

The future of grooming – the PistenBully 600

Kässbohrer Geländefahrzeug AG is presenting the new PistenBully generation on a FIRE IN RED tour of Europe. FIRE IN RED stands for state-of-the-art engineering and red-hot design on the international groomer market.

Photos: Kässbohrer



The PistenBully 600 opens up a new dimension in grooming in terms of both engineering and design.



Powerful performance and hot design



The Kässbohrer team at the unveiling of the PistenBully 600 on the Zugspitze

A first glance into the cab of the new PistenBully 600 shows that the emphasis is definitely on the driver. The PistenBully 600 incorporates a wealth of technical goodies for optimum ergonomics, the quality of the ride and user-friendly operation. The driver's seat has been completely re-

vamped. It has a greater range of adjustment and an integrated harness belt attached directly to the swing-action seat frame. That is important for the driver, who often sits in the PistenBully for hours at a time. The new half-cut airplane-style steering wheel with its built-in multifunctional display is also a fully ergonomic solution. The steering column is steplessly adjustable for height and reach to ensure that that steering wheel is always in the ideal position. Generous glazing extending well down the cab ensures optimum all-round vision. Above all, the extra-large side windows give the driver a good view of the tracks. And ample space for the driver generally enhances the quality of the workplace.

Extension of the human hand

As there was no joystick available on the market to meet Kässbohrer's requirements in terms of ergonomics and driver convenience, a new joystick was developed. Now the driver no longer has to grip the joystick; he simply rests his hand on it. This solution means pleasant untiring handling and permits more functions to be incorporated in the joystick at the same time. The various switches are located to suit the natural extension of the fingers of the human hand. To make it easier to find the standard work positions for cable pull and tiller pressure, the joystick has been fitted with a potentiometer with a detent function.

Driver-friendly cab

Experienced PistenBully drivers and newcomers to the brand can all make use of the intelligent help systems to meet their individual needs. Self-explanatory controls and a touch-screen make the driver's job simplicity itself. The control panel shows the entire vehicle, and the logical icons enable

the driver to find his way around immediately. He does not have to remember which switch is used for which function, but simply presses the icon for the appropriate component. For example, if he presses the tiller icon, the tiller is lowered. All functions can also be controlled using the I command integrated in the armrest.

A real PistenBully

In terms of design, the new PistenBully 600 signals get-up-and-go! In spite of its unique looks, it is a logical continuation in the history of PistenBully design incorporating the consistent development of typical lines like those of the cab doors. Some design elements, on the other hand, have definitely changed, and the designers have created a modern formal language as a powerful expression of the company's brand values and the character of a real PistenBully.

Excellent all-round vision

All the headlights and the twin searchlights are integrated in the roof of the driver's cab for outstanding range and working-area illumination. The two rear spotlights mounted in the back of the roof provide excellent glare-free illumination of the tiller and trail. The standard lighting package includes xenon working lights and SideFinder lights for the side and rear working areas of the blade.

A xenon lighting package is also available as an option for all front and rear headlights. For enhanced illumination of the side area, the PistenBully 600 is fitted with the new Treeline lamps. When the door is unlocked using the remote control, the vehicle entry lights and service lighting in the engine compartment are activated automatically, thus providing good illumination around the vehicle on the mountain.

Robust basics

Precision handling in all situations is guaranteed by the perfectly balanced running gear, with the main frame made of high-strength fine-grain steel for sub-zero temperatures. Thanks to the use of finite element methods for frame design, the new groomer has a frame structure with reduced notching. Optimally positioned anchor points for the push frame and rear attachment carrier ensure ideal blading and grooming results.

The new PistenBully 600 has a 6-cylinder engine delivering 295 kW (400 hp). The generously sized drive pumps with integrated pressure cut-off and servo control, and the planetary gearbox with its excellent weight-performance ratio ensure optimum efficiency with plenty of torque in reserve.

The folding deck railing introduced with the PistenBully 300 Polar is also to be found on the PistenBully 600. It is the ideal solution

for transporting personnel in safety on the rear deck.

