

boschung 



Designed for
performance, engineered
for efficiency

Jetbroom
series



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Jetbroom 10000 A



Jetbroom 10000 T



Jetbroom 4000



Jetbroom A Boschung success story since 1985

Originally designed in 1985, the Jetbroom is the world-first high-speed snow removal machine intended for fast action on highways and runways. The Boschung engineered and patented chassis has been purposely developed to hold the broom in between the front and rear axle. Not only is Boschung the first company to come up with such an advanced development, the firm will push the envelop even further adding a blower unit in front of the sweeping unit. Equipped with two jets, one in the middle of the broom and the other on the outside, the Boschung engineered air / broom combination in between the axles is a revolutionary product that will open the door to an entirely new market.

Today in its 5th generation, the Jetbroom Series offer its same original concept with the most up to date cutting edge technologies.





Technology

Quattro-Jet System

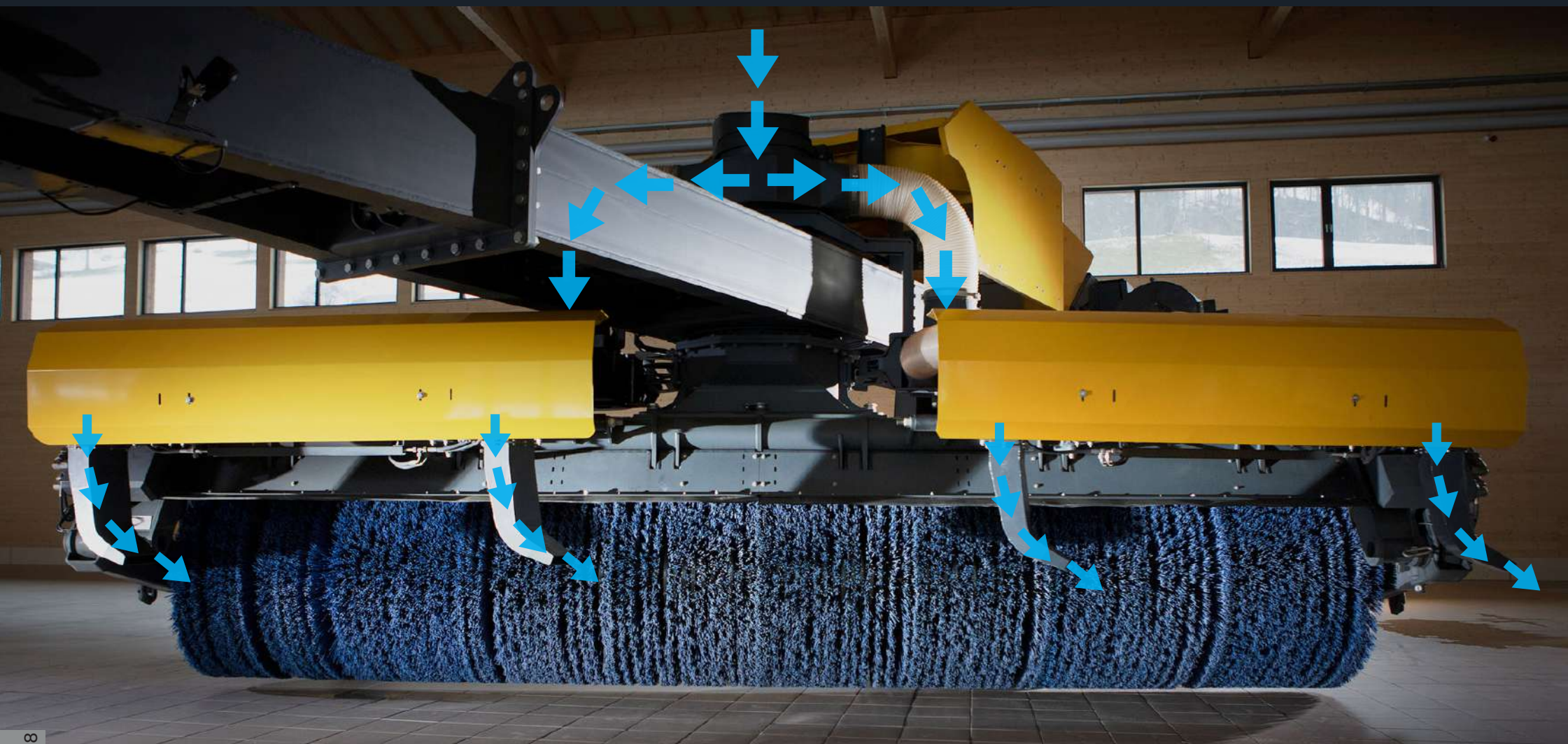
