Noise reduction of an enclosed booth · NIC according to ASTM E413

SPB33S – soundproof booth, single layer

Noise reduction of the **complete assembled booth** · SPB33 with single-layer interior panels, 100 × 100 × 200 cm

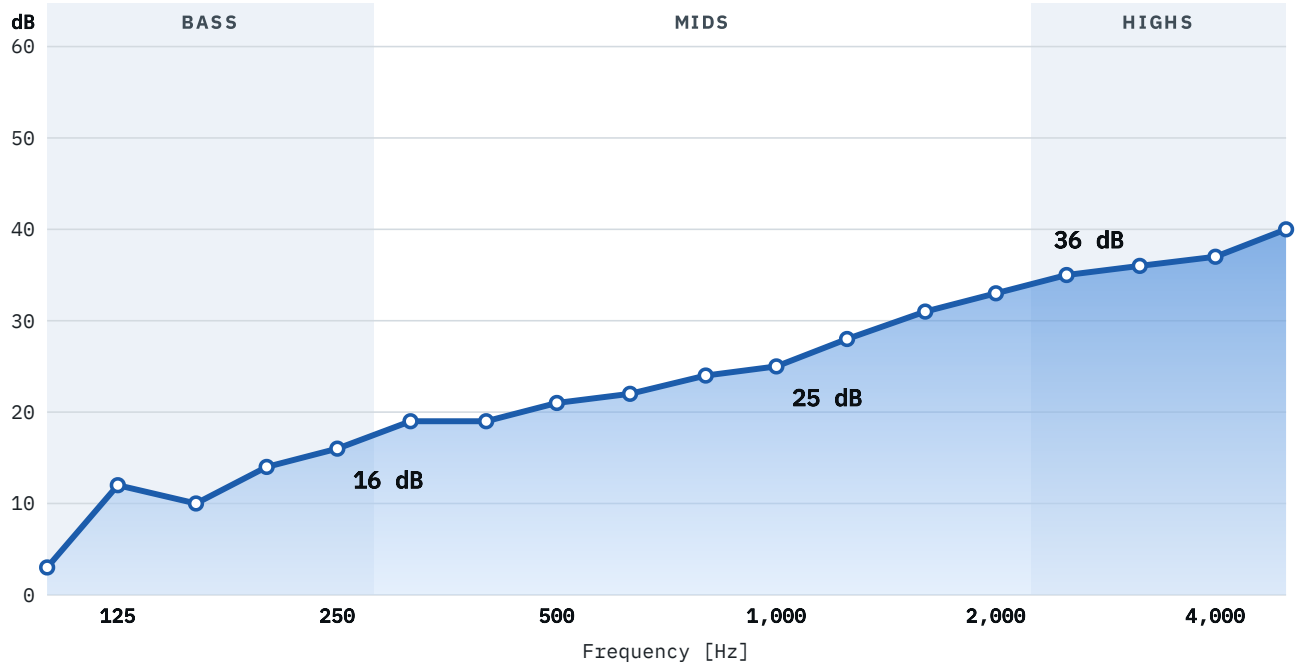
BOOTH NOISE REDUCTION

NIC = 25

Weighted rating EN ISO 717-1 (calculation)

25 dB $(C; C_{tr}) = (-1; -6)$ dB

Noise reduction by frequency



booth noise reduction measured in the laboratory (in decibels)

What is NIC

A single number (Noise Isolation Class, ASTM E413) that sums up how much outside noise the booth stops. It is measured on the complete assembled booth including the door and window, not on the material alone. It therefore cannot be compared directly with the R_w of panels or materials.

How to read the chart

The chart shows the noise reduction in decibels separately for each frequency, from deep bass on the left to highs on the right. The higher the value, the more noise the booth stops.

How it is measured

The booth stands in a reverberation room where a loudspeaker plays. The noise level is measured outside the booth and inside it (ASTM E596). The weighted rating according to EN ISO 717-1 is a calculation from the values in the 100–3,150 Hz bands.

Data source: laboratory measurement by Riverbank Acoustical Laboratories (USA, NVLAP accreditation, ISO/IEC 17025), report RAL™-NR19-002, measured 13 November 2019. The NIC value is taken from the report. The weighted rating according to EN ISO 717-1 was calculated by VocalBoothToGo-EU s.r.o. from the measured values; it is not a measurement according to EN ISO 11957.