

**DISAB**  
VACUUM TECHNOLOGY



# DISA-CLEAN 130

HIGH VACUUM ROAD SWEEPER

PM10 SOLUTION



**DISA-CLEAN 130 DUST FREE SWEEPING  
WITHOUT THE NEED OF WATER OR CHEMICALS**

The DISA-CLEAN is developed to vacuum the smallest (PM10-2.5) particles, a common health hazard in cities and industries.

Our philosophy is simple and is built on the same principle as cleaning your home. You don't soak the floor before brushing or vacuuming. You start with vacuuming. The DISA-CLEAN high vacuum sweeper combines brushing and vacuuming and cleans without adding water. Thanks to the dry cleaning method of the DISA-CLEAN, the cleaning result is unmatched.



**DISA-CLEAN - A NEW APPROACH TO CLEANING LARGE SURFACES.**

- The superior result achieved by the DISA-CLEAN is accomplished by a unique vacuum nozzle, with an equivalent of 1600kg pulling force, which cleans the surface from dust, gravel and stones.
- DISA-CLEAN operates completely dry, without causing a dust cloud around the machine. The DISA-CLEAN main brushes are surrounded by protective covers with vacuum which make the operation dust free.
- The collected material passes a 4-step filter separation preventing it to escape into the air. Even the smallest of particles won't escape the machine.
- Thanks to the unique filter system, the working air flow can be kept at maximum, even during extreme conditions.
- Exceptional high operation speed.
- One of the advantages with the high vacuum method is that the DISA-CLEAN works in both wet and dry conditions.
- 2.5 m work width, operational speed 0-15 km/h.  
(e.g. 10 km/h gives 25 000 m<sup>2</sup>/h x 8 h = 200 000 m<sup>2</sup>/work day)



## DISA-CLEAN 130

- |                          |  |
|--------------------------|--|
| • Dry cleaning           | Gives an unbeatable result                   |
| • No added water         | No "painting" of the surface with particles  |
| • Works in cold climates | No risk of frozen road conditions afterwards |
| • Dust free collection   | No dust cloud during operation               |
| • Cleaning result        | No remnants of loose material                |
| • Operational speed      | 0-15km/h                                     |
| • Continuous operation   | No interruptions to refill water             |

### DISA-CLEAN VACUUM CLEANING METHOD

#### - GIVES A UNIQUE RESULT

Vacuuming with the DISA-CLEAN eliminates the problem with PM10 dustparticles, that arise both during and after sweeping using conventional methods.

No "painting" of the surface by the smallest particles. (A characteristic typical for traditional sweepers using added water to bind the dust to the ground).

Once a wet area dries after a cleaning by a traditional sweeper, dust clouds easily form by the dust remnants when they are no longer bound to the ground by the water.

Combining the DISA-CLEAN together with traditional sweeping methods and vacuum the surface dry for optimal result.

Using DISA-CLEAN at regular intervals keeps asphalt surfaces clean even down into the pores.

PM10/maintenance vacuuming can preferably be done without using brushes, which makes higher workingspeed possible. (in some cases up to 20km/h)



The result from a DISA-CLEAN 130 high vacuum sweeper

- The surface is free from particles which can become airborne
- Completely dust free operation

### EXAMPLE 1: COAL TERMINAL WORK UK

- Fine dry coal dust
- Surface wet sweep the day before
- The pores of the asphalt are filled with coal dust
- The dust is totally exposed for the elements
- After dry vacuuming with DISA-CLEAN, the surface is free from dust particles



- Operation speed: 7-10km/h
- Approx. 17 500-25 000 m<sup>2</sup>/h
- Using only main nozzle

### EXAMPLE 2: BAUXIT TERMINAL MALAYSIA

- Big problem with dust and particles in the air and the sea
- All the surfaces are cleaned daily with conventional methods: wet brushes, high pressure water for cleaning. Water-spraying for dust suppression.
- The problems remains with a large amount of dust on transport roads when the surface is dried
- DISA-CLEAN removes this dust fast and efficient, due to the completely dry operation
- Problems with dust clouds generated by the traffic is now under control



**WHAT IS PM10?**



**PM10-2.5 airborne particles = Deadly dust!**

Atmospheric particulate matter – also known as particulate matter (PM) or particulates – are microscopic solid or liquid matter suspended in the Earth’s atmosphere. PM10 is particulate matter with a mean aerodynamic diameter of 0.01mm.

**PARTICLES IN THE TRAFFIC/INDUSTRY**

Hazardous particles in traffic

- High amounts of fine particles, PM10, are mainly caused by road wear, brakes, tires and sand used on roads.
- Research shows that too high particle levels causes about 3 000 to 5 000 premature deaths in Sweden, each year.
- 15 % of the children suffering from asthma can be coupled to living within 75 m from heavy traffic roads and correspondingly, for adults, 13% COPD and 18% cardiovascular diseases.

Hazardous particles in industry, harbours etc.

- High levels of PM 10 particles are caused by several different sources in production, material handling and transport in general.

EU Regulations:

- The norm for daily averages is 50 µg/m³ PM10 particles which may not be exceeded more than 35 times/year.
- EU is threatening to impose steep fines in Sweden for breaking the PM10 regulations.
- The demands are affecting both the municipalities and the private industries.

Source: Naturvårdsverket, Aphelkomstudien (TT), Luftkvalitetsförordning (2010:477)

**FILTERSYSTEM**

Safety filter:

Filters the exhaust air down to a particle size down to PM 2.5.

Main filter:

Automatic filter cleaning using during operation using compressed air.



**DISA-CLEAN CONTROL SYSTEM**



Simple and logical control over all the functions of the machine, using a touch screen in the cabin.



Specifications	DISA-CLEAN 130
<b>Truck chassis</b>	Volvo Euro 3-6
Wheel base	4.3 m
Axel load Front axel	7.1 ton
Axel load Rear axel	13 ton
<b>Donkey motor for high vacuum pump</b>	
Model	Diesel Turbo, 4-cylinder (Step III A- Step IIIB)
Power	129/160 kW ISO3046
<b>Vacuum nozzle with encapsulated brushes</b>	
Function	Hydraulic and pneumatic
Width, suction nozzle	2500mm
Side brush right	Option
Side brush left	Option
Maximum width, sweeping	2800mm
Operation speed	0-15km/h
Pay Load volume	5000 litres (approx.)

We reserve the right to alter any specifications without prior notice.



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