

Product Range

Reducing noise levels and emissions

Industrial & Marine Silencers





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IMS provide customised solutions to minimise specific and unusual noises for diverse industrial applications in areas of power generation, marine, co-generation, offshore, petro-chemical, railroad and general construction.

We design and manufacture a comprehensive and versatile range of products such as acoustic canopies, air inlet and extract attenuators, SCR systems and exhaust gas silencers.

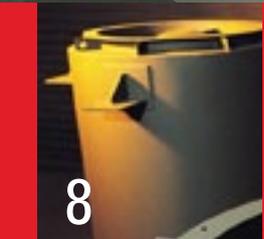
Our products are designed and manufactured to meet your specific requirements as well as the most rigorous demands of the latest noise legislation.

We offer full installation and testing or we can simply supply you with the products.

Established in 1991, we operate from a purpose-built, 1600m² plant in Leicestershire, giving us the capacity to manufacture on time and in full, from single components to turnkey applications.



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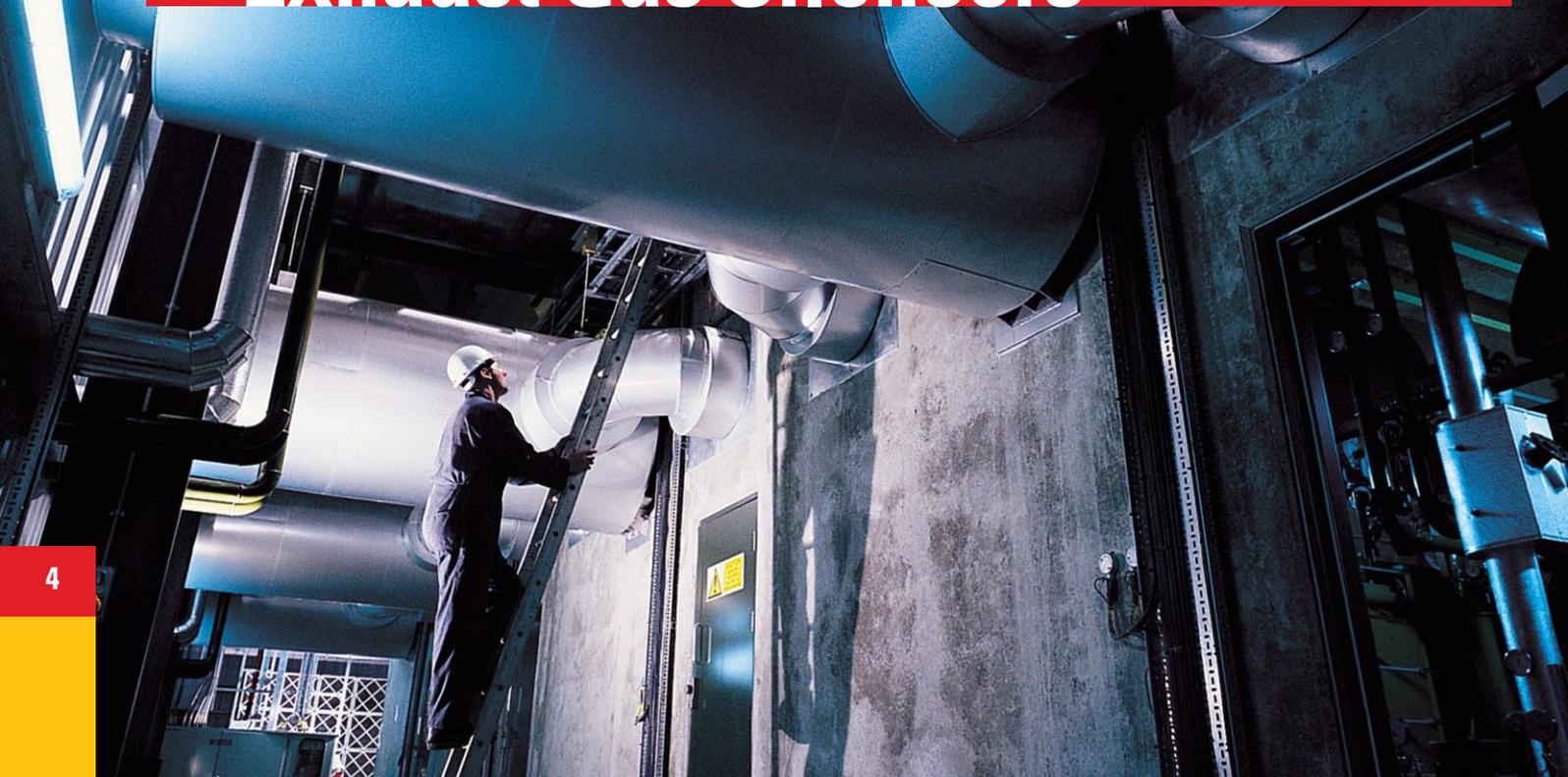
Our team of qualified engineers draw on huge practical experience and knowledge to design and build the right system to meet your needs.

