

Schiedel Flue Systems

Commercial range











For more than 50 years, Schiedel have been designing, manufacturing and distributing systems throughout Europe.

Schiedel provide innovative commercial heating solutions in multi-accommodation buildings where central heating and hot water boilers provide the right temperature at the right time ensure maximum efficiency and low environmental impact.

### Schiedel AD

The Schiedel AD system is a modular twin wall insulated exhaust system, made of stainless steel, with a high pressure sealing.

### **Applications**

- Gas/Diesel engines
- (Emergency)power gensets
- Uninterrupted Power Supply (UPS)
- Industrial processes

### Advantages

- Inner and outer wall from high quality stainless steel
- No thermal bridges; better heat protection
- Stress free thermal expansion
- High quality insulation uninterrupted from base plate to top stub













130-700mm



Diameter range



The Schiedel AM system is a modular twin wall insulated exhaust system, made of extreme high quality stainless steel, with a high pressure sealing.

### **Applications**

- Auxiliary and propulsion engines
- (Emergency) power gensets
- Incinerators
- Boilers

#### **Advantages**

- Outer wall from 254 SMO
- No thermal bridges; better heat protection
- Stress free thermal expansion
- High quality insulation uninterrupted from base plate to top stub



| Technical characteristics |                                  |
|---------------------------|----------------------------------|
| Fuel                      | Diesel, gas, oil, process wastes |
| Firing temp.              | 600°C                            |
| Mode of operation         | High Positive Pressure (H1)      |
| Pressure capabilities     | 5000Pa                           |
| Diameter range            | 80-600mm                         |













EN 1856-1:T600 H1 D V2 L50050 O50,T600 N1 D V2 L50050 G50 EN 1856-2:T600 H1 D V2 L50050 O50,T600 N1 D V2 L50050 G50

Schiedel are Lloyds Register Approved for Marine & Offshore applications such as cruise ships, yachts, as well as tankers and offshore platforms. Schiedel also specialise in flue systems for coastal buildings, where corrosion and environmental impact is increased.

Schiedel will help you to aim for the best method of optimising the use of power and converting it into energy from your generator sets and CHP applications, as well as the most efficient way of discharging exhaust gases.

### Schiedel MF

The Schiedel MF system is a modular twin wall insulated flue/chimney system, made of stainless steel, with a high temperature sealing ring.

### **Applications**

- Atmospheric gas-fired boilers
- Condensing boilers
- Wood-fired stoves
- Industrial ovens, large-scale establishments

### Advantages

- Inner- and outer wall from high quality stainless steel
- No terminal bridges, uninterrupted insulation from base plate to top stub
- Stress free thermal expansion
- Fast-build system without the need of sealants
- High density and high quality insulation
- High-temperature silicone sealing ring
- Chimney fire resistant



| Technical characteristics |  |  |
|---------------------------|--|--|
| Fuel                      | Oil/wood/coal/pellets normal(wood)/gas |  |
| Firing temp.              | 200°C positive pressure                |  |
| Mode of operation         | Dry/wet                                |  |
| Max. working pressure     | 5000Pa                                 |  |
| Inner diameter range      | 100-100mm                              |  |



EN 1856-1:T200 P1 WV2 L50040 O10 | T200 H1 WV2 L50040 O10,T450 N1 WV2 L50040 O40 T450 N1 DV3 L50040 G50 | T600 N1 DV3 L50040 G70, EN 1856-2:T200 P1 WV2 L50040 O10 | T200 H1 WV2 L50040 O10,T450 N1 WV2 L50040 O40 T450 N1 DV3 L50040 G70 | T600 N1 DV3 L50040 G70

### Schiedel ME

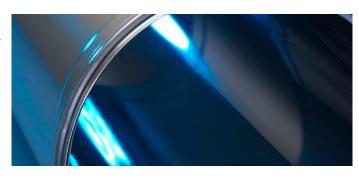
The Schiedel ME system is a modular single wall flue/ chimney system, made of stainless steel with a high temperature sealing ring. It can resist a chimney fire.

