



Global Hitech Solutions

engineering support, solutions & supplies... to perfection



NOISE POLLUTION CONTROL PRODUCT LINE

Noise is indistinguishable from desired sound, as both are vibrations through a medium, such as air or water. GHS offers Noise Pollution Control Solutions that reduce & limit Un-wanted sound at the source, to desired levels.

NOISE CONTROL PRODUCTS & SOLUTIONS

➤ Silencer for Boilers:

- Drum safety valve vent silencer
- Super heater safety valve vent silencer
- Start-up vent silencer
- Blow-down silencer
- Steam blowing silencer
- Auxiliary steam silencer
- Turbine warm-up vent silencer

➤ Silencer for Compressors/ Blowers:

- Suction silencer
- Discharge silencer / In-line silencer
- Blow-off silencer
- Acoustic enclosure (Control noise at path)

➤ Silencer for Fans:

- PA Fan inlet silencer (Primary Fan)
- FD Fan inlet silencer (Forced draft Fan)
- ID Fan silencer (Induced draft Fan)
- Blower inlet & discharge Silencers Gas turbine intake & exhaust Silencers
- Steam blowing silencer
- Auxiliary steam silencer
- Turbine warm-up vent silencer

➤ Silencer for Engines, having capacity:

- 500 kva, 1000 kva, 1250 kva, 1500 kva, 2000 kva, 1 MW, 2 MW, 4 MW and 6 MW or higher capacity silencers as per customer requirement

➤ Other Silencer/ fabricated Products:

- Auto clave vent silencer
- Flash tank vent silencer
- Snort valve vent silencer
- Air vent silencer
- Gas vent silencer
- Oxygen vent silencer
- Nitrogen vent silencer
- Chimney by-pass stack silencer
- Gas turbine stack silencer
- Safety Valve Silencer
- Cooling Towers

➤ Noise survey

➤ Vibration control solutions

➤ Sound proof doors for turbine & compressor rooms/ studio/ theatres

VENT SILENCERS

Air & Steam Vent Silencer

The release of high pressure air, steam and gas to atmosphere generates noise that is dangerous to the plant personnel and may also be environmentally unacceptable. Global Hitech Solutions provide the most economical solutions with optimized Silencer design and guaranteed performance. Our flexible design practice allows us easy customization for every solution combined with the best available technology, the appropriate material selection and best possible practice in manufacturing & construction.



Control valve Silencer

The Silencers are built to withstand the high pressure and high noise level environment downstream of pressure reduction valves and regulating valves. Global Hitech Solutions' Control valve Silencers when used in conjunction with standard valves, provide the most cost effective means of valve silencing and noise control.

Our pressure vessel construction ability and acoustic technology from our extensive experience in vent Silencers is our strength that helps to avoid need of expensive and complex quiet trim valves. Design & Material Code - ASME Sec VIII Div - I & ASME Sec II.



FAN/ BLOWER SILENCERS

ID/FD/PA/SA Fan Silencers

Centrifugal fan and axial Fan generate broad band noise with a distinctive at the blade passing frequency of the rotor. The custom designed Global Hitech Solutions silencer is built to treat the special noise problems and will reduce the noise radiated by the suction and discharge connected duct work with minimum pressure drop and will reduce or eliminate the need for extensive acoustic lagging systems. The acoustic packing material is specially chosen and is protected try glass fiber cloth.

Application: Air intake Fans, Sinter fans, Cooling Draft fan and Exhaust fans etc

Performance: 0 upto 40 dBA Noise reduction

Flow: 100 to 1,000,000 kg/hr

Construction: Carbon steel and stainless steel

Temperature: -50 to +500 deg C

Type: Rectangular and Circular type

Design & Material code: ASME Sec VIII Div - I & ASME Sec - II



Acoustic Enclosures

Industrial environments, reverberation and reflected noise from machinery can easily exceed statutory limits and cause a serious health risk to production- staff Global Hitech Solutions Acoustic enclosures to reduce noise pollution from noisy plant and machinery without reducing the efficiency or cleanliness of the plant during normal operations. To avoid the heat build up inside the enclosure Global Hitech Solutions will provide the proper ventilation systems with ventilation intake silencers, exhaust fan with exhaust silencers
Typical Acoustic Enclosure Applications



ENGINE EXHAUST SILENCERS

Diesel & Gas Generator Engine Exhaust silencers / Mufflers

Controlling noise pollution from Engine exhausts is a priority for many organizations in the power generation market. It is essential that all Power Generation applications have the required noise control measures in place that ensures the facility meets with the relevant noise criterion. Global Hitech Solutions has excellent experience in noise control engineering and is one of the premier manufacturers of Engine exhaust silencers. Global Hitech Solutions has developed a range of absorptive and reactive engine silencers to satisfy most applications within the power generation market.