To find out how we can help you reduce noise and emissions call us on +44 (0)1509 506792, or email us at sales@silencers.co.uk



www.silencers.co.uk

Exhaust Gas Silencers



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IMS exhaust gas silencers are installed around the world, reducing noise levels of diesel and gas engines in applications as diverse as power generation, petro-chemical, railroad and marine.

We have developed a range of silencers using reactive and absorptive principles. All are designed to meet rigorous demands, from our FP range of basic industrial absorptive silencers to our MRA3 range where environmental demands are super critical.

Our silencers can be configured with spark arresters or catalysts where required, and we offer two, three and four pass box silencers with variable inlet and outlet positions where space is restricted.

We offer full installation or can supply parts only.



[FP/1/2 series](#)

[FPR and FPD series](#)

[M21/MA21 series](#)

[M31/MA31 series](#)

[M41/MA41 series](#)

[M51/MA51 series](#)

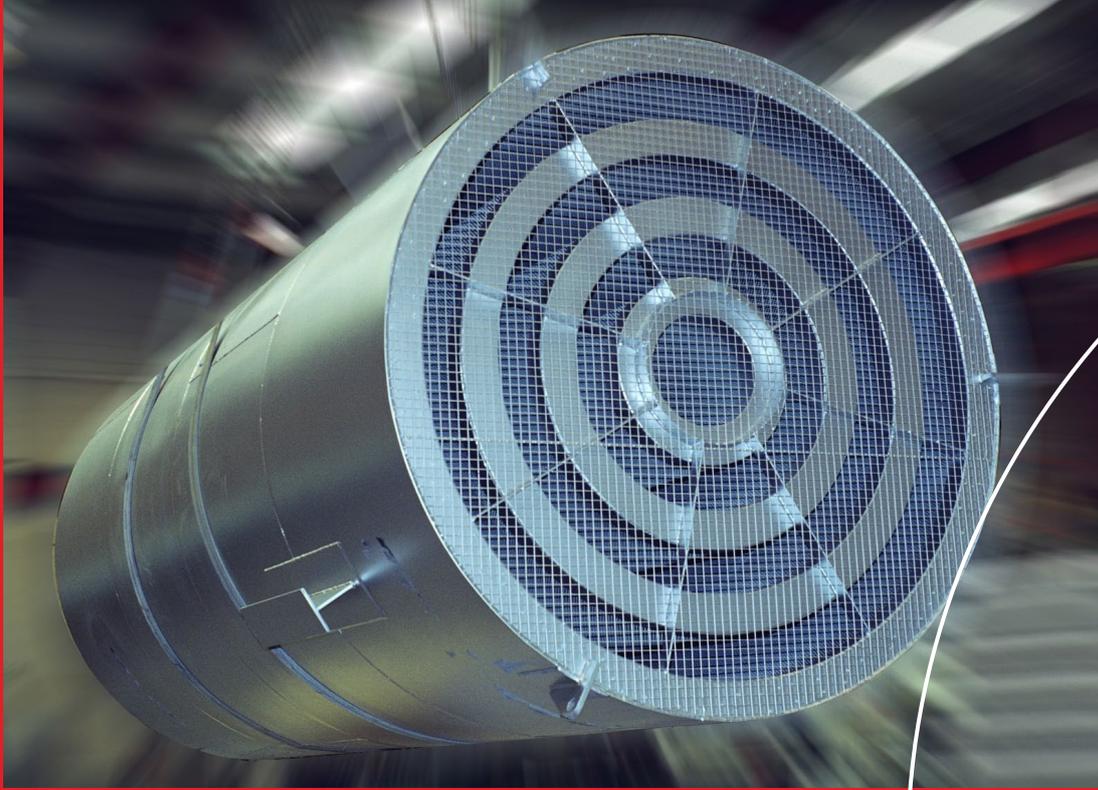
[MRA1/MAA1 series](#)

