

TR SERIES

EFFICIENCY MEETS PERFORMANCE



TECHNOALPIN®

THE TR FAMILY **INNOVATION WITH** **A LASTING IMPACT**



At TechnoAlpin, successful development work begins with clear goals: the best snow quality, optimal use of resources, maximum ease of use, and maximum operational reliability. A key factor in the efficiency of any snowmaking system is using the right snow gun in the right location. With its groundbreaking TR series, TechnoAlpin makes this vision reality through innovative, future-ready solutions.

The TR series is available in two fan sizes: The compact TR9 combines high efficiency with reduced power consumption, while the TR10 features a larger

fan, higher rated power, and more nozzles to deliver greater performance reserves. Both models represent the highest standards of precision and technical innovation, with attention to detail down to the smallest component.

Regardless of the model selected, users benefit from easy operation, great flexibility for transport, and efficient operation. As a result, the TR9 and TR10 once again set new standards in snowmaking in terms of user-friendliness, operational reliability, and resource efficiency.

THE BEST SNOW
OUTPUT IN MARGINAL
TEMPERATURE
CONDITIONS

MAXIMUM SNOW
PRODUCTION
WITH SUPERIOR
SNOW QUALITY





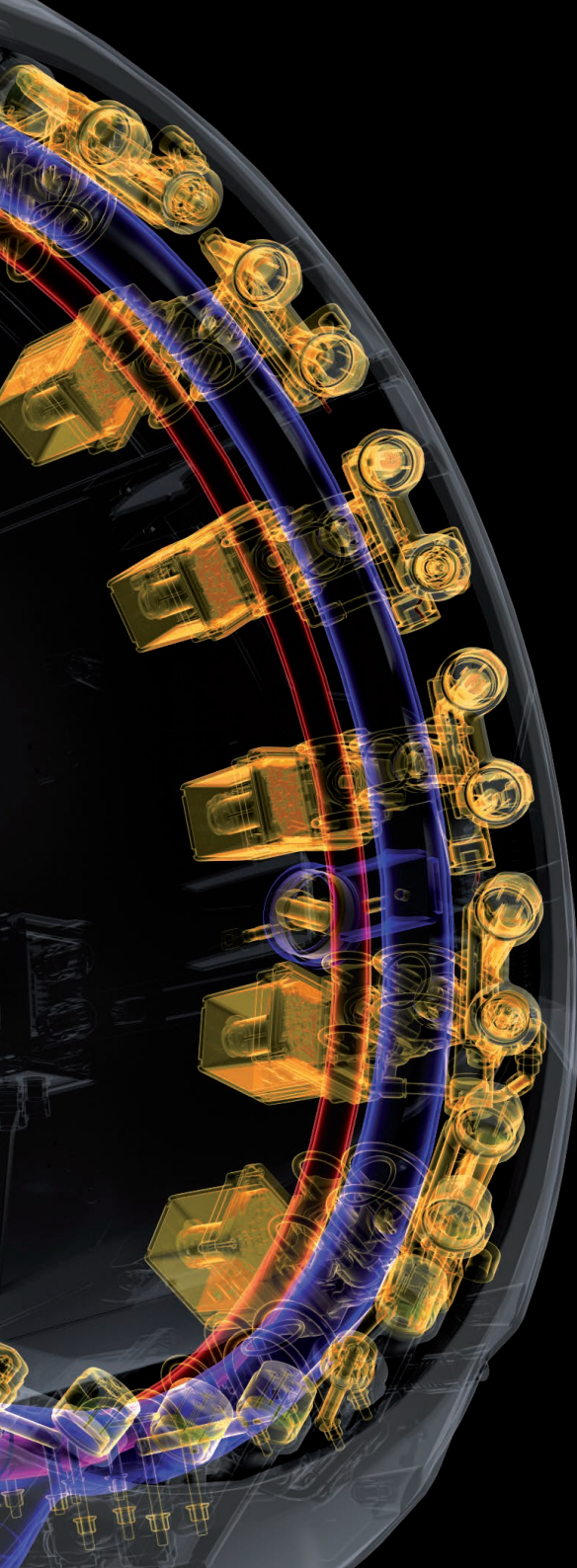
The new TR series is setting a new standard for snowmaking at extreme temperatures. The machine's automatic compressed air cooler plays a crucial role, especially at critical temperatures, as it helps determine the quantity and quality of the snow produced. Both models are designed to deliver their full performance potential even under demanding conditions, ensuring maximum snow production and superior snow quality.

The TR Series delivers reliable snowmaking performance when conventional systems reach their limits, while creating optimal conditions for efficient slope grooming. Compared with previous models, it

offers enhanced snowmaking performance, reduced noise emissions, and improved energy efficiency.

