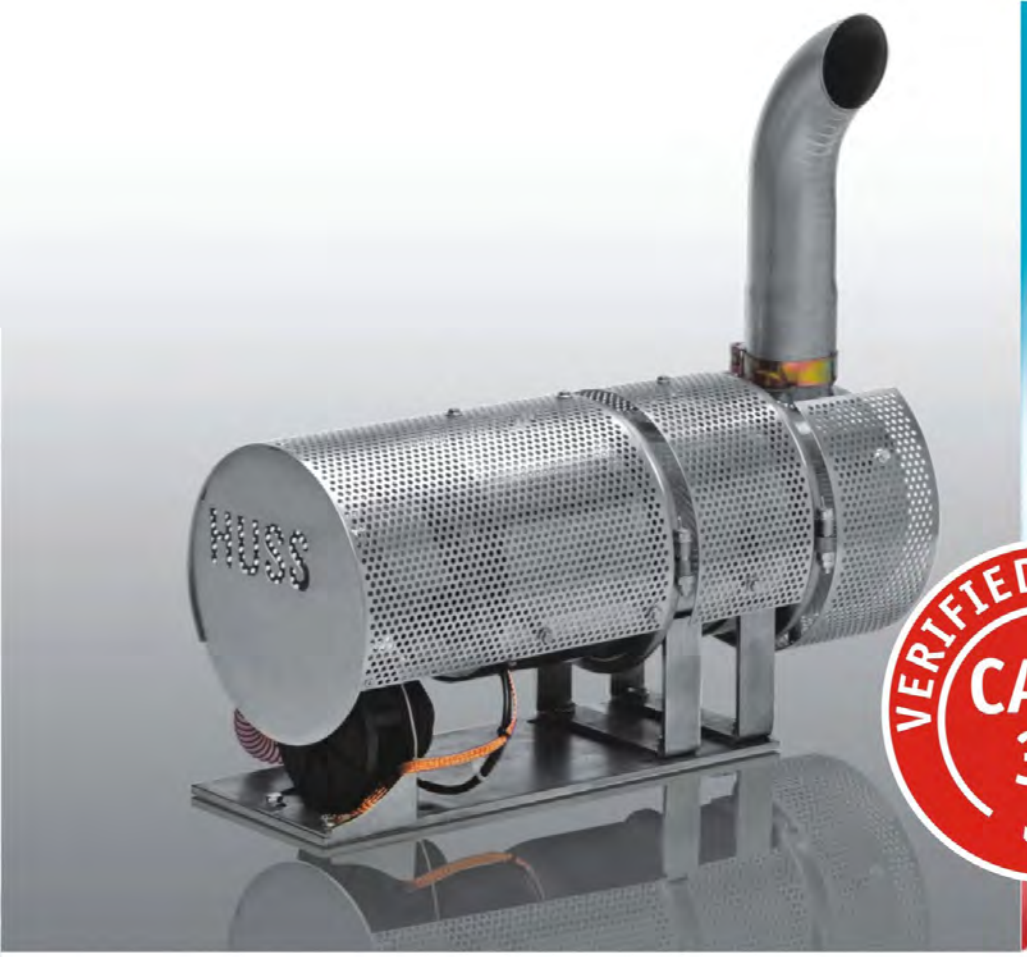


MK-SYSTEM

VERIFIED PRODUCT
CARB
3+

HUSS

We care for air.