[MRA2/MAA2 series](#)

[MRA3/MAA3 series](#)

[MSA1/2/3 series](#)

[BTS 2/3/4 series](#)



Steam Vent Silencers

Vent silencers are used to attenuate noise produced by the expansion of gas, steam or air at elevated temperatures to atmospheric pressure.

Vent silencers serve a dual purpose to reduce work place noise levels to a desired occupational safety level, and to reduce the intrusion of industrial noise into residential areas.

We have developed a range of vent silencers for applications such as steam ejectors, steam and gas vents, process vents, turbine and compressor bypass systems, and safety and relief valves.

We offer full installation or can supply parts only.

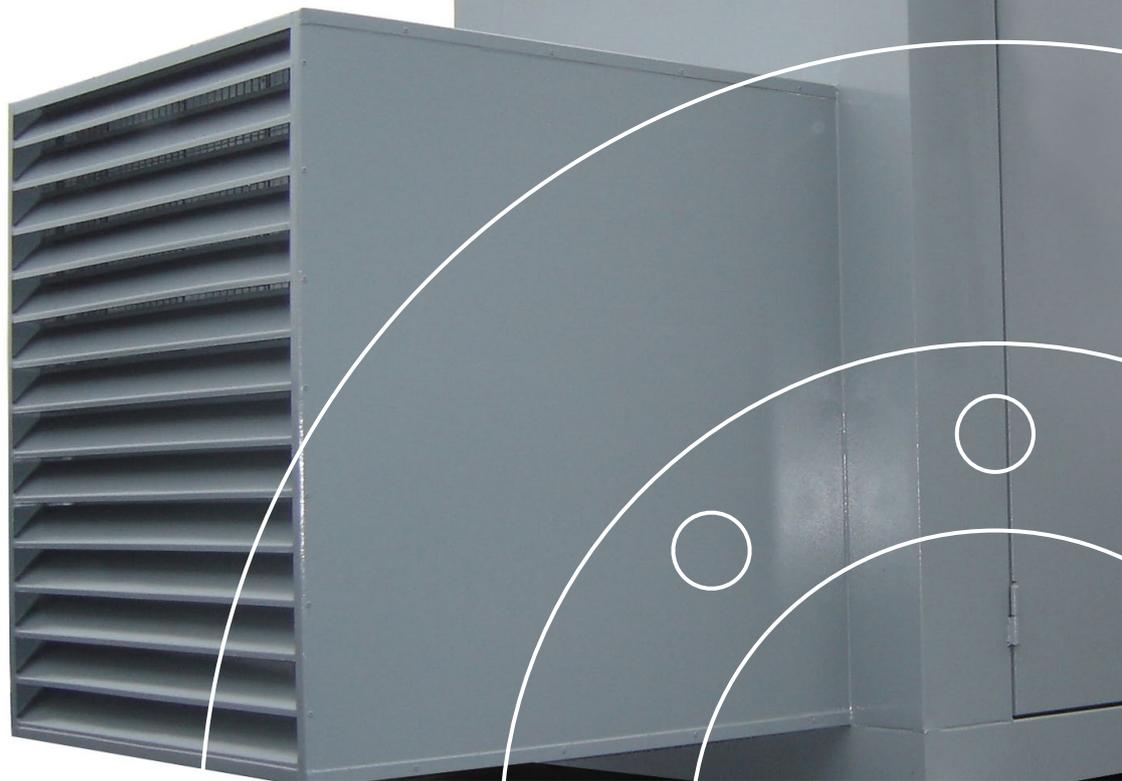


[IMS Steam Vent Brchure](#)



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Air Inlet & Extract Attenuators



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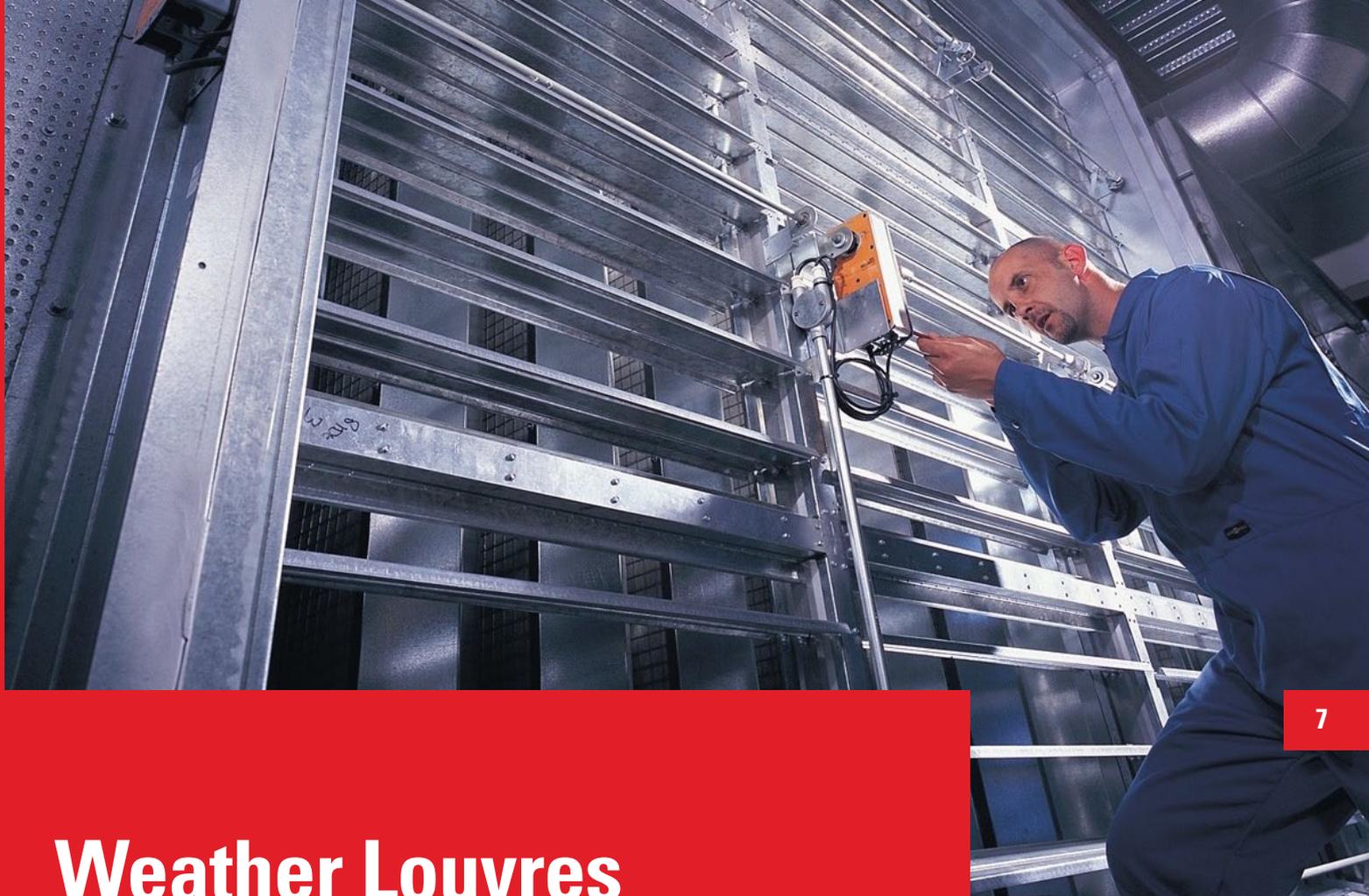
IMS air inlet and extract attenuators are designed and manufactured at our purpose-built facility to address the dual problems of ventilation and noise that beset most generators sited in purpose-built plant rooms.