### **Applications**

- Shaft liner in renovation projects
- Air inlet & ventilation systems
- Flue system for condensing heaters and boilers
- Chimney renovation

### **Advantages**

- Stress free thermal expansion
- Can be connected to Schiedel MF
- High quality stainless steel system
- High temperature silicone sealing ring
- Universal application
- Chimney fire resistant

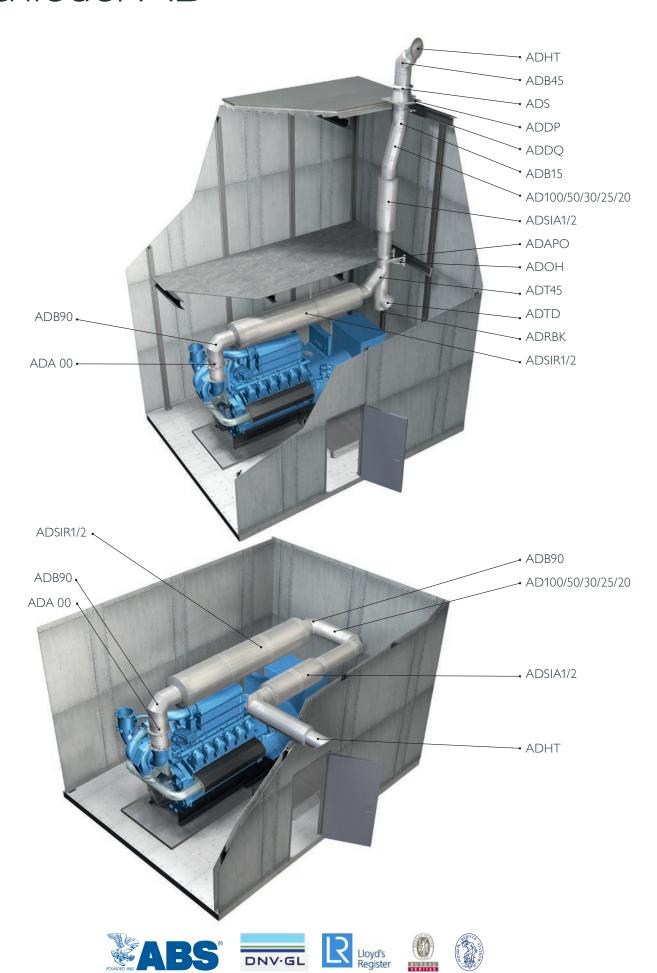


| Technical characteristics |                        |  |
|---------------------------|------------------------|--|
| Fuel                      | Gas, oil               |  |
| Firing temp.              | 200°C                  |  |
| Mode of operation         | Positive Pressure (P1) |  |
| Pressure capabilities     | 200Pa                  |  |
| Diameter range            | 80-750mm               |  |