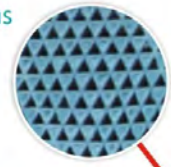
Diesel Particulate Filter with Active Diesel Burner Technology

HUSS
A HUSS GROUP COMPANY
WWW.HUSSGROUP.COM

HUSS MK-SYSTEM DESIGN FEATURES

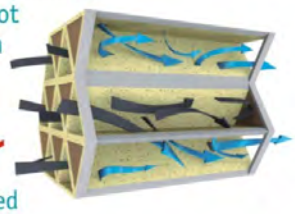
99.9%
SOOT FILTRATION RATE

LPS-SiC Filter
Designed specifically for Heavy-Duty and Off-Road applications with a long life expectancy

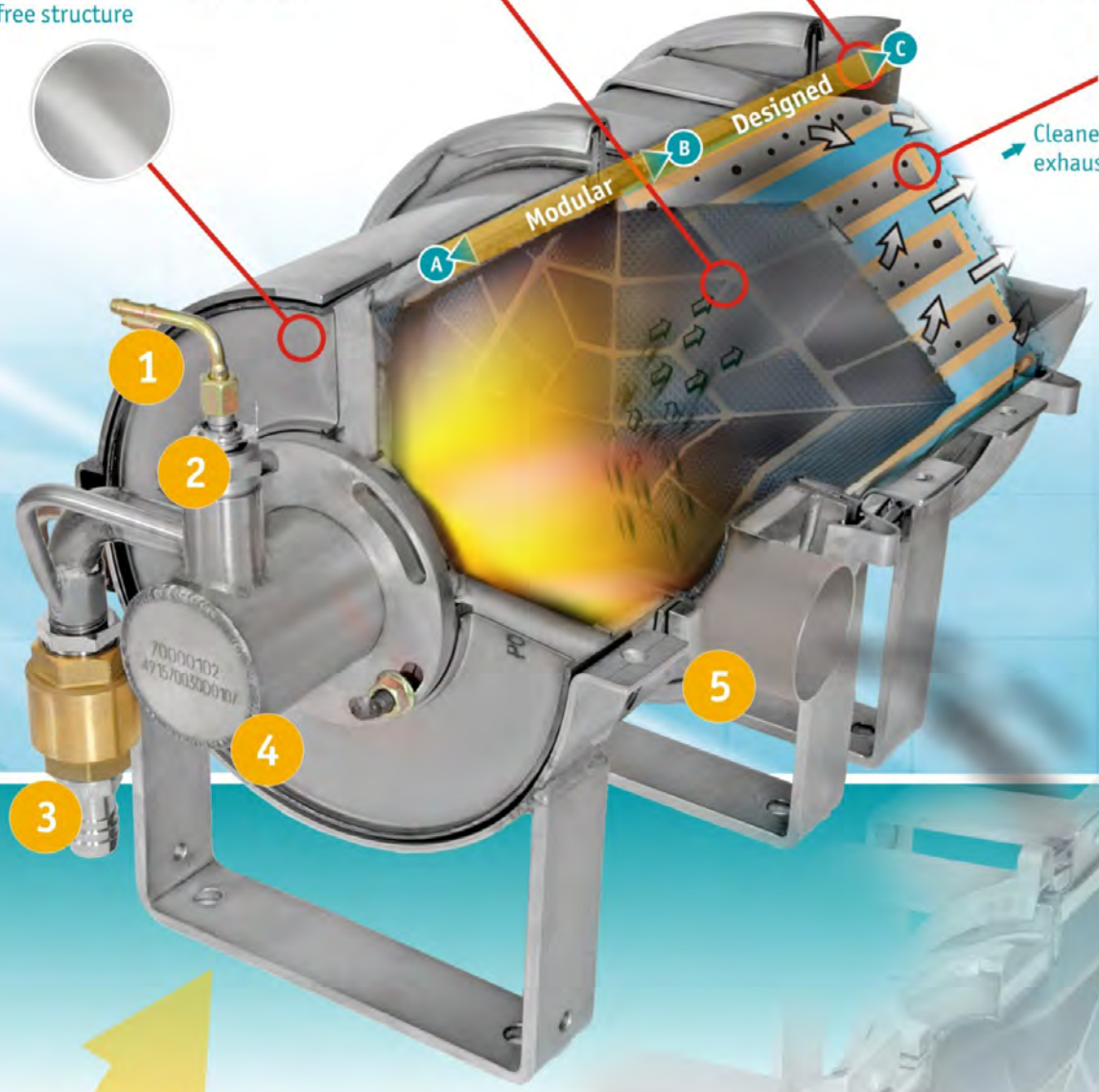


Modular Design
A, B and C modules

Wall-flow technology
High performance; 99.9% soot collection



Stainless Steel Construction
Provides a robust and corrosion free structure



Controls and monitors:

