



Supra 4002/5002

Snow removal machine



The Supra is a self-propelled snow clearing machine, specially designed for removing large quantities of snow on airports or all road surfaces. It combines maximum efficiency, first-class operating comfort and a high level of environmental compatibility, and is available in the 4002 and 5002 series. Both machines differ in terms of clearing performance, but are designed for all applications and are highly efficient and effective.

Highlights

- **Accurate and fast snow clearance** - with throwing distances of up to 40 metres
- Individually adjustable chimneys and hydraulically adjustable ejection housings, through which the **throwing distance can be infinitely varied**
- **Low-emission drive**

Your benefits

- **High performance:** the Supra combines all-wheel drive, high-performance clearing head and innovative articulated steering to provide a consistently strong work-rate.
- **Long service operation:** Both series have a tank volume of 530 litres, which allows uninterrupted operation of up to eight hours.
- **Ergonomic and comfortable workplace.**

Performance features

Clearing technology

The Supra is equipped with a **snow blower unit** suitable for clearing all types of snow on all road surfaces and airports. If necessary, the technology allows for efficient loading of the snow onto trucks. Two clearing head variants are available: the Supra 4002 with a clearing capacity of up to 3,500 tonnes per hour and the Supra 5002 with a clearing capacity of up to 5,000 tonnes per hour.

The Supra's **powerful snow clearing unit with cutter drum** and downstream blower wheel in monobloc design ensures a permanently high clearing capacity. The FS-type snow blower front consists of a large drum drive and a blower wheel with an ejection housing that can be hydraulically swivelled right or left. The clearing head is equipped with adjustable skids to adjust the distance between the ground and the wear bar. Adjustable castor wheels are optionally available.

The high-capacity Supra 5002 can be equipped with hydraulically movable front flaps especially for use at airports. This increases the clearing width and can be flexibly adapted to the width of the snow bank, allowing particularly efficient snow removal. In addition to its great clearing efficiency, the Supra's all wheel drive makes it highly manoeuvrable – very important in narrow areas on airports and near aircraft.

Adjustable ejection chute

The Supra ejects cleared snow precisely and up to 40 metres left or right. Thanks to the adjustable chimney and the hydraulically adjustable ejection housing, the distance can be infinitely varied - from minimum to maximum and under full load. A hydraulic slewing ring mounted on the front end of the cutter centrifuge has a 225° turning range and can be equipped with either a short target chute or a loading chute with hydraulic ejection flap. Removing snow contaminated with de-icing agents directly onto trucks is a straightforward operation. And for loading trucks with high tail lifts, an optional chimney height adjustment is also available. For transport purposes, the entire chimney body can be hydraulically folded down at the push of a button.



Articulated steering

The articulated steering enables the feed force of the front carriage to be transferred exactly in the working direction of the clearing head. Regardless of the radius of the curve, the rear carriage follows the front carriage exactly and remains perfectly positioned in the clearing track.



- Optimum guidance of the rear vehicle following the clearing head's track
- Cutting tight corners even in hard-packed snow
- The feeding power is transmitted in the clearing head's direction of travel at any steering angle, supplying it with maximum power

Reliable drive

The Supra is powered by high quality, environmentally friendly, **economical diesel engines** that operate to the latest EuroMot IV emission standards at a comparatively low noise level. For countries outside the EU, the powertrains comply with EuroMot IIIA.

The **hydrostatic travel drive is fully reversible**, while the driving and clearing speed is achieved by means of a **variable displacement pump and motor**. This allows a constant speed of the drive motor and thus the ideal power use in every situation.

In **Eco mode**, reduced engine speed generates a fuel saving of up to 20% - at the same high driving speed, virtually unchanged clearing performance and significantly reduced noise level. Two speed ranges can be set for work and transport travel.

The clearing head drive of the Supra 4002 is reversible, thanks to the hydraulic motor being mounted directly on the clearing head, and the ejection distance is infinitely variable from 0-40 metres. With the Supra 5002, the higher drive power is introduced into the clearing head via a mechanical drive with two-stage gear. The ejection distance can be adjusted in two stages from six to 40 metres.

Ergonomics and comfort

The Supra is equipped with a vibration and noise-insulated, ergonomically-designed driver's cab with two seats. Thanks to specially sound-absorbent materials, the noise level during operation is only 75 dB(A). The driver and passenger seats are equipped with mechanical or air suspension and heating, while air conditioning can be fitted as an option.

The clearing head is operated by a comfortable joystick with a simple key function. The large, heated front and side windows provide excellent all-round visibility, while the cab can be raised hydraulically by 700 mm to further improve vision if required. An optional rear view camera makes work easier, while to prevent snow build-up, the front wind-screen has a negative angle of attack.

