



Silencer Test Facility

Measurement	Sound power, wind and flow noise Insertion loss, pressure loss
Standard	DIN EN ISO 7235
Measuring objects	Silencer as splitter, round reactive silencer, silencers in specific construction, components of ventilation systems (filter, heat exchangers etc..) facades, facade elements, ventilators, other components of HVAC systems (filter, heat exchangers, grid, valves etc.)
Technical data	
Test duct (L x H)	12 m x 0,5 m
Width of the test duct	0,50 m to 1,30 m (50 mm steps)
Fan	flow rate $\leq 35 \text{ m}^3/\text{s}$, pressure difference $\leq 2500 \text{ Pa}$
Max. size of test samples (L x H)	6 m x 0,498 m
Type of test facility	Wind tunnel with closed loop ventilation duct

More information

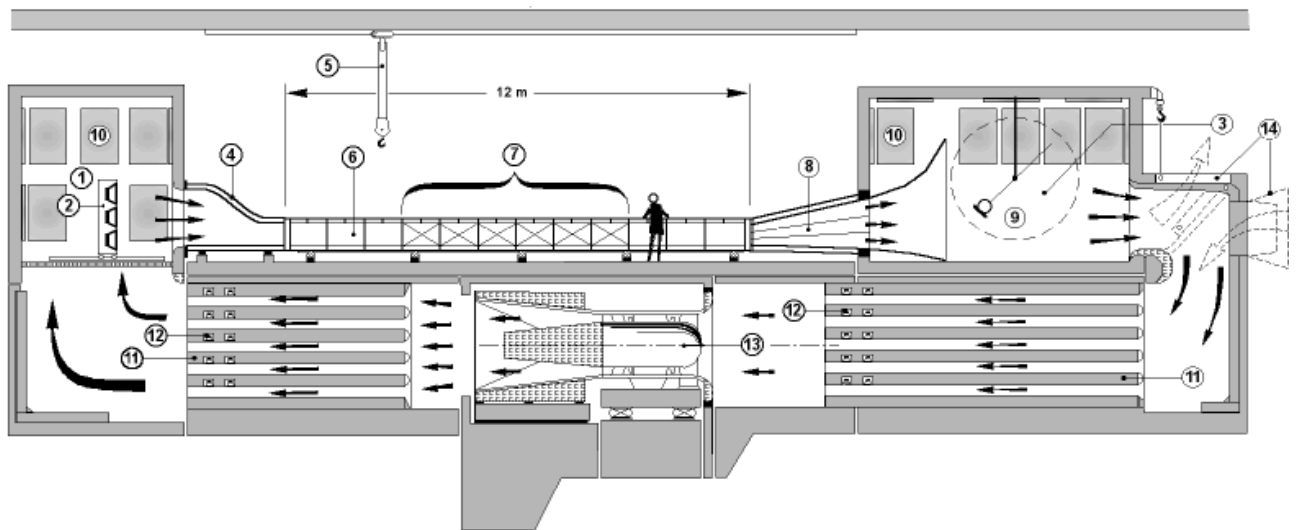
- Continuously adjustable air flow speed.
- Uniform and noiseless air flow.
- Sound power measurement in the receiving room out of the air flow
- Stationary measuring system for static and dynamic pressure.
- Sound source with regular radiation (loudspeaker wall 2800 W).
- Compressed air and electric power available

The silencer test facility of the IBP offers manufacturers the opportunity to have their products tested under precisely defined test conditions according to standard DIN EN ISO 7235 and further developed.

By installing a building component in a flow channel three parameters have to be determined, which can be determined according to standards by means of the silencer test facility:

- Insertion loss of the building component with and without flow
- Sound power of flow noise of the building component itself
- Pressure loss of the building component

Vertical section of the silencer test facility



1 source reverberation room	5 crane runway	8 flow diffusor	12 active absorber cassette (connectable)
2 loudspeaker wall	6 measurement distance 12 m	9 rotary microphone	13 Axial blower (130 kW)
3 receiving reverberation room	7 measurement distance variable in width	10 CBA sound absorber	14 air discharge and supply opening for fresh air
4 inlet horn		11 silencer splitter	