



 **schmidt**  
a brand of aebi schmidt

# CJS-DI

Jet sweeper



The Schmidt CJS-DI is an extremely manoeuvrable jet sweeper and de-icer at the same time. It is ideal for airports that want to plan with maximum efficiency and clear and de-ice stands, taxiways and runways with one machine. The jet sweeper provides impressive performance features and ease of maintenance and can be used with a spreader, sprayer or combination de-icer.

## Highlights

- The **robust and compact design** is ideally matched to the MAN series chassis.
- The aerodynamic air flow ensures **maximum blowing performance** and reliable snow removal even at high speeds.
- The plough, sweeper unit and spreader or sprayer can be **operated independently of each other**. The choice of attachments can be largely customised to the specific requirements of the airport.
- The CJS-DI can be easily **integrated** into intelligent, **digital support systems** that ensure optimally efficient clearing and de-icing operations.
- The CJS-DI can be used with a variety of **broom systems and automatic settings**, as well as combined with **ploughs** individually **adapted to the application scenario**.

## Your benefits

- With the CJS-DI, you can always react **flexibly** to changing requirements **without having to compromise on performance**.
- The **training effort is significantly reduced** with just one all-round vehicle.
- Drivers benefit from the **comfort** of the hydro-pneumatic three-axle chassis.
- Thanks to the extremely small turning circle, the CJS-DI also clears and de-ices **in places where additional equipment would otherwise be required**.
- The modern, intuitive operating concept allows many **presets customised to your airport** and operation with just one joystick.
- **Proven in use:** Both jet sweeper and attachments were first used over thirty years ago and have been continuously developed since then.

We know how important it is that your machines and equipment are always ready to deploy. **Get in touch with us** about our range of tailored services and original spare parts.





Using digital solutions to monitor, control and optimise your operations? Saving fuel and resources? With reduced CO<sub>2</sub> emissions and increased security? **Get in touch with us.** We'll make it work.

## Performance features

### Clearing process

#### Back to blacktop in a single work step

Four process steps combined in a single operation and the runway is ready for flight operations again.

1. The snow plough clears the majority of the snow to the side
2. The brush roller clears away the remaining snow and slush
3. The blower unit generates a powerful jet of air that sweeps across the entire sweeping width, removing any remaining moisture
4. The build-up spreader/sprayer ensures de-icing or prevents against building

### Snow plough

Clean and aggressive clearance is achieved with the Schmidt MS Tarron airport snow ploughs, such as the MS 56.2 N. These are designed for fast snow clearance at airports and offer outstanding performance with optional fine clearing bar, ejection stop or low blade shape.

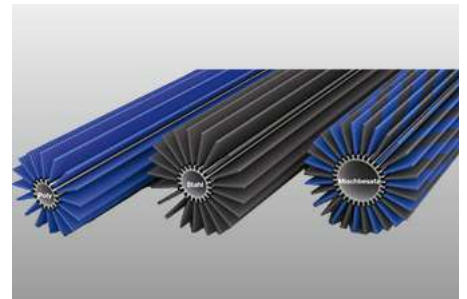


### Roller brush

The sweeping unit is mounted between the vehicle axles, while the sweeping roller drive is hydrostatic. The roller brush is optimally adapted to the sweeping surface and achieves a very good clearing result. The sweeping mirror of the roller brush is adjusted automatically and continuously via twin trailing wheels.

### Brush designs

The CJS-DI has a 16-piece cartridge system with plastic [1], steel [2] or mixed bristles [3] and is also available as an 18 or 21-piece system. The 21-piece design produces less air turbulence with the denser bristle material, which ensures better clearing performance and a longer brush life at the same speed and with more brush strips.



### Blower unit

The high-performance blower is driven hydraulically by the auxiliary engine via a variable displacement pump. The blower can be switched on and off by swivelling the pump. The blower unit is optimally designed to spread the large air capacity. The air speed is virtually constant across the entire working width. The blowing nozzle can be raised and lowered hydraulically.



## Mounted spreader/sprayer

With the spreader/sprayer, de-icing can be delivered both preventively and curatively. The entire vehicle width is covered by a spray bar, while further working widths can be achieved with additional jet nozzles. The drive for the spreader/sprayer is provided by the carrier vehicle's hydraulics.



