

VIRGA

In harmony with nature



Virga 1V



An economical solution designed

Virga 2V



A universal variant with four-level adjustment

Virga 3V



Most popular version with eight-level adjustment

Virga 3V+

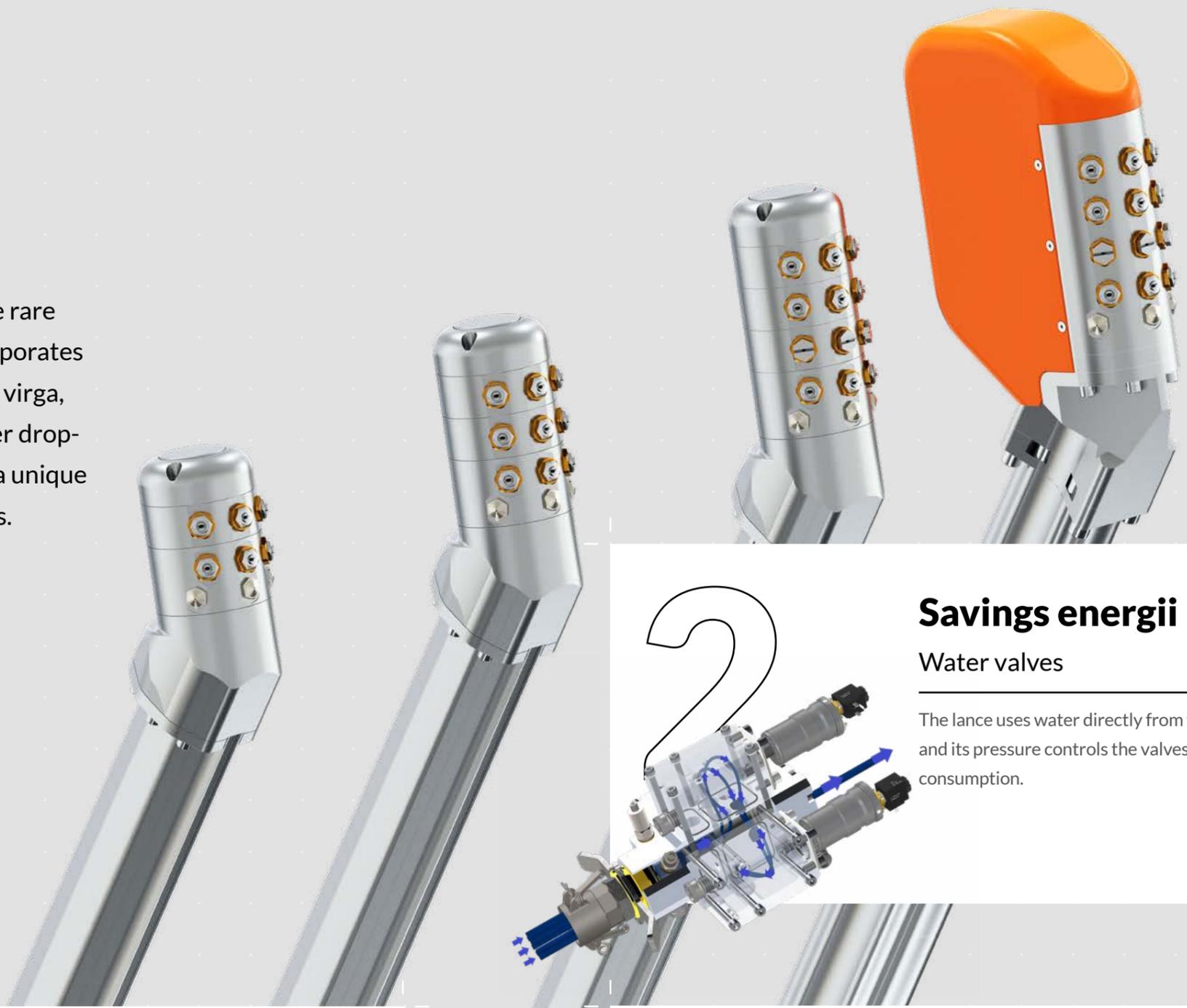


Improved head design integrated with water system

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The inspiration for the lance came from the rare virga phenomenon – precipitation that evaporates before reaching the ground. Unlike natural virga, the SUPERSNOW Virga allows falling water droplets to transform into a layer of snow with a unique structure, creating perfect slope conditions.