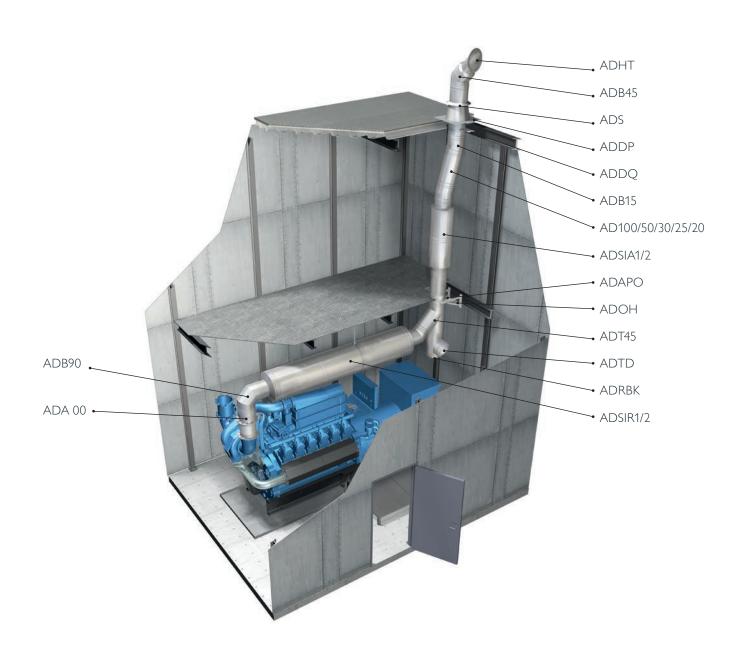
EN 1856-1:T200 P1 WV2 L50050 O30 | T200 H1 WV2 L50050 O30 | T400 N1 WV2 L50050 O70 EN 1856-2:T200 P1 WV2 L50050 O30 | T200 P1 WV2 L50050 O71 D720 H1 WV2 L50050 O30, T200 H1 WV2 L50050 O30, T200 H1 WV2 L50050 O30, T200 H1 WV2 L50050 O30, T450 N1 DV2 L50050 G400 | T600 N1 DV2 L50050 G400

