

Blow-off Silencers

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The expansion of pressure compressed gas or steam is combined with a transformation into acoustic energy with which enormous sound power levels can be emitted.

BBM Akustik Technologie is one of today's leading suppliers of blow-off silencers, which are specially designed for applications downstream of safety or pressure control valves. Our silencers basically consist of an inlet pipe with a radial mul-

tistage expansion unit and – if required – a subsequent absorption section, so that the noise reduction of these expansion procedures can be reduced by more than 60 dB.

Numerous measurements on installed silencers in situ and in our test laboratories as well as the excellent acoustic and process engineering qualification of our staff have provided us with detailed knowledge in thermodynamic expansion processes and acoustic effects within the silencer. This experience enables us to optimize the expansion stages and the subsequent absorbing baffles in order to guarantee the acoustic requirements as well as to minimize costs, dimensions and weights, at the same time.



Tailor-made for each individual project, the silencers are dimensioned, designed, manufactured, delivered, and – upon request – mounted. They are offered worldwide and can be characterised by

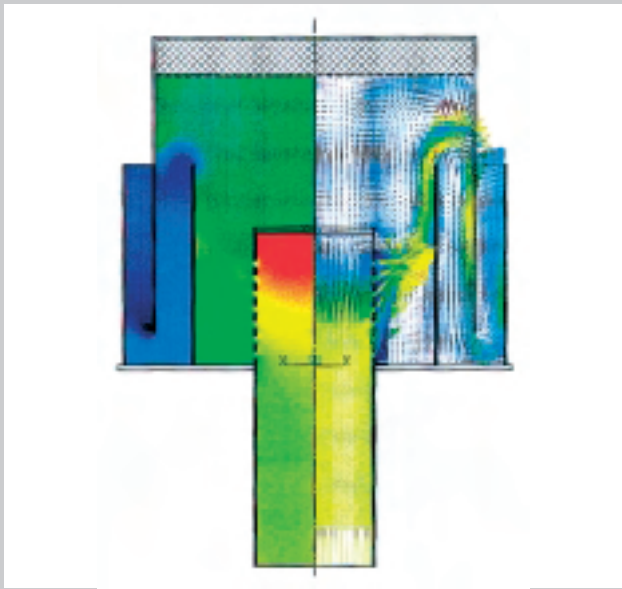
- ▶ high performance
- ▶ reliability and endurance
- ▶ stability and quality.

Our silencers are designed according to all mainly required national and international standards.

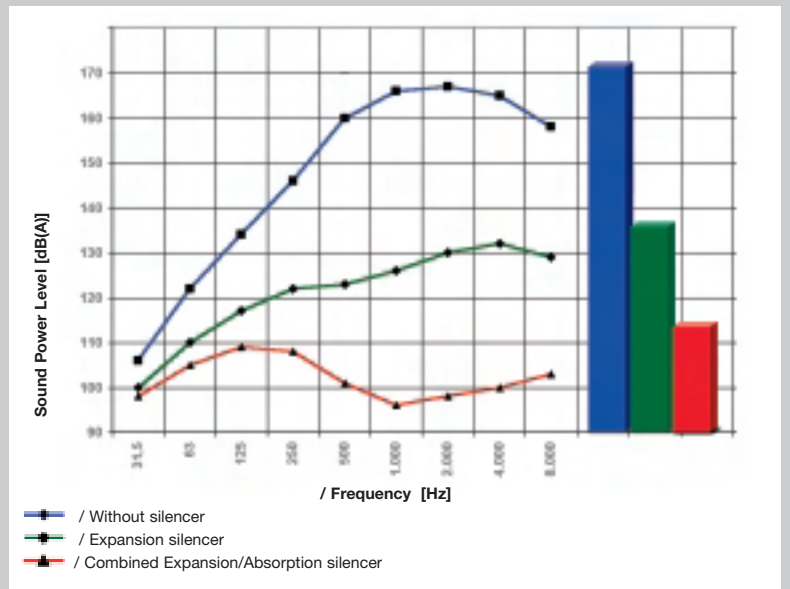
For special applications, contamination-, i. e. fibre-free constructions are available.

For temporary applications (e. g. steam purging of pipes before plant start-up), we have suitable blow-off silencers for rent.





Flow and pressure distribution inside a blow-off silencer (FEM calculation)



Noise reduction by a blow-off silencer.

Delivery program

- ▶ Blow-off silencers for all media
- ▶ Baffle silencers for gas turbines, cooling towers and fans
- ▶ Inline and reactive silencers
- ▶ Noise enclosures
- ▶ Flue gas silencers
- ▶ Design and supply of complete blowdown and condensate systems.

Inquiry Data

- ▶ Type of medium
- ▶ Max. mass flow
- ▶ Pressure and temperature upstream the valve
- ▶ Pressure and temperature upstream the valve
- ▶ Admissible sound power level or admissible sound pressure level with the measuring point indicated or required level reduction of the silencer

Additional data:

- ▶ Nominal diameter of the pipe downstream the valve
- ▶ Standards concerning the design of pressure parts.