UNMATCHED COOLING PERFORMANCE

The air cooler has been completely redesigned and significantly enhanced. It has an unprecedented cooling capacity due to the significant increase in cooling surface area. This ensures that optimum quality snow is produced even in difficult temperature conditions. Optimally cooled compressed air significantly enhances nucleation, enabling the production of more high-quality snow precisely when it matters most: at marginal temperatures.



GROUNDBREAKING NOZZLE VALVE TECHNOLOGY

The TR Series snow guns feature state-of-the-art components as standard, delivering maximum efficiency while significantly reducing resource consumption.

+ Optimized resource efficiency

In both TR Series models, a single electric motor efficiently drives both the fan and the oil-free compressor. Individually controllable nozzle valves maximize resource efficiency, ensuring that every drop of water contributes to snow production. The intelligent nozzle control valve prevents water loss as it switches: The valve is drained using compressed air, and the discharged water is fed directly into the air jet. Meaning that every drop of water is converted into snow.



+ Improved energy efficiency and stable pressure buildup

Compared with previous models, the TR9 and TR10 produce the same amount of snow while consuming less energy. This helps ski areas achieve powerful, efficient snowmaking while making responsible use of valuable resources.

+ Increased operational reliability

Eliminating the central valve block and front discharge reliably prevents ice buildup in front of the machine, significantly enhancing operational safety.

+ Unmatched reliability & failure resistance

Thanks to intelligent valve switching, the valves automatically compensate for one another in the event of malfunction. This ensures that exactly the required number of nozzles remain open at all times, guaranteeing reliable snow production.