1. Fuel supply
2. Glow plug
3. Air supply
4. Temperature control
5. Exhaust backpressure

HUSS MK-SYSTEM ADVANTAGES

Regeneration is independent of exhaust temperature	Ideal for engines with low temperatures and light duty cycles
Independent from external power supply	No connection to the main utility power; no exchanging of filter cartridges
HUSS Control unit supervises the entire process	Visual display with audible alarm
Meets noise regulation requirements	Additional muffler module may be incorporated into filter installation
Variety of exhaust angles	Easy integration for every mounting configuration
Variety up to 800 hp (600kW)	Most appropriate filter size for each application
Low fuel consumption	Low filter system operating costs
Secondary emissions regulations fulfilled	No secondary emissions related to regeneration

MK-SYSTEM

System Overview

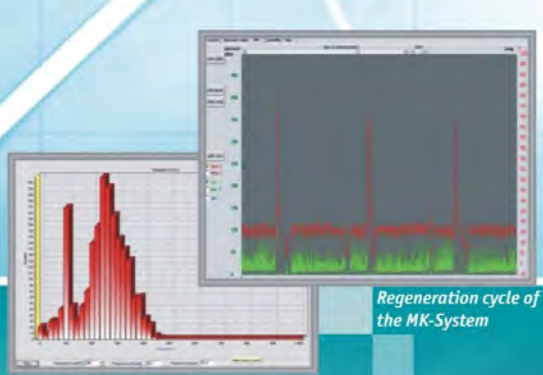
The MK-System is integrated into the exhaust line of the vehicle. The high-tech LPS-SiC ceramic filters 99.9% of the harmful soot particles out of the exhaust gases. The active regeneration is executed by a powerful diesel burner, which works independently from the exhaust gas temperature. Depending on the filter size the regeneration takes between 5 and 45 minutes. The entire process is supervised by the HUSS control unit.

A SOLUTION THAT FITS EVERY APPLICATION

Type of filter	FS 40 MKXS	FS 40 MKS	FS 50 MKS	FS 80 MKL	FS 100 MKS	FS 100 MKM	FS 100 MKL	FS 160 MKL	FS 200 MKS	FS 200 MKM	FS 200 MKL	FS 300 MKS	FS 300 MKL
Engine power in kW (hp) up to	-20 (27)	-30* (40)	-60 (80)	-90 (121)	-160 (215)	-190 (255)	-240 (322)	-260 (322)	-270 (362)	-320 (429)	-440 (590)	-480 (644)	-520 (700)
PM collection rate	99.9 %												
Secondary emissions	No secondary emissions related to regeneration												
Filter material	Liquid-phased sintered Silicon Carbide (LPS-SiC)												
Exhaust gas temperature	No minimum temperature required												
Control unit	HUSS Control with integrated Datalogger												
On board voltage	12 V or 24 V												
Installation position	Horizontally or vertically												
Regeneration technique	Diesel burner technology												
Operation hours until regeneration	App. 8-10 operating hours												
Regeneration time	App. 5-45 min. depending on filter size												
Filter casing	Stainless steel												

The table above shows the appropriate filter/engine combinations based on an EPA TIER 3, non-derated, engine. Under these conditions the filter offers a soot loading period between 8-10 hours, before it needs to be regenerated.

For further information:
www.hussgroup.com



Regeneration cycle of the MK-System

Ideal for low or unsteady exhaust gas temperatures

HUSS CONTROL OVERVIEW

The MK-System operates independently from the exhaust temperature and from engine electrical system. The user friendly and dependable HUSS control unit monitors the entire filtration process. 25 years of engineering experience has gone into the design and operation. The popular datalogger is a standard feature of the HUSS Control.

