

Runway Cleaning up to 2500 bar with Suction Device

This high performance vehicle for professional runway and surface cleaning was designed and built in a cooperation with the company BROCK Kehrtechnik GmbH in Witten. The system was sold to Vietnam.

The rubber deposits on the runway are removed by high pressure water and the debris plus water is then entirely drawn off by suction. On this vehicle, all of the relevant components for the job are hydraulically driven. The required power is taken off two sources: Firstly, via the direct auxiliary drive system on the gear of the vehicle and secondly, via a hydrostatic transmission built into the cardan shaft.



Technical Data:

Chassis	:	Daimler Chrysler ACTROS 2550 L – 6x2 with lift able und steerable trailing axle	
Motor	:	V 8 – 500 PS	
Tank volume	:	6.000 litres fresh water tank 7.000 litres dirty water tank	
Working width	:	1000 mm	
Working pressure	:	1000 – 2500 bar	stepless regulation
Capacity	:	15 – 29 l/min	stepless regulation
Rotation of nozzle arm	:	100 – 2000 Upm	stepless regulation
Speed	:	0,3 – 85 km/h	stepless regulation
Suction	:	> 700 m ³ /h	free air volume



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The heart of the vehicle is a 140 kW KAMAT high pressure pump with a performance of 29 l/min at a maximum working pressure of 2500 bar.

Two water filters (100 und 25 μm) are assembled in line in the inlet to the 6m² water tank.

In addition, there is a 10 μm filter fitted in the inlet side between the booster pump and the high pressure pump.

The vessel can be tilted for maintenance and to empty the dirty water tank.

This allows easy access to all components - high pressure pump, fan, boost pump, coolers and aspirator.



Surface cleaner with suction device in working position



Additional control panel in driver's cab



Monitor in the driver's cab for transfer of the cleaning results

The **RWC 1000 HS** is an ultra-modern vehicle which successfully removes automatically all types of rubber deposits from the touch-down zones of airport runways. The high pressure pump works at a pressure of 1000 to 2500 bar (stepless adjustment) and a flow rate of 29 l/min. While the cleaning job is being carried out, the dirty water and the removed debris is completely drawn off and removed by suction.

The vehicle is able to cover an area of 1500 to 3000 m², depending on the condition of the runway and the thickness of the rubber deposits.

In case of an emergency the cleaning device can be lifted up within 3 seconds and swiveled into the vehicle. This means that the vehicle can leave the runway in less than 10 seconds.