Absorptive engine silencer: 15dB (A) to 45dB (A)

Absorptive with reactive type: 15dB (A) to 55 dB (A)

Engine exhaust silencers from P.KE provide reliability, optimum performance and effectiveness at a competitive price.

Application: Diesel Engines, Natural and Bio gas engines etc

Construction: Carbon steel and stainless steel

Temperature: -50 to +800 deg

C Type of in fill: Mineral Wool or LSGF (96 Kg/m³ density)

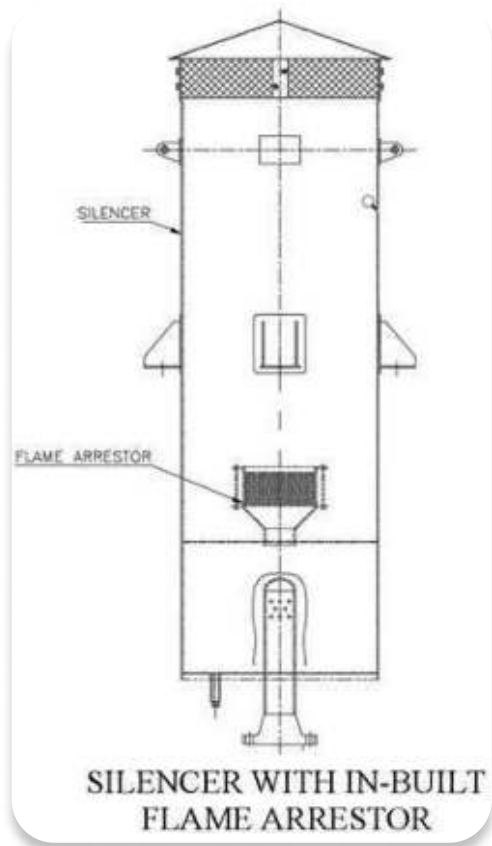
Special arrangement: Silencer along with spark arrester if required
Generally, engine silencers are broadly classified into following categories depending on the end use.

- Industrial Grade
- Semi Residential Grade
- Residential Grade Critical Grade
- Setter Critical or Hospital Grade



VENT SILENCER WITH IN-BUILT FLAME ARRESTOR

Vent Silencers are a combination of absorptive and reactive section used to reduce the noise produced by the expansion of steam or gas from the elevated pressure level to the atmospheric pressure level. The gas enters through the diffuser (reactive section) where the pressure is reduced as per the requirements and process condition.



After reactive section, gas passes through the flame arrestor to stop a flame in order to prevent a larger fire or explosion. In silencer, flame arrestor can be used vertically or horizontally as in-line equipment, depends upon the silencer mounting. The flame arrestor Internal material is usually made up of SS material only. Then Gas passes through the annular space between the acoustic packing where the sound energy is absorbed. These are used to attenuate the high as well as low frequency noise level to the optimum sound level criteria at a given distance from the silencer.

The volume of exhaust flow is one of the important factor when performing sizing & selection of a silencer. The open flow area within the silencer must be large enough to accommodate the exhaust flow without exceeding the engine manufacturer's allowable backpressure. If the silencer is much too large, then the exhaust noise simply passes through using only the initial large expansion for attenuation. On the other hand, insufficient size of silencer may cause loss of power and possible damage to the engine or equipment.

Global Hitech Solutions in India (An ISO 9001-2015, ISO 14001 : 2015, ISO 45001 : 2018 Certified company) is engaged in Engineering, Design, Manufacturing and exporting of the wide range of Noise control products such as Industrial silencers and Acoustic enclosures, and sound proofing systems. We do Design, Manufacture and Supply of customized solutions for Industrial silencers, Acoustic enclosures, Sound Proof Door and Sound Proof cabins etc... Our products are successfully applied in the Power, Steel, Oil & Gas, Water, Process, Petrochemical, Fertilizers and Paper Industries worldwide. We also have the CE and ATEX certifications to fulfil Customer specific requirements.

