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# MFH 250

Sweeper



The MFH 250 is the ideal solution for daily cleaning jobs in inner city areas, on footpaths and cycle paths, industrial areas or parking garages. Optional attachments enable clearing and spraying in winter road maintenance, sink drains, high pressure cleaning and weed control. The MFH 250 enables sustainable and efficient sweeping at low cost over its product life cycle.

## Highlights

- **Two or three broom system** available
- **Pressurised circulating water system:** conserves resources through water recovery
- **Koanda air circulation system:** operates with almost no particulate matter emission
- Hydrostatic drive with **electric parking brake** and **hill start assistance**

## Your benefits

- **High performance:** High suction power even at low engine speed. The spherical joint of the drawn suction shaft allows movement in all directions and ensures optimum ground hugging and a constant suction power.
- **Excellent sweeping performance:** A two or three broom system with a pulled suction shaft.
- **Unsurpassed comfort:** A spacious cab, excellent visibility, ergonomic controls, an adjustable steering column and a sprung driver's seat with individual adjustment options. AGR („Healthy back campaign“) tested and recommended.
- **Minimum fine dust emissions:** The MFH 250 meets the best level of PM10/PM2.5 certification with four stars each. The combination of the Koanda air circulation system and the pressurised circulating water system can reduce fine dust emissions by up to 70%.
- **Flexibility:** Thanks to modular equipment and a wide range of optional expansion options, the sweeper can be adapted to customer-specific requirements.

## Performance features

### Sweeping technology

The MFH 250 is available with two independent sweeping systems. A **pushed two-broom system** with a brush diameter of 850mm or a **pulled three-broom system** with a brush diameter of 800mm. Both systems can be operated either independently or as a dependent system with convenient controls on the driver's door. The brush speed and the pressure can be infinitely adjusted, while the brooms can be plastic, steel or mixed trimmings, and the suction nozzle on rollers or runners.

The **two-broom system** with independently controllable circular brushes guarantees absolute mobility in every sweeping situation. Two stable broom arms with integrated buffers allow sweeping widths of up to 2,900mm. Independent broom control is available as an option: separately controllable brooms, up/down, left/right, plus contact pressure control. This guarantees clean sweeping results with minimum wear and tear. The broom always returns to the basic position, even when road conditions change. A version for heavy weed use is also available with hydraulic tilting functions for the broom.

The **three-broom system** with freely movable front broom arm offers a wide range of options and a sweeping width of up to 2,600mm. Left-right alignment of the front broom, sweeping on two levels or heavy weed broom use are all possible. All functions of the front broom are hydraulically controlled, including the broom support pressure. The broom unit under the cabin ensures optimum feed of the sweeping material to the suction shaft, and an overlap is always guaranteed. As an option, the angle-adjustable side brushes can be extended hydraulically to ensure optimum alignment to the ground.



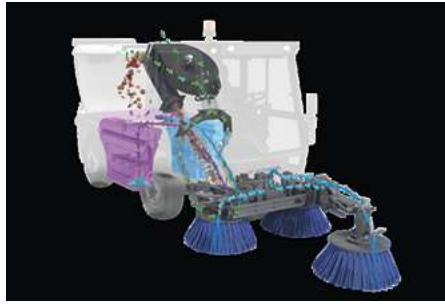
### Suction and water system

For the two-broom system, there is a choice of a basic suction shaft with hydraulically-operated coarse dirt flap or an HS suction shaft with integrated coarse dirt flap and optimum air flow. The HS suction shaft guarantees maximum suction power at low speeds saving up to 15% in operating costs. There is an air-flow-optimised suction shaft for the three-broom system, which does not require a separate coarse dirt flap as coarse debris can only be easily collected by simply tilting the suction shaft.

The MFH 250 is certified with a four star PM10 and PM2.5 certificate, recognised throughout Europe for the highest level of air pollution control for the PM10 test and the best possible absorption performance for PM2.5.

With the unique Koanda air circulation system and the pressurised circulating water system, emissions of harmful fine dust is reduced by up to 70%. The Koanda system delivers reduced noise emission, low water consumption and allows sweeping at temperatures just below-zero. The proven pressure circulation water system returns large quantities of circulating water to the circuit by means of a waste water pump for reuse.

The water recovery system, with a screen surface of 3.3 m<sup>2</sup> in the container, not only saves fresh water, but also makes optimum use of the container capacity. The 250-litre hopper allows the operating range to be increased by up to 50%. The collected swept material is both moistened and compacted. The electric fresh water pump supplies the spray nozzles on the circular brooms, while the quantity can be easily controlled from the cab.