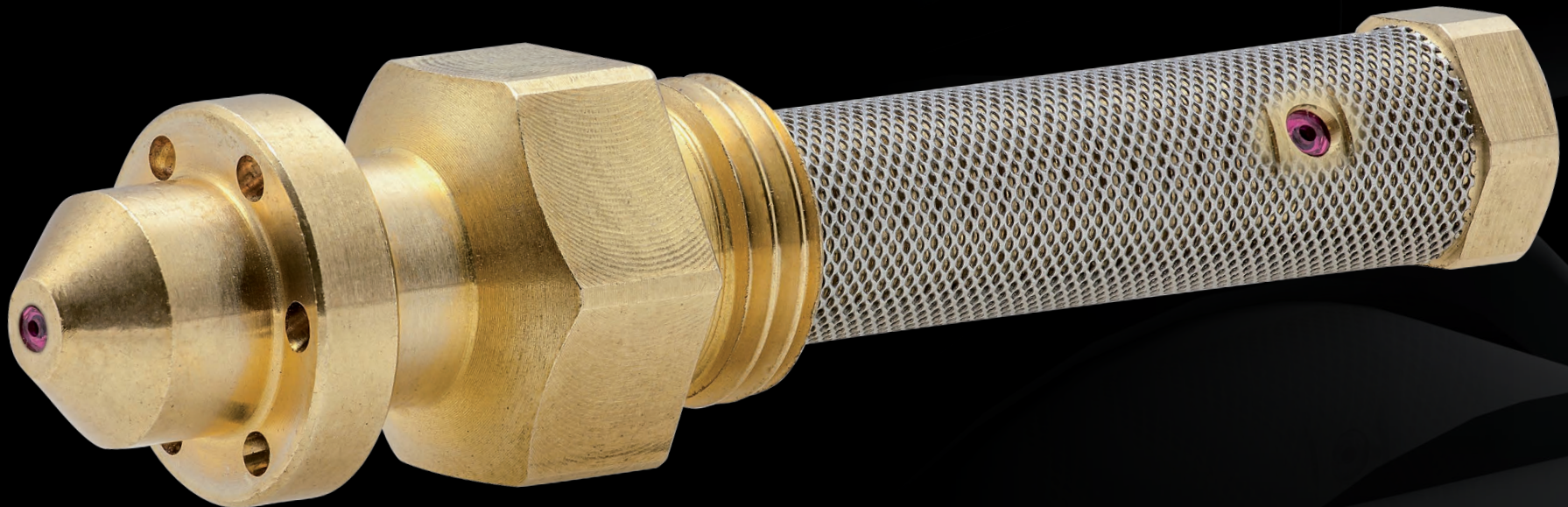


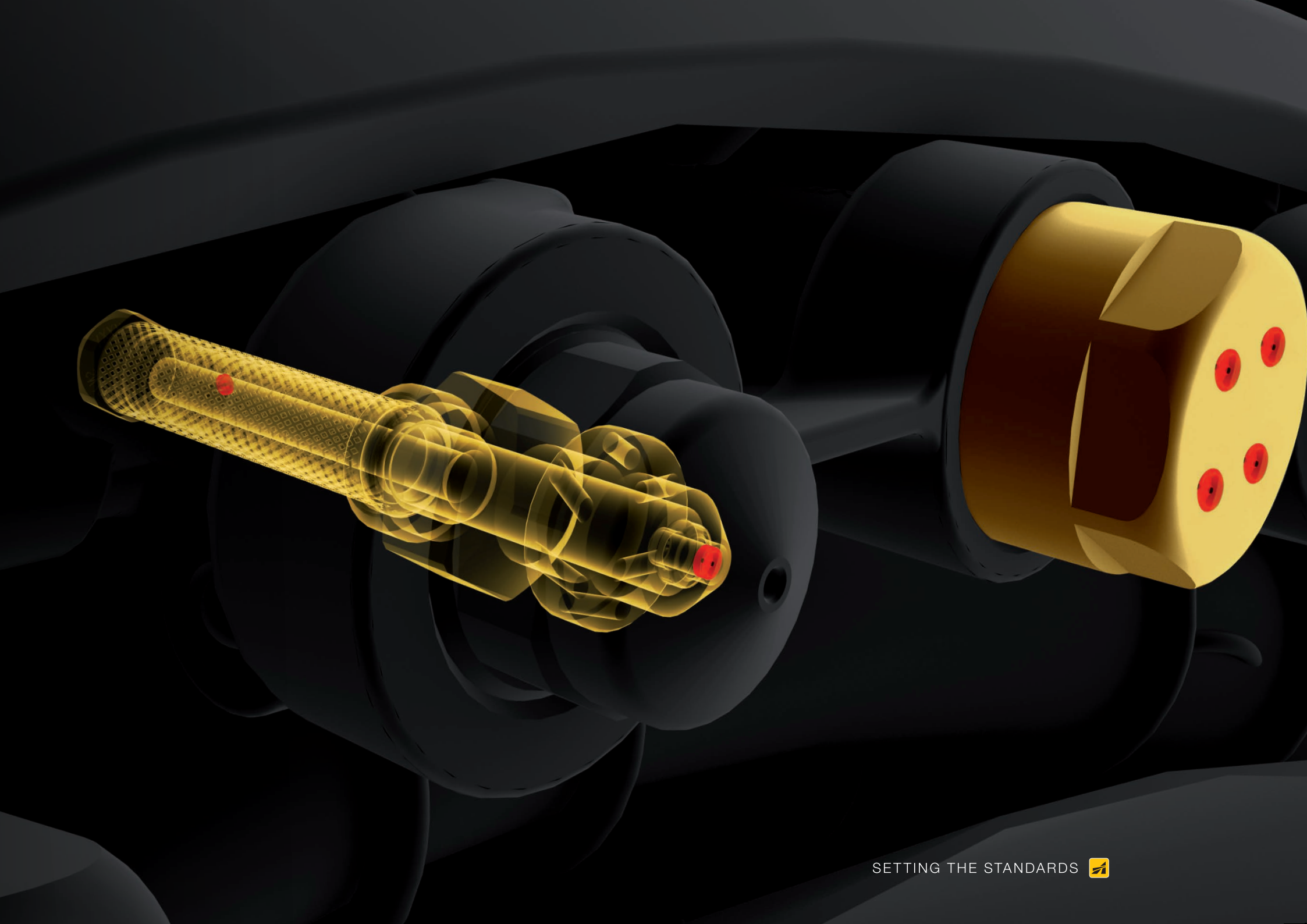
SNOW OF GEMSTONE QUALITY

Exceptional snow quality starts with the snow gun's most precise components, where the ideal air-water mixture is created.

All TR Series nucleators are equipped as standard with two ruby inserts in the bore, precisely metering a defined amount of water into the compressed

air. These ruby inserts provide extremely high wear resistance, even under aggressive water conditions and high operating pressures. They ensure consistently high-quality snow production for many years while significantly reducing wear and minimizing the need for maintenance and replacement of the nucleators.





THE TR FAMILY

INTUITIVE, SECURE, AND AUTOMATICALLY ALIGNED

To make the grooming team's daily work on the slopes as easy and safe as possible, the TR Series offers cutting-edge automation features, an ergonomic design, and ingenious mechanical solutions:



+ Easy to use & optimal function bundling

The TR series features automatic height adjustment and swivel. Thanks to the optimized design, all controls are conveniently accessible from the same side of the machine, making both models particularly easy to operate in day-to-day use: The touchscreen, control cabinet with main switch, height adjustment, and the rotation lock are now all located on a single side of the machine. This means that all central control elements are clearly grouped together and are directly accessible during operation or maintenance.

+ New undercarriage for greater flexibility

The newly developed undercarriage combines compact dimensions with a high degree of stability. Its supports can be flexibly extended or retracted depending on the application.