Bluetooth Technology
Wireless programming and readout of the control unit

Smart Integration
Simple integration- only the display is installed near the operator

Backpressure settings
Backpressure limits are adjustable based upon specific application needs

Data logger function
Data management software keeps track of the filter system operation

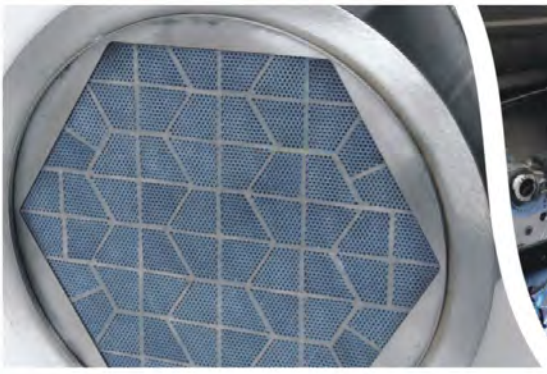
Safety Concept
Overloading of the filter prevented by security measures

Stop-and-Start Function
Automatic regeneration start possible

Multiple X Function
One control device for multiple filter systems

Language selection
Different languages supported

HUSS advantages



QUALITY

▪Experience and Know-how
HUSS products are successfully established in the market for more than 20 years

▪99.9% PM reduction
99.9% soot collection due to LPS-SiC wall-flow filtering

▪Premium Materials
Stainless steel and Silicon Carbide offer long life

▪Certifications
VERT, CARB, TRGS 554, exhibit XXVII StVZO and other standards. Quality management according to DIN Iso 9001:2000

▪Warranty Extension
Customer satisfaction assured by long term warranty

TECHNOLOGY

▪Technology
Continuous development leads to innovative products

▪System Solutions
Particulate filters up to 600 kW (800 hp) and regeneration strategies for every application

▪Modular Design
Fits even in difficult locations

▪HUSS Competence in Ceramic Production
In-house production of LPS-SiC ceramic filters, especially developed for Off-road and Heavy-duty applications

▪HUSS Competence in Metalworking
In-house production of mufflers and pipings; Canning technology

SERVICE

▪Engineering
Engineering expertise in filter adaptation

▪Field Service
Installation, maintenance and repairs by our own professional service technicians

▪Professional Sales Assistance
Products and product support directly from the manufacturer

▪International Presence
HUSS has corporate locations in North America and Europe with authorized partners located internationally

▪Training
Special training courses on all filter systems by HUSS specialists

FIELDS OF EXCELLENCE

- Trucks and commercial vehicles
- Transit and school buses
- Construction machines
- Forklifts and Cargo Handling
- Ships and rail
- Stationary engines
- Special applications

Professionalism at its best

The entire range of solutions:

The HUSS Group companies produce high-tech and high-quality solutions for the exhaust aftertreatment of diesel engines, with focus on both, first- and retrofit, of heavy-duty and off-road applications.

The HUSS Group production facilities include; CleanDiesel-Ceramics, the producer of the LPS-SiC ceramic filters and Metpela, the producer of the particulate trap casing.

HUSS Locations in North America and Europe provide verified retrofit solutions to meet local regulatory requirements. As clean air regulations become law accross the globe, the HUSS Group will be there to provide proven and dependable solutions.

HUSS Technologies is the ideal partner for the development and integration of engine and vehicle solutions for manufacturers.

Complete solutions for emission reduction under one roof:

HUSS - We care for air.

HUSS GROUP

We care for air.

HUSS LLC

Sales and service
North America

HUSS Umwelttechnik GmbH

Retrofit sales for Europe and other export markets
After sales service

HUSS Technologies GmbH

Sales firstfit
System integration

HUSS Umwelttechnik AG

Sales and service for Switzerland, France and Italy

CleanDieselCeramics GmbH

Development and production of LPS-SiC diesel particulate filters

Metpela Oy

Development and production of mufflers and pipings; Canning technique

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