Any enclosed plant will require ventilation to enable it to operate to its full potential, and noise from the generator can cause problems in areas adjacent to the plant room.

To tackle these problems we have developed acoustic attenuators that provide excellent sound attenuation and protection from the weather.

Our splitter attenuators are manufactured to the highest possible specifications to provide appropriate levels of noise protection.

We offer full installation or can supply product only.



Weather Louvres

As well as providing attenuators IMS also offers a full range of stand alone fixed blade and acoustic weather louvres.

Louvre construction is in aluminium or stainless steel and can be painted in a variety of finishes or colour-matched to your specification. The blade assembly uses a standard fixing flange which can be drilled to suit the required mounting.

Our single blade and chevron blade louvres are manufactured with a Zintec/galvanised steel top section, with an acoustic infill of resin-bonded mineral fibre.

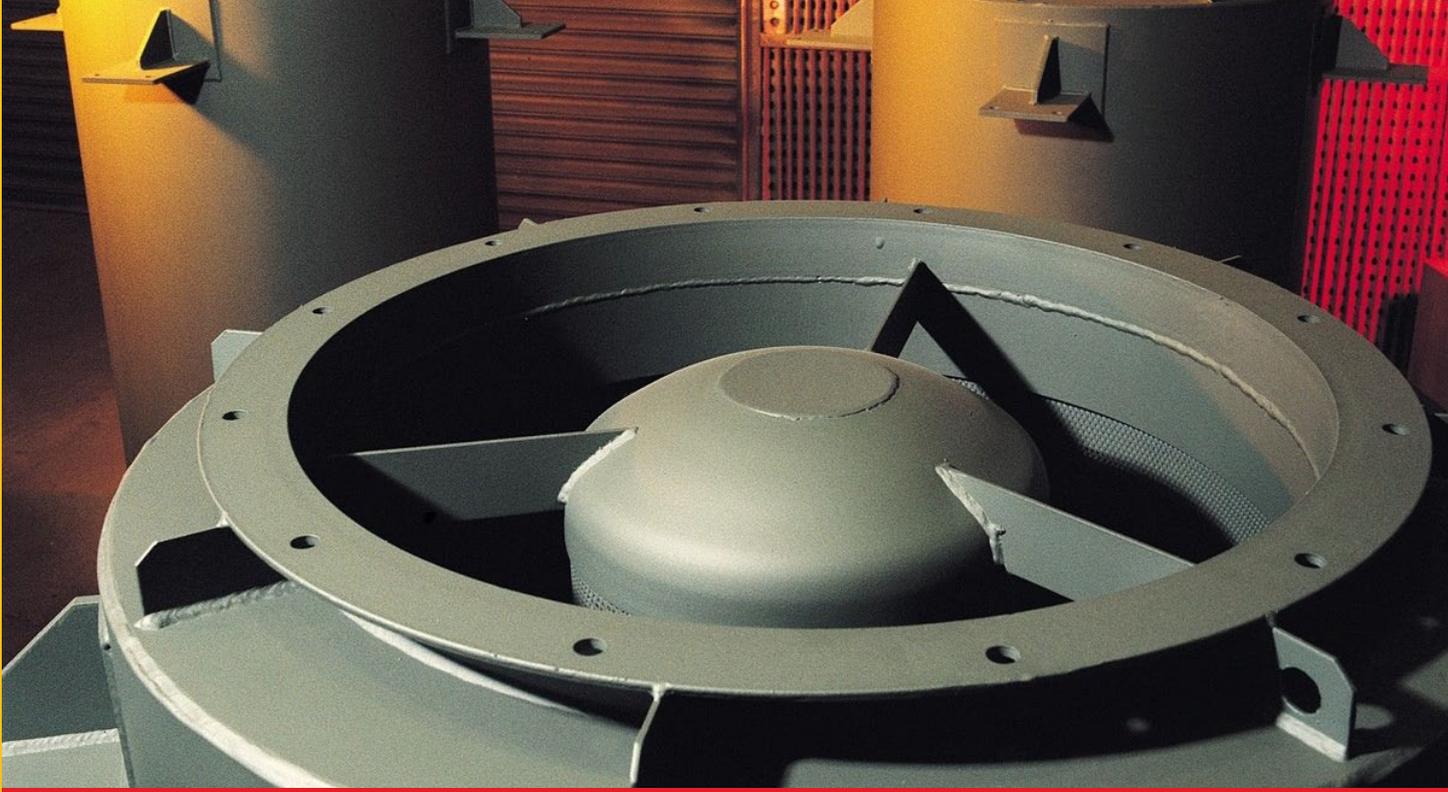
The fibre characteristics are:

- non-hydroscopic
- chemically inert
- non-combustible to BS476 Part 4 1981
- 45kgs/m³ in density
- V under-section formed from 1.6mm galvanised steel mesh.

In harsh environments where the climate, location or industrial processes create substantial amounts of dust, extra protection can be provided by our motorised louvres (24v DC or 240v AC), or our range of gravity flap, sand trap, and penthouse-type louvres.

We offer full installation or can supply parts only.





Air Intake Silencers

Large diesel and gas powered engines and turbines draw in huge volumes of air for combustion purposes. The air induction systems may be naturally aspirated or use turbo chargers or compressors to increase air pressure fed into the cylinders to improve performance, resulting in substantial amounts of noise.

IMS provide solutions to the problems presented by air induction noise through the use of various forms of annular or rectangular intake silencers.

Depending of your requirements, we offer simple annular 'clean straight-through' acoustically packed intake silencers such as the FP type, or more complex

units with a central pod or annular splitters such as the FPC and FPS types. These units can be placed between the engine and the corresponding filtration unit.

In very large applications, we offer single or multiple framed banked systems or rectangular parallel type splitter units to cater for the largest air intake flows at very low pressure drops. These can either be positioned before the filter housing system or upstream from it.

We offer full installation or can supply parts only.



[FPC1/2 series](#)

[FPS1/2/3 series](#)

Catalytic Converter Units



IMS have developed two kinds of exhaust gas catalytic converters to reduce emissions that occur during the running of an engine.

Our single stage oxidation converter reduces levels of carbon monoxide (CO).

Our two stage oxidation converter reduces carbon monoxide and hydrocarbons (HC).

Units are designed and manufactured to meet the most stringent legislation. Construction is in stainless steel substrates, and our innovative design ensures the maximum surface area for the coating of the precious metals that cause the chemical reaction.

All catalysts can be installed as stand alone units with coned inlet/outlet for insertion into the exhaust pipe work, or as an integral part of an exhaust gas silencer, thereby eliminating the need for a separate housing.

Our catalytic converter units can be used in various applications, including: locomotives and railway vehicles, construction machines, ships and yachts, tractors, commercial vehicles and buses, electrical and generator power plants, combined heat and power plants, and CO₂ fertilisation for greenhouses and waste incinerators.