The brains of the PistenBully 600

Intelligent control and positive diagnosis: the PSX controller is the on-board computer for central power and energy management. The diesel engine and drive/tiller pumps are directly controlled via CAN signals. Oil distribution for the working hydraulics and the automatic tiller depth function are also handled by the PSX controller. Should the need arise, all sensors and actuators switch automatically into the failsafe mode. The use of non-contact sensors ensures the highest levels of operational safety and reliability. The diagnostic functions of the individual components and operating data have again been further developed, so that the driver always knows exactly how things are with his PistenBully.

Grueling tests passed with flying colors

Countless quality tests and consistent quality management, from the development phase onwards, have made the new PistenBully a

vehicle in which all the components are a perfect match. In order to guarantee full operating safety, a prototype was subjected to spectacular tests such as the pendulum impact test for the windscreen, ROPS testing and the cold chamber test. In addition to the QA measures employed for development work and manufacturing at the Kässbohrer plant, all suppliers are also subjected to the same rigid quality controls. From tool and model-making using 3D milling data for outstanding repetition precision and rigid first sample testing to the series production stage, Kässbohrer's QA teams always keep a watchful eye.

There is a fine feeling of space and a high standard of comfort in the new PistenBully 600, and in general it is furnished and equipped to satisfy the most demanding user. Although the basic vehicle is already very complete, there are enough optional extras to give every groomer an individual touch.

FIRE IN RED European tour

With the introduction of this new-generation groomer, the PistenBully 600 looks set to consolidate its lead over the competition. It is a unique vehicle in terms of design, ergonomics, the quality of the ride and groomer technology, as in the case of the innovative help systems and the precision running gear. What makes the new groomer so special is not only its driving performance, but also the experience of the ride and the quality of the interior. At all events, the PistenBully 600 has once again raised the bar in terms of design, driving dynamics, safety, ergonomics and the driver's vision and information systems.

The FIRE IN RED tour is the perfect opportunity for a hands-on experience of the new groomer throughout Europe. For the dates, go to www.pistenbully.de ●



The user-friendly cab is the benchmark for design and ease of operation.



Ergonomic joystick for the driver to simply rest his hand on. All switches and indicator lights are color-coded for the various operations and functions.



Half-cut airplane-style steering wheel with built-in multifunctional display

TECHNICAL DATA

PistenBully 600

Dimensions:

Width: without tracks	2,500 mm
with combined tracks	4,202 mm
with finisher and Multiflex tiller	5,400 mm
Height with cab tilted	3,360 mm
Overall height	2,880 mm
Length with all-way blade and Multiflex tiller	10,075 mm
Ground clearance	350 mm
Rear deck	2,250 x 1,920 mm (4,2 m ²)

Weight:

Deadweight with combined tracks	7,100 kg
Deadweight with steel tracks	7,300 kg
Gross vehicle weight limit with attachments	11,000 kg

Performance:

Speed, stepless	0 – 23 km/h
Grooming capacity with Multiflex tiller	96,000 m ² /h

Garaging dimensions:

Length/width/height	11,000/6,000/3,500 mm
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Engine

Type	Mercedes-Benz OM 460 LA6-cylinder in-line engine turbocharged and intercooled with electronic PJD fuel injection and thermostatically controlled fans
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ECE output	295 kW (400 PS), TIER 3 and EPA/CARB
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Max. torque	1,900 Nm at 1,300 rpm
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Displacement	12.8 l / 12.800 cm ³
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Fuel consumption	from 20 l/h
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Fuel tank	220 l (additional 80 l tank under the deck as an optional extra)
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Switzerland	Meiringen-Hasliberg
Germany	Zugspitze
Austria	Zauchensee, Stuben, Scheffau
Italy	Corvara
Sweden	Sälen
Norway	Kongsberg
Finland	Ruka
France	Mégève, La Plagne, Serre Chevrier
Andorra	Grand Valira