› **Compact transport position:** When retracted, they take up about 30 percent less space than previous models. This offers significant advantages during transport, as more machines can be loaded onto a single truck, while also reducing the space required for summer storage.

› **Stable footing on rough terrain:** The supports are extended when particularly secure footing is essential, such as when positioning the machine on steep terrain. They extend farther than on previous models, improving stability. This allows the machine to be flexibly adapted to local conditions – from a compact transport position to safe operation on challenging terrain.





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+ Optimal Production & Safety Position

Both the TR10 and TR9 automatically move into the preset vertical snowmaking position when starting up. Once snowmaking is complete, the machine automatically returns to its initial position, ensuring optimal protection against external damage while at rest. The swivel settings have also been optimized to ensure even more precise snow distribution on the slope. Both positions (starting and working positions) can be individually preset. This feature is unique to TechnoAlpin's TR series and is not offered by other manufacturers for mobile snowmaking machines.



+ Design perfection

Thoughtful design is reflected in every detail of the TR series, ensuring exceptionally convenient handling and maintenance. Around 90 percent of the components are identical both within the TR series and with the models in the TT series, simplifying spare parts procurement and inventory management. All protruding parts are fully integrated into the turbine housing, improving serviceability and transport safety. This comprehensive model refinement is consistently based on customer feedback and combines proven performance features with practical improvements.

INTUITIVE TOUCH CONTROL WITH OR WITHOUT DISPLAY

The TR Series offers intuitive and flexible machine operation. In day-to-day use, the system is controlled first and foremost by the ATASSpro software. A Bluetooth connection is also available for local maintenance work or at locations without Internet access.

+ Flexible equipment

In the future, mobile machines will also be available without a display. They can be easily operated via a smartphone or tablet app, providing a cost-effective and resource-efficient solution.

+ Durable and reliable display

Thanks to its high brightness, auto-dimming feature, and high contrast, the display remains easy to read no matter what the lighting conditions. It can be operated reliably even at temperatures as low as -30°C and while wearing thick work gloves.

+ Increased operational reliability

The controls have been rearranged. The main switch is located right in the work area, making it easily accessible.



TECHNICAL SPECIFICATIONS **TR9 & TR10**

A key feature of the TR series is its high degree of component standardization: Around 90 percent of the components are identical across the TR series and the TT series. This simplifies spare parts procurement and inventory management for customers, while also benefiting internal logistics.

This comprehensive redesign represents a meticulous refinement of the model down to the smallest detail, driven entirely by customer's input and feedback. The TR Series combines proven performance with practical improvements, providing an even more efficient foundation for operation and maintenance.



SETTING THE STANDARDS 

TECHNICAL SPECIFICATIONS

	TR10	TR9
Electrical properties		
Nominal voltage	400 V	400 V
Nominal frequency	50 Hz	50 Hz
Nominal current	39.7* A	32.3* A
Connection plug	5x63 A	5x63 A
Rated power – POWER UNIT (turbine + compressor)	21.8 kW	18.3 kW
Heating	1.3 kW	1.0 kW
Dimensions		
Snow gun length	1,770 mm	1,750 mm
Snow gun width	1,470 mm	1,470 mm
Snow gun height	2,030 mm	1,940 mm
Undercarriage height (big wheels)	540 mm	540 mm
Undercarriage height (small wheels)	385 mm	385 mm
Total height	2,570 mm	2,480 mm
Length (max.)	3,580 mm	3,580 mm
Length (min.)	2,010 mm	2,010 mm
Length (excluding drawbar)	3,110 mm	3,110 mm
Length (excluding front jack)	2,100 mm	2,100 mm
Width (max.)	2,610 mm	2,610 mm
Width (min.)	1,720 mm	1,720 mm
Track width (wheels)	2,300 mm	2,300 mm

	TR10	TR9
Weights		
Snow gun – compressor	708 kg	652 kg
Transport frame with jacks	150 kg	150 kg
Double lifting bracket	42 kg	42 kg
KIT for mobile undercarriage (GRPT007)	52 kg	52 kg
Various		
Operating temperature	-25 : +2 °C	-25 : +2 °C
Rotational speed	1,500 rpm	1,500 rpm
Turbine inclination	45°	45°
Horizontal rotation	360°	360°
Swinging (automatic)	180°	180°
Water		
Operating water pressure	8 : 40 bar	8 : 40 bar
Water filter	250 micron	250 micron
Water connection – Camlock	2 in	2 in
Nozzle configuration		
Nucleator	8	6
Fixed nozzles – Quadrijet type	8	6
Switchable nozzles – Quadrijet type	16	12

Subject to technical modifications.

The specifications may vary depending on the type of system and/or the country of installation (always refer to the wiring diagrams).

* Measurements at nominal voltage at 1,500 m above sea level and at a temperature of 0°C.



**SETTING
THE STANDARDS**