### **Sweeping material container**

The hopper, which is made of corrosion and seawater resistant aluminium, has a 2m<sup>3</sup> volume which enables maximum sweeping capacity and a large radius of action. A large dumping height of 1400mm enables emptying into all common dirt containers, while the suction pipe in the container is optionally available in wear-resistant stainless steel.

### **Ergonomics and comfort**

The spacious cabin is equipped with high quality noise and vibration insulation (72 dB(A)). The front windscreen extends down to the floor and, with the viewing window in the cab floor, provides optimum visibility of the sweeping unit and suction nozzle. This contributes to a pleasant working environment and supports safe operation in road traffic, while the standard and powerful air conditioning system creates a pleasant and cool working climate even at high outside temperatures. Fresh air is sucked in and filtered at the rear of the cab through an air filter designed as a dual pollen filter.

The sweeping unit is controlled via the door control panel with joysticks and push buttons. With the Auto-Drive option, all sweeping functions and driving commands in sweeping mode can be conveniently operated via the ergonomically shaped multi-functional control lever. Driving and sweeping from a single source also means greater safety and less stress.

The most important information is visible at a glance on the colour display in the roof console. In addition, a mechanic can make machine-specific settings on the display. With the help of the onboard diagnosis system, any faults can be localised quickly and efficiently.

A height and angle adjustable steering column, cruise control, minimal pedal forces, a healthy driver's seat with AGR certificate („Campaign for healthier backs“) plus operating and control instruments in an optimum grip area complete a modern, ergonomic workplace.



### Drive

The basic model has a powerful, high torque, EuroMot 5 engine with 55 kW (75 hp), which works without additional AdBlue. Also available is a Euro 6c engine with 62 kW (84 hp) with a modern exhaust after-treatment system with diesel oxidation catalytic converter, closed particle filter system plus AdBlue injection and SCR catalytic converter - with the same wheelbase as previous versions.

The engine and AdBlue tank are perfectly integrated into the chassis so that manoeuvrability is not compromised. Combined with the powerful hydrostatic transmission, this makes driving and working comfortable and economical at speeds of up to 50 km/h (31mph).

An electric parking brake system with hill start assistance is one of the newest developments, while in the optional Eco-mode, the maximum operating speed can be achieved with lower engine speed, leading to reduced operating costs and emissions.



### Modern vehicle technology

High-quality corrosion protection comes from the hot-dip galvanisation of the entire vehicle frame, the suction mouth plus important steel components and the dirt container.

A hydropneumatically suspended chassis with hydrostatic drive and large 15" wheels offers the highest level of driving comfort in this machine class. The high load capacity and large contact areas of the wheels ensure increased safety with low ground pressure, regardless of road and weather conditions. Optional 17.5" tyres are available to increase the permissible total weight to 5,000 kg. A mechanical chassis is also available. The suspension package ensures safe and comfortable car-like driving, robustness and lower maintenance.

Optional lowerable, self-levelling running gear simplifies driving in multi-storey car parks and low entrances as the chassis can be lowered by 70mm at the push of a button.

Switchable all-wheel steering, monitored by steering angle sensors, allows extremely tight turning manoeuvres and is user-friendly and safe. A hydraulic dual-circuit brake system with disc brakes front and rear is standard.



## Wide range of options

- Koanda air circulation system
- Rear view camera and suction shaft camera
- Weed broom including hydraulic tilting functions
- Hand suction hose
- Pressure washer
- Sound insulation package
- Scrub deck
- Sink drawer cleaner
- Automatic central lubrication system
- Auto-Drive (control lever operation)
- Lowerable landing gear
- High quality LED products
- Winter maintenance attachments



## IntelliOPS telematics platform

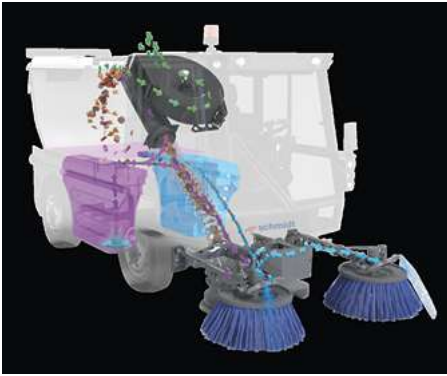
The MFH 250 can be connected to the Aebi Schmidt IntelliOPS platform, which provides comprehensive monitoring, selection, reporting and analysis functions. It enables rapid performance evaluation by displaying machine activity data live on a map, and uses collected data to provide detailed overviews and reports that help optimise operations.