We offer full installation or can supply parts only.



SCR Systems (Selective Catalytic Reduction)



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Nitrogen Oxide, also known as NO_x, refers to a binary compound of oxygen and nitrogen, or a mixture of such compounds. Two of the most common nitrogen oxides, Nitrogen Dioxide (NO₂) and Nitric Oxide (NO), are given off during power generation creating air pollution with consequent environmental problems.

IMS manufacture SCR systems capable of reducing emissions by over 90%. Our three stage SCR systems reduce Carbon Monoxide (CO), Monoxide and Hydrocarbons (HC) and Nitrous Oxides (N₂O).

Our SCR technology achieves this reduction by using reagents such as urea, ammonia and AdBlue®, which are dosed into the exhaust

gas line to convert NO_x into nitrogen (N₂), and water (H₂O). Our SCR systems can be used in various applications, including: locomotives and railway vehicles, construction machines, ships and yachts, tractors, commercial vehicles and buses, electrical and generator power plants, combined heat and power plants and CO₂ fertilisation for greenhouses and waste incinerators.

We offer full installation or can supply parts only.



Acoustic Doors

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It is increasingly recognised that excessive noise can affect employees' health, and consequently the demands for effective and efficient noise protection has increased.

IMS produce single and double acoustic doors with a choice of three levels of sound reduction – 30dB, 38dB and 45dB, to provide a high degree of noise control.

Our doors can be left or right handed - the hand of the door being determined by the position of the hinge when opened towards the operator - and our double doors are available in a double-leaf configuration with a removable centre pillar.

Optional extras include: paint finish; double-glazed windows; positive door stops; recessed sills; fixing lugs for building into brickwork; sliding doors; lockable two-pointer fastener; and double Schlegel-type door seal to ensure maximum compression when closed.

We offer full installation or can supply parts only.



Acoustic Canopies



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Generators are large, noisy and potentially dangerous, demanding particular care in their siting and protection. IMS build generator canopies which protect both the machinery, and those who work with them from noise, vibration and fire risk. Protection from the weather can also be provided as well as security, safe access and ventilation.

Weather canopies are constructed using a Zintec steel body, preformed into sections and welded to form a rigid structure. Aspiration and cooling air flow is provided via mesh or fixed weather louvred apertures. We can also manufacture demountable canopies.

Acoustic louvres or baffles are used for aspiration and cooling air flow, and flexible canvas plenums are used to connect radiators to outlets.

Access doors can be positioned on both sides and at the rear. Doors have anti-rattle pads, slam lock fastening, chromium handle, a compression-type seal and can be fitted with viewing windows.

All panels are constructed of non-combustible materials and satisfy Class 1, Spread of Flames requirements.

We offer full installation or can supply parts only.

Components & Accessories



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To compliment our silencers, we offer a comprehensive range of associated components and accessories, from single items to complete systems.

Our extensive range of accessories includes:

- Pressed Steel, Cast Alloy and Stainless Steel Rain Caps
- BS10 Table D, ANSI 150, Din, BS4505, PN6 to 16, DIN 86044 Mild Steel and Stainless Steel Flanges
- Gaskets to suit above flange specifications
- BZP, Stainless Steel and Galve Bolt Sets to suit above flange specifications
- Mild Steel and Stainless Steel Pipework
- Twin Wall Stainless Steel Flue

- Stucco Aluminium Exhaust Cladding Kits
- Expansion Bellows
- Mild Steel and Stainless Steel Elbows
- Spring Hangers
- Plain and BSP Mild Steel and Stainless Steel Sockets and Plugs
- Vertical and Horizontal Brackets

The components can be supplied as loose items or as fabricated parts to suit all types of installation.

To find out how we can help you reduce noise and emissions call us on +44 (0)1509 506792, or email us at: sales@silencers.co.uk

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