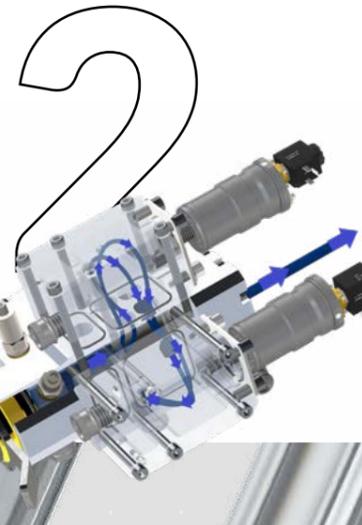


1

SUPERefficiency

Nucleator nozzle

The new design of the nucleator nozzle allows snow production at just -1.5°C wet bulb, consuming less than 2 kW of electrical power. VIRGA reaches maximum efficiency even at -7°C without affecting operating economy.



Savings energii

Water valves

The lance uses water directly from the pipeline to heat the body, and its pressure controls the valves, reducing electrical energy consumption.



Self-cleaning system

Water valve

The self-cleaning system of nucleator nozzle filters uses inlet holes to divert impurities to the water nozzles, protecting filters and nucleators from contamination. This reduces required maintenance tasks.

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Autonomous Virga

The autonomous Virga is a self-sufficient unit with full automation, operating independently based on data from its own weather station and pressure/temperature sensors. The lance analyzes environmental conditions and dynamically adjusts operating parameters accordingly.

System Virga (integrated with SNOWMATIC)

The system version is a fully autonomous lance managed by the central SNOWMATIC system. This allows:

- Full integration with the rest of the snowmaking infrastructure
- Centralized planning and snow production launch
- Automatic parameter optimization for the entire group of devices.

Ideal solution for large installations requiring scalability and centralized control.

Master/Slave configuration

To reduce investment costs without compromising quality, Virga offers a Master/Slave setup:

- One Master lance manages up to 5 Slave lances with simplified electronics
- Master is equipped with a control panel, its own weather station, and sensor suite for water and compressed air
- Parameters collected by the Master are transmitted to the Slaves, which independently monitor only water and compressed air pressure
- From the Master panel, the user can manage all connected Slaves – change settings, start, or stop operation.

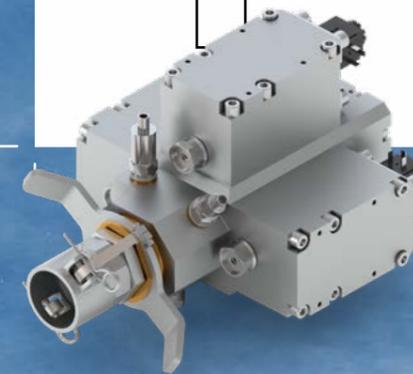
This configuration significantly reduces device costs while maintaining high performance and easy operation.

4

Reliable performance

Water unit

The water unit uses the energy of flowing water to heat its components, including valves – preventing freezing and extending system life.



5

Anti-icing protection

Head design

We've implemented 3 anti-icing mechanisms: a built-in heater, warm water filling the head volume, and appropriate geometry – all protecting the lance in extreme conditions.