## Gallery



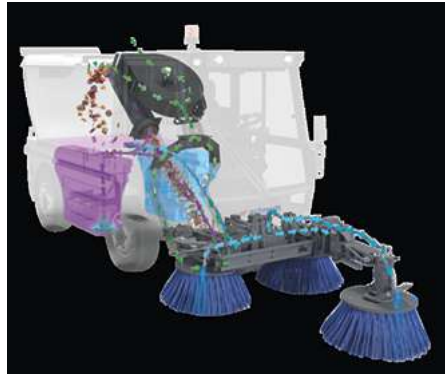
## Variants

### MFH 500 | 2 brush system



The 2-broom system with independently controlled circular brushes guarantees absolute mobility in every sweeping situation. Two stable broom arms with integrated buffers allow sweeping widths of up to 2,900 mm.

### MFH 500 | 3 brush system



The 3-broom system with freely movable front brush arm offers a sweeping width of up to 2,600 mm. Left-right alignment of the front broom is just as possible as sweeping on two levels or heavy weed broom use.

## Keywords

#Counties, Cities & Municipalities #Industry, Construction & Facility Management #Contractors #Cleaning & Washing #Sweeping #Innercity Roads #Sidewalks & Cycleways #Parking Facilities & Underground Car Parks #Airport Landside #Industrial & Port Areas

## Technical data

	MFH 500   2 brush system	MFH 500   3 brush system
<b>Hopper</b>		
Tank volume	2 m <sup>3</sup>	2 m <sup>3</sup>
Tilt angle	102°	102°
Dumping height tilt discharge	1,400 mm	1,400 mm
<b>Sweeping unit</b>		
Disc brush diameter	850 mm	800 mm
Disc brush speed	120 1/min	100 1/min
Brush material	steel / Plastic / Mixedfill	steel / Plastic / Mixedfill
Sweeping width	1,400 - 2,900 mm	1,800 - 2,200
sweeping width with 3rd brush	-	0 - 2,600 mm
<b>Suction fan</b>		
Speed	3,300 1/min	3,300 1/min
<b>Water system</b>		
Total water volume	360/380 l	360/380 l
Fresh water volume	190 l	190 l
Water spray system	3 bar / 11 l/min	3 bar / 11 l/min
<b>Drive system auxiliary engine</b>		
Engine type	VM R754	VM R754
Number of cylinders	4	4
Exhaust emission	EuroMot V	EuroMot V
After treatment system	DOC + DPF	DOC + DPF
Fuel	Diesel	Diesel
Displacement	2,970 cm <sup>3</sup>	2,970 cm <sup>3</sup>
Performance	55 kW (75 PS) @ 2,300 1/min	55 kW (75 PS) @ 2,300 1/min
Torque	310 Nm	310 Nm
<b>Drive system auxiliary engine 2</b>		
Engine type	VM R754	VM R754
Number of cylinders	4	4
Exhaust emission	Euro 6c	Euro 6c
After treatment system	AdBlue + SCR-Kat	AdBlue + SCR-Kat
Fuel	Diesel	Diesel
Displacement	2,970 cm <sup>3</sup>	2,970 cm <sup>3</sup>
Performance	62 kW (84 PS) @ 2,300 1/min	62 kW (84 PS) @ 2,300 1/min
Torque	270 Nm	270 Nm
<b>Steering</b>		
Steering angle front axle	48°	48°
Steering angle rear axle	24°	24°
Turning circle diameter wall to wall (2-wheel steering)	8,400 mm	8,300 mm
Turning circle diameter kerb to kerb (2-wheel steering)	6,350 mm	6,350 mm
Turning circle diameter wall to wall (4-wheel steering)	7,100 mm	6,800 mm
Turning circle diameter kerb to kerb (4-wheel steering)	4,750 mm	4,750 mm
<b>Speed</b>		
Transport speed	25 km/h / 40 km/h / 45 km/h / 50 km/h	25 km/h / 40 km/h / 45 km/h / 50 km/h
Sweeping speed	12 km/h	12 km/h
<b>Dimensions</b>		
Length without 3rd brush	-	4,030 mm
Length with brush	4,580 mm	-
Length with 3rd brush	-	5,030 mm
Width without brush	1,300 mm	1,300 mm
Height (without beacon)	1,990 mm	1,990 mm
Wheelbase	1,820 mm	1,820 mm
Track width front	1,073 mm	1,073 mm
Track width rear	1,073 mm	1,073 mm
<b>Weights</b>		

	<b>MFH 500   2 brush system</b>	<b>MFH 500   3 brush system</b>
Empty weight of the basic unit approx.	2,900 kg	3,000 kg
Permitted total weight	4,500 kg	4,500 kg



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