## Schiedel AD





## Schiedel AM







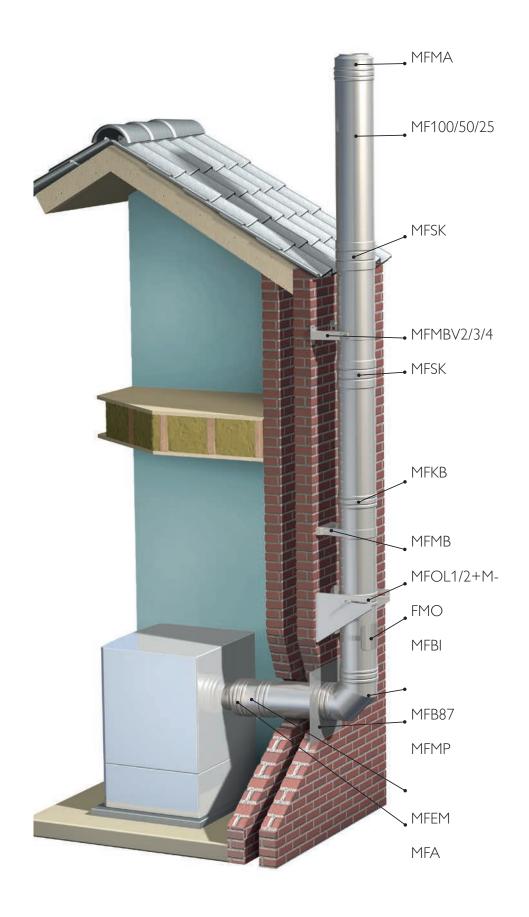






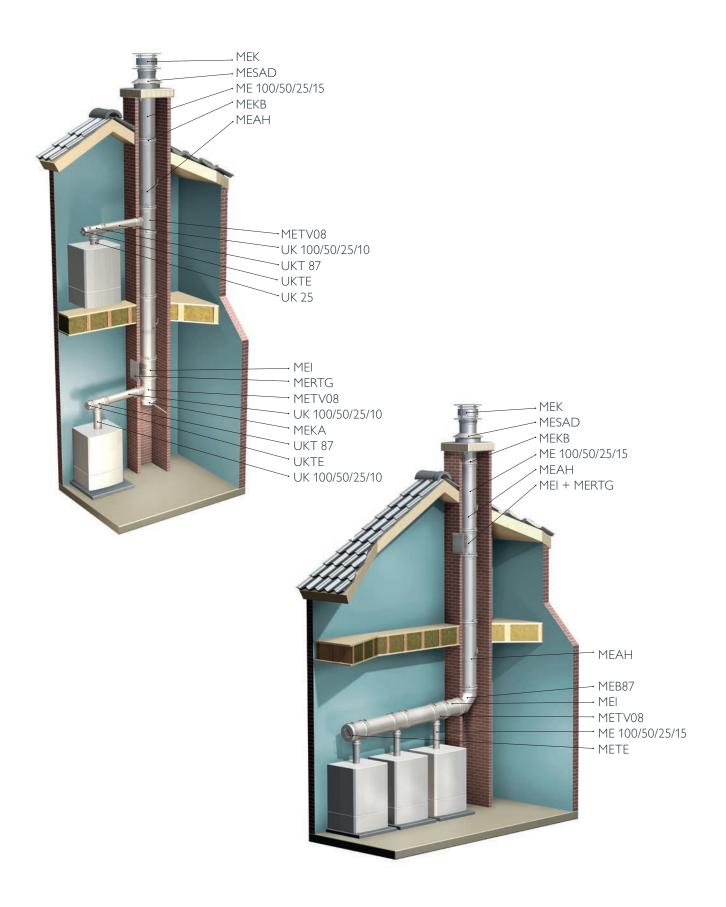


## Schiedel MF



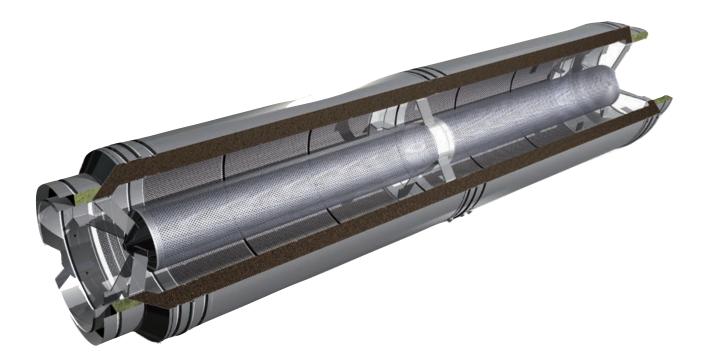


# Schiedel ME





## Schiedel Noise Reduction



Schiedel have developed their own silencer programme due the increasing demand for noise attenuation and after extensive research and development by a team of their acoustic engineers.

Schiedel can present a unique variety of stainless steel, light-weight, silencers, all fitting seamless into the existing product range for exhaust gas and flue systems.

#### WHY NOISE REDUCTION?

Typically, the Schiedel Silencer is used with appliances that produce substantial noise, above and beyond the legal or comfort limits. With regulations concerning permissible noise levels becoming stricter throughout Europe, Schiedel has developed a full range of innovative silencers to meet this demand.

#### THE TYPE OF SILENCERS

Different frequencies demand different types of silencers.

Higher frequencies can be reduced by absorption of the sound. For this, an absorbing material is applied, usually a type of mineral wool.

Lower frequencies can be reduced by resonance silencers. For this, the silencer is divided into connected chambers of various dimensions, to reflect and therefore reduce the noise.

In situations where the velocity of the flue gases exceeds 20 m/s, noise will naturally occur, which will influence the sound spectrum.

In many installations, the different types are combined to achieve the best results.

#### **ADVANTAGES**

### Schiedel Noise Reduction

Choosing a Schiedel silencer means that you have the most efficient product on the market. The advantages given by the use of Schiedel silencers are numerous:

- Twin wall and pre-insulated
- All silencers are equipped with "click-fix" connections at the inlet and outlet to suit the modular character of the various Schiedel systems
- Extremely light weight properties, ensuring a weight reduction of up to 50%, compared to traditional heavy steel welded silencers
- Due to these light weight properties there is minimal transfer of vibration to surrounding structures
- All silencers are constructed using high quality stainless steel materials only
- Due to the fact that any thermal expansion is compensated inside for the silencer construction, expensive compensators and flexible mounting kits are not necessary
- Schiedel Metaloterm's own standard supports and brackets can be used for installation
- All Schiedel silencers are developed and tested in our own testing facilities according to international standards

Schiedel offers a time saving, cost effective and high quality solution for any acoustic demand, whether this is for buildings situated in urban, commercial or industrial areas, or for passenger vessels, commercial ships or even mega yachts.



