

Silencers



EXPERTS IN NOISE CONTROL SOLUTIONS

Alara-Lukagro Silencers

Create a pleasant and safe working- and living environment by the application of Alara-Lukagro silencers which reduce the noise of disturbing noise sources to the level as desired by you.

Vent silencers

Vent silencers are developed to reduce disturbing noise from vent openings in buildings and enclosures and in air transport ducts. The heavier versions are applied for industrial use, like the attenuation of noise from air inlet and -outlet from turbines.

Properties

- Absorption silencer for broadband attenuation.
- Resonance silencer for the attenuation of specific frequencies within the sound spectrum.
- Rectangular (with sound absorbing- and/or resonance splitters) or cylindrical (with edge absorption, absorbing splitters and/or sound absorbing core).
- Sound attenuation up to 50 dB tested in accordance with ISO 7235:1991.

Smoke- and exhaust silencers

Smoke- and exhaust silencers are used for the attenuation of noise from combustion engines and for heavy industrial applications such as flue gases from boilers.

Properties

- Absorption silencer for broadband attenuation, resonance- or combination silencer for the attenuation of specific frequencies.
- Executed as $\frac{1}{4}$ wave length silencer (Helmholtz) for highly contaminated gas flows.
- Sound attenuation up to 50 dB.
- Gas velocity up to 50 m/s due to maximum back pressure, temperatures up to 800° C.



Blow-off silencers

Safety valves or seals suddenly release steam or gas under high pressure which causes a lot of noise. In a blow-off silencer, this pressure is gradually reduced in different phases during which the frequency spectrum shifts. As a result, certain tones become inaudible. Subsequently, the remaining noise is reduced in the absorption chamber.

Properties

- Combined transformation- and absorption silencer for broadband attenuation.
- Inlet pressure 1.2 bar up to 20 bar; capacity up to approx. 150 t/h.
- Sound attenuation up to 60 dB.
- Special designs, multiple air intakes and air outlets and horizontal and vertical installation possible.
- Available with lifting lugs, supports, rain hoods and all necessary product documentation.

Pulsation silencers

Variations in flow velocity always exist in pressurized pipes and are transformed to pressure variations. These variations in pressure can damage machines and result into strong noise reflection.

In order to prolong the life span of machines and to reduce the noise level, pulsation silencers are used in pressurized pipes behind for instance hydraulic pumps, compressors, roots blowers and vacuum pumps.

Properties

- Hydraulic pulsation silencer for a high level of attenuation, in which the pressure level has a relatively small influence on the amplitude behind the silencer.
- Sound attenuation up to 40 dB.



Complete ventilation sets

In addition to silencers, Alara-Lukagro also supplies you with complete (acoustic) ventilation sets for, for instance technical areas or combustion plants. Possible to supply explosion proof ventilation sets, manufactured in accordance with ATEX-guidelines. Alara-Lukagro delivers you complete ventilation systems including ventilators, filters, duct systems, contra rotating dampers, fire dampers and rain covers.

Material & coatings

- Depending on the application, the silencers are manufactured in carbon steel, galvanized steel, aluminium, Corten steel or stainless steel.
- In-house blasting, powder coating and/or wet painting of the silencers is possible.

Calculations & certifications

The acoustic calculations and designs of Alara-Lukagro are supported by years of experience and modern technology, for example FEM (Finite Element Method) and CFD (Computational Fluid Dynamics) studies and simulations for an optimal performance.

Pressurized parts are designed, calculated and manufactured in accordance with the international design codes such as the guidelines Pressure Equipment Directive (or PED) and further elaboration in NEN-EN 13445. Also available with CE-quality label.

Wind resistance, seismic calculations and specific calculations for pipes can be executed on demand in accordance with the valid international codes.

With the online silencer selection programme on www.alara-lukagro.com, you can easily calculate and select the most efficient silencer.



Subject to change without notice.

Quality guaranteed

Custom-made and specials

Whether you are searching for standard silencers or custom-made silencers, as a result of over 40 years of experience, we are able to realize the most varied and exceptional projects for you.

Guarantee and quality

Alara-Lukagro designs, manufactures and preserves the products in-house. This way, the entire process can be controlled and we are able to offer you a high degree of quality, user-friendliness and a good price-quality ratio.

Alara-Lukagro is ISO 9001 and ISO 14001 certified. As a result, the quality and durability of all materials that are used can be guaranteed. All product-specific properties are secured due to extensive testing in laboratories in accordance with international standards (for instance NEN, EN and ISO) and are supported by certificates. Alara-Lukagro guarantees the required sound reduction for every project.

Service and assembly

Alara-Lukagro offers total solutions, ranging from advice and design to production and assembly. Delivery and assembly is possible around the world. Alara-Lukagro mechanics are VCA (Safety Checklist Contractors) and NOGEPa certified.





WORLDWIDE DELIVERY AND IMPLEMENTATION

- Enclosures & walls ▪
- Doors ▪
- Silencers** ▪
- Louvers ▪
- Vibration isolators ▪
- Room acoustics ▪
- Blasting & preservation ▪