The control console, which features a graphic-capable TFT colour display and keyboard, can be moved, rotated and adapted to the driver's personal requirements. The display clearly shows all vehicle, engine and clearing head parameters as well as various joystick functions. Various menu levels are available for the driver, workshop and service personnel.

An ergonomically adjustable and fold-up armrest with joystick is designed for single-handed operation of all clearing head and drive functions. In addition, handily located rotary switches with LED displays control ejection range, Eco mode and stem relief.

The Supra offers good access to all hydraulic components, as both the engine and cab canopy can be easily raised, while fuel, AdBlue and coolant can be filled easily under the bonnet.

GPS-Guide: By summer mapping, the track can be cleared in winter without causing damage to track boundaries, the machine or without endangering pedestrians. The route can be driven completely autonomously with the help of a GPS guide during clearing operations. No additional track marking is necessary.



Maximum robustness

The Supra series uses extremely robust rigid axles, which offer a clear advantage over steering axles. As there are no swivel joints, they are absolutely maintenance and wear-free. Moreover, rigid axles offer a significantly higher load capacity compared to steering axles. A torsionally stiff rigid frame and an extremely stable, articulated joint between the front and rear of the vehicle ensure effortless absorption of all forces.

The Supra boasts optimum weight distribution for problem-free milling of layers. Leaf springs allow tough operating conditions to be tackled easily with high driving comfort.

The Supra's wide tyres ensure low surface pressure and are suitable for all types of snow. An optional caterpillar track drive, which can be quickly replaced with standard tyres, offers outstanding performance in stratified milling - even under the toughest conditions.

Corrosion protection

Efficient corrosion protection guarantees a long service life with all necessary painting carried out to the latest regulations. Elaskon preservation is used for exposed parts and full Elaskon sealing is also possible. Highly wear-resistant Hardox parts are used for particularly stressed areas. Wherever possible, closed profiles are used which also significantly reduces corrosion.

Gallery



Variants

Supra 4002



The Supra 4002 is a self-propelled snow clearing machine with a clearing width of either 2400 or 2600 mm. With a clearing capacity of up to 3,500 t/h, it is ideally suited for pass and road clearing.

Supra 5002



The Supra 5002 is a self-propelled snow clearing machine with a clearing width of either 2400, 2600 or 2800 mm. It is particularly recommended for airports with a clearing capacity of up to 5,000 t/h

Keywords

#Counties, Cities & Municipalities #Contractors #Airports #Clearing Snow #Highways & Main Roads #Innercity Roads #Parking Facilities & Underground Car Parks #Industrial & Port Areas #Airport Airside #Airport Landside

Technical data

	Supra 4002	Supra 5002
Clearing width	2,400 mm / 2,600 mm	2,400 mm / 2,600 mm / 2,800 mm
Clearing capacity up to approx.	3,500 t/h	5,000 t/h
Ejection distance up to approx.	40 m	40 m
Transmission		
Type of drive	hydrostatic resp. automotive	hydrostatic resp. automotive
Displacement pump - capacity	175 cm ³ /U / 0	175 cm ³ /U / 0
Displacement pump - maximum pressure	500 bar	500 bar
Regulating motor - capacity	140 cm ³ /U / 0	140 cm ³ /U / 0
Regulating motor - maximum pressure	500 bar	500 bar
Cutter drive		
Type of drive	Hydrostatic	2 stage gearbox
Displacement pump - capacity	175 cm ³ /U	175 cm ³ /U
Displacement pump - maximum pressure	500 bar	500 bar
Regulating motor - capacity	140 cm ³ /U	140 cm ³ /U
Regulating motor - maximum pressure	500 bar	500 bar
Drive system - auxiliary engine		
Engine type	Deutz	Deutz
Number of cylinders	6	8
Exhaust emission	EuroMot V	EuroMot V
Fuel	Diesel	Diesel
Displacement	11,950 cm ³	15,930 cm ³
Performance	330 kW (448 PS) @ 1,800 1/min	440 kW (598 PS) @ 1,800 1/min
max. Torque	2,100 Nm at 1,300 1/min	2,700 Nm at 1,200 1/min
Fuel tank	530 l	530 l
Speed		
Driving speed max.	40 km/h / 50 km/h	40 km/h / 50 km/h
Steering		
Steering type	Articulated steering	Articulated steering
Steering angle	35°	35°
Steering force transmission	Hydrostatic	Hydrostatic
Weights		
Gross vehicle weight	12,000 kg	12,000 kg
Permissible weight front axle	7,500 kg	7,500 kg
Permissible weight rear axle	6,000 kg	6,000 kg
Weight with clearing head approx.	10,780 kg	11,200 kg



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