## Carrier vehicles



As standard, the CJS-DI seamlessly mounts onto the MAN TGS 18.320 chassis type carrier vehicle. This carrier vehicle features a turning circle diameter of 18 meters and offers the option for additional rear axle steering for enhanced agility. The basic equipment and the exhaust emissions of the carrier vehicle must be selected specifically to meet the standards of the customer and the relevant country.

## Drive

The drive motor drives the hydraulic pumps for operating and controlling the sweeping unit and blowing unit. The snow plough and the mounted sprayer/spreader are controlled by a hydraulic system driven by the carrier vehicle's engine. The CJS-DI's hydropneumatic chassis offers the operator additional comfort in the field.

## Motion control

Both impulse and synchronous control are possible for the snow plough, sweeping unit, blower and rear mounted spreader/sprayer. On the one hand, this allows particularly efficient clearing processes via synchronous control. On the other, it also allows response to specific situations such as adjustment of the snow plough by means of individual, impulse control.

## Display

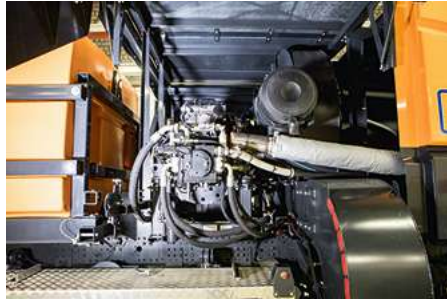
State-of-the-art control technology is an important step in the safe and efficient clearing of airport tarmac. Logical and intuitive menu navigation and automatically controlled processes help to support drivers by ensuring that concentration remains focused on the clearing operation. The display indicates the operating hours data when the machine is at a standstill; information about the engine speed, brush speed and blower output can be called up when the engine is running. The display also provides a comprehensive overview of fault or error messages.



## Smart Service Concept

The Smart Service Concept equals easier maintenance. It allows free access to all important components and low service time due to the ease of access to the components. In addition, the CJS-DI has a practical mounting bracket for the control panel on the control cabinet for service and workshop use. The optimised wiring harness layout ensu-

res high quality standards and reduced service requirements. At the same time, the air intake underneath the bonnet ensures less air filter contamination.



## Gallery



## Related products

**ACE**  
Combination machine



**CJS**  
Jet sweeper



**TJS / TJS-C**  
Jet sweeper



Trust in our many years of uniquely diverse experience. **Get in touch with us.** We'll find the right solution for your specific challenge.



## Technical data

### Sweeping unit

Brush length	4,200 mm
Number of Cartridges / brush material / diameter	16-, 18- o. 21-piece steel, poly and mixed bristles Ø 914 mm

### Working speed

Working speed up to	60 km/h
---------------------	---------

### Drive system - auxiliary engine 2

Motor type	Mercedes Benz OM 936 LA
Exhaust emission	EuroMot V
Performance	260 kW (354 HP) @ 1,800 1/min
Fuel tank	600 l
Working hours, depending on the operating conditions	8 h - 10 h

### Optional sprayer

Filling volume	5,000 l
Spraying width	15,000 mm
Distribution system	Ejection & spray nozzles

### Optional spreader

Filling volume	customized
Spreading width (solid) approx.	24,000 mm
Spraying width (liquid) approx.	15,000 mm
Distribution system	TwinDisk

### Carrier vehicle

Carrier vehicle type	MAN TGS 18.320
----------------------	----------------

### Example dimensions

Length including snow plough MS 56.2 N in working position	14,730 mm
Length without snow plough	13,035 mm
Transport width including snow plough MS 56.2 / 56.2 N in working position	4,750 mm
Height (excl. rotary beacon)	3,700 mm
Sweeping width at 32° positioning angle	3,560 mm

### Example Weights

Total weight incl. vehicle	28,000 kg
----------------------------	-----------



© Aebi Schmidt Group  
www.aebi-schmidt.com

Aebi Schmidt Holding AG  
CH-8050 Zurich, Switzerland

All rights reserved. Technical data is  
subject to change.  
Illustrations are not binding. Errors and  
amendments excepted.

Document created on 8 JUN 2024