## Heat Recovery

The economical use of energy fits entirely in the "We Care" philosophy of Schiedel Metaloterm. Therefore we have developed our own heat recovery system which, thanks to its simplicity, only requires a small investment and can yield considerable savings in fuel use.

This heat recovery system consists of a concentric system which combines burner air inlet and flue gas outlet. As a result the supplied burner air is preheated by the warmth of the flue. By preheating the burner, air less fuel is needed to achieve the desired temperature.

- Short pay-back time of 1 to 2 years A low investment combined with considerable cost savings through more efficient use of the burner.
- Simplicity No complex measurement and control system needed because the system does not make use of any other (additional) medium such as water.
- No accumulation needed The released warmth is re-introduced into the process immediately.
- Quick installation The installation is practically identical to the mounting of a normal flue system.
- **Easy to clean -** The smooth inner wall of the flue makes the system easy to clean.

The system is ideally suited for preheating burner air of (bakery) furnaces, but it can also be used for the heating of spaces.



A recent project for Dijko Ovens saw a custom built concentric system specifically for the oven types designed by Dijko. Approximately 6% of the heat is recovered and used to supply heat back into the ovens, making the system exceptionally efficient.

Pleaser visit www.dijko.com for more information



## Marine and Offshore

The construction of a ship or an offshore platform comes with many sector-specific challenges.

The balance must be perfect, the comfort offered to travellers and crew must be optimal, and then there are the salt water and environmental aspects that have to be taken into account.

### EXHAUSTS FOR MARINE ENGINES, BOILERS AND GALLEYS

With diesel engines, boilers, incinerators and galley systems, modern ships, super yachts and tow boats need a variety of different exhaust systems. For these applications the Schiedel AD/ AM system offers solutions that are proven.

This modular (twin-wall insulated), lightweight system is easily installed and does not require any compensator.

Beside the modular systems, Schiedel engineers are specialists in work that is tailored for the marine industry.

#### SILENCERS FOR SHIP BUILDING

The range comprises of silencers that guarantee excellent noise reduction across the full

frequency range. All parts are made of stainless steel and the AISI 254 SMO outer wall of the AM products (above deck) offers the highest possible corrosion resistance. The Schiedel AD/AM has been approved by ABS, DNV GL, Bureau Veritas, Lloyd's Register and PRS.



Schiedel has 20 years of experience in the field of exhaust systems for maritime use and has an impressive list of references to show for it. This includes, amongst others, exhaust pipes for engines of superyachts, cruise ships, platform supply vessels and tow boats. Schiedel also specialises in coastal flue systems, where the environmental impact and corrosion is far more substantial than an inland project.

The Schiedel project engineers have extensive knowledge of maritime exhaust applications and are always on standby to offer advice to customers and to make calculations in the fields of acoustics, counter pressure, outer wall temperature etc. The systems are especially designed for (diesel) engine applications such as gensets and uninterrupted power supply.

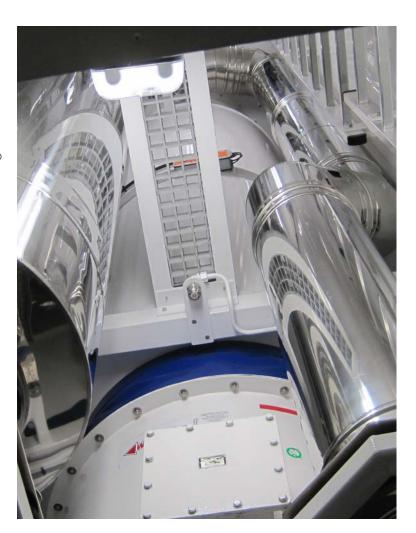






















Schiedel Chimney Systems

Crowther Estate Washington Tyne & Wear NE38 0AQ Tel. +44 (0)191 416 1150 Fax. +44 (0)191 415 1263

Follow us on Social Media @SchiedelUK