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57 m³/h

Performance

Max. snow production



330-870 kg/m³

High snow quality

Range of produced snow density



7

Precision

Number of snow quality levels



330 l/min

Efficiency

Max. water consumption

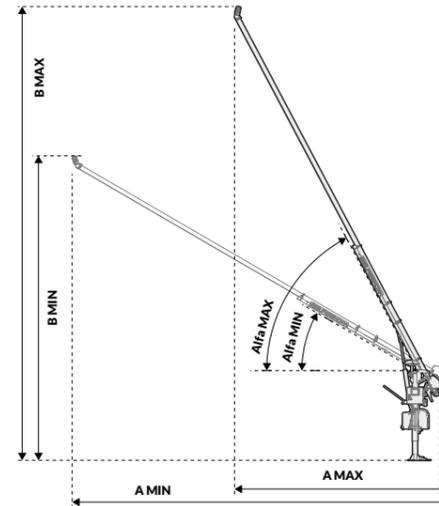


0,35 kW

Saving

In the central compressed air setup

Dimensions



L [m]	A min [m]	A max [m]
10	8,45	4,7
8	6,75	3,8
6	4,9	2,8
L [m]	B min [m]	B max [m]
10	7,45	11
8	6,45	9,3
6	5,45	7,5
L [m]	Alpha min	Alpha max
10		
8	30°	60°
6		

Technical specifications

1V 2V 3V 3V+

	15 m ³ /h	31 m ³ /h	57 m ³ /h	57 m ³ /h
maximum snow production	15 m ³ /h	31 m ³ /h	57 m ³ /h	57 m ³ /h
maximum water flow	85 l/min	180 l/min	330 l/min	330 l/min
water nozzles	6	9	12	12
number of adjustment levels	2	4	8	8
nucleator nozzles	3			
control type	master / slave			
maximum air flow	205 l/min at 6 bar			
operating water pressure	15-50 bar			
Electrical parameters				
nominal power consumption (with central air)	0,35 kW			
nominal power consumption (with piston compressor)	1,85 kW			
Weight / Dimensions				
weight (with lifting device)	From 209 kg to 298 kg (depending on configuration)			
Height	Up to 10.9 m (available configurations: 7.5 m and 9.3 m)			
Other				
nucleator nozzles	Nickel-plated brass and stainless steel			
water nozzles	Made of stainless steel			
foundation	Shaft construction, concrete base, mounting base, ground- ing bolt			
snow quality change possible	Yes			
noise level	71 dB acoustic power of the compressor			
water pressure adjustment method	Electric, on hydrant			
water filter mesh size	250 µm			
snowing width	5-15 m			
wet-bulb temperature at start	-1,5°C			
filter type	Mesh			
filter type	CEE 16A			
snow density range	330-870 g/l			
rotation range	360°			
profile tilt range	30°-60°			

Standard equipment

- Aluminum profile with head featuring three water nozzle sections and support profile
- Base for SUPERSNOW well with electrical box
- Water unit with three controlled water valves integrated in lance profile or located in the well
- Control panel
- Rubber water hose, 4 m
- Water pressure sensor
- Water temperature sensor
- Air temperature and humidity sensor
- Weather station
- LED work light, 12/24 V, 30 W
- Head heating
- Oil-free compressor 1,5 kW
- Power cable 5x4 mm², 4,5 m
- Hydrant drive cable, 4,5 m
- Mounting kit

Optional equipment

- SUPERWIRE or SUPERWAVE communication
- Linear actuator
- DV7 hydrant drive
- Overload protection adapter CEE 63 A/16 A 5p
- Protective mattress
- High-pressure rubber hose with heating cable and air prep unit, 4 m

*System lance does not include weather station or water temperature sensor; oil-free compressor and high-pressure hose available in select configurations

Snowmaking equipment

Lances: 1V, 2V, 3V, 3V+

Snow guns: 900T, 900H, 900A, 900MN, 700S, 700H, 700ASE, 600M

All Weather Snow

Booms and poles

H800

ST170

T400 / T600

Infrastructure

Retention tanks

Pipelines

Pump stations

Mobile pump stations MP200 and MP500

Cooling towers

Filtration systems

Electrical networks on slopes

Central air systems

Services and software

Snowline24

Quick on-site service

SNOWMATIC

Mobile app

Snowmaking systems design

Slope profiles design

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Technology that cares for snow

