0070 Microdot – BNC cable 3 meter
- AA0073-CL Microdot – BNC cable custom length

Reference microphones

- 46BL ¼" High sensitive pressure CCP microphone set
- 46BD ¼" Low sensitive pressure CCP microphone set
- 46BE ¼" Free Field CCP microphone set

DUT holders

- OP0030 Small DUT holder, low placement in drawer
- OP0031 Large DUT holder, low placement in drawer
- OP0032 Small DUT holder, top placement in drawer

Microphone holders

- OP0040 Microphone holder for top/bottom mounting
- OP0041 Microphone holder for mounting in drawer

Sound source holders

- OP0045 Holder with swivel head for GRAS 44AA
- OP0046 Heavy duty version of the above holder

Input connector panels

- OP0050 Connector panel – Standard
- OP0051 Connector panel – Blank for customization

Microphone Holder OP0040



Microphone Holder OP0041



Sound Source Holder OP0045



Sound Source Holder OP0046



Specifications

Acoustic test chamber

Frequency range: 100 Hz – 20 kHz
 Noise insulation (SIL): >25 dB (3rd Octave)
 Patch panel connections: 4 x BNC
 2 x USB
 2 x Mini DIN 4 pin
 Dimensions (WxDxH): 42,4 x 63,8 x 52,8 cm
 Weight: 38 kg

Reference Microphones

46BL:
 Frequency range: 4 Hz – 20 kHz
 Dynamic range: 25 dB(A) – 147 dB
 Sensitivity: 18 mV/Pa
46BD:
 Frequency range: 4 Hz – 70 kHz
 Dynamic range: 44 dB(A) – 166 dB
 Sensitivity: 1,45 mV/Pa
46BE:
 Frequency range: 4 Hz – 80 kHz
 Dynamic range: 35 dB(A) – 160 dB
 Sensitivity: 3,6 mV/Pa

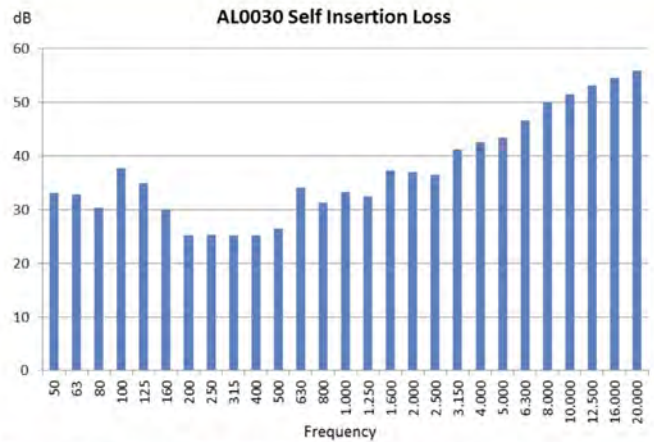


Figure shows SIL for G.R.A.S. AL0030 measured in reverberant conditions.

Mouth simulators 44AA & 44AB

Standards: IEEE 269, 661 and ITU-T Rec. P51
 Continuous output level: 110 dB (200 Hz-6 kHz)
 100 dB (100 Hz-16 kHz)
 Loudspeaker: 8 Ω/ 20 W (max)
 Gain*: 10 dB
 Power supply*: 24 Vdc
 Weight: 1.3 kg

*Only valid for 44AA



OP0030, OP0031, OP0032



44AA, 44AB



We make microphones