Cleaning wider, faster

The new Jetbroom Series is more than an evolution, it represents a fundamental re-engineering of the Jetbroom concept.

The new cutting-edge technology is made of two blowing unit systems: one behind the broom and one in front of the broom, the new and patented Quattro-Jet System. While the accelerated rotation of the broom lifts up snow, slush or water, the 4 jet nozzles fixed in the front of the broom blast everything lifted to the side. The second blower unit, placed behind the broom, blows off any leftover leaving behind a perfectly clean, nearly dry surface.

Cutting-edge technology

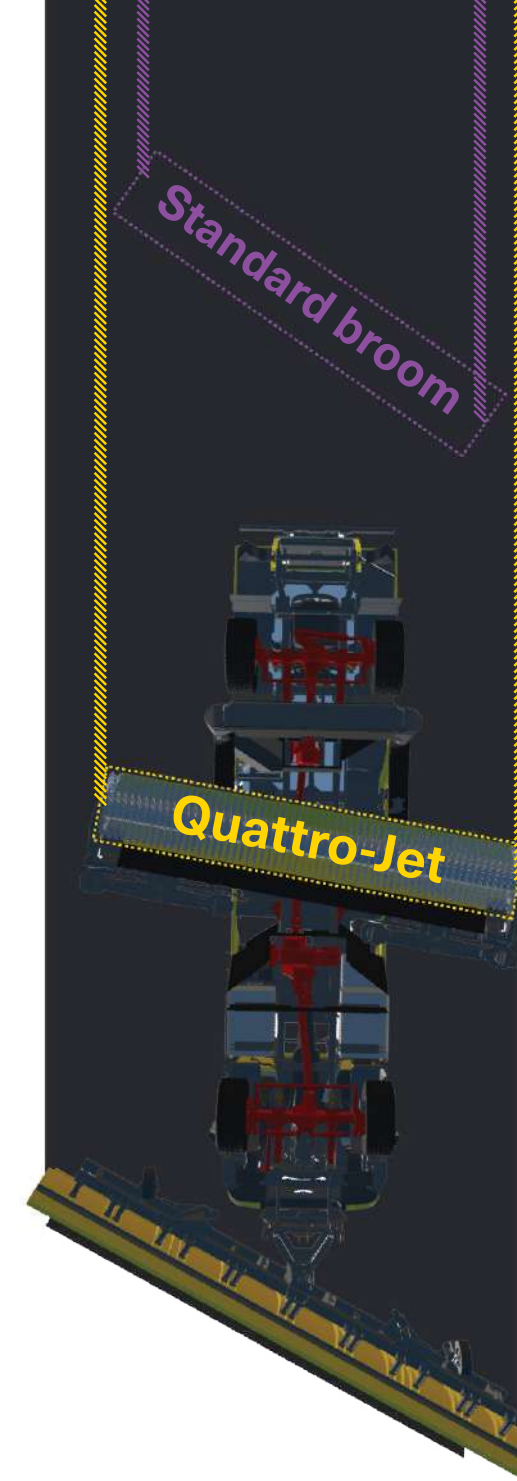
Not just a patented system, the revolutionary Quattro-Jet system built in front of the broom of the Jetbroom increases work efficiency by 30%. The direction of the air flow follows the position of the broom, ensuring a synchronized work, leaving the ground perfectly clean.



A wider angle of work for further performance

Quattro-Jet System
4 jets
built in front of the broom

Mounted directly in front of the powerful broom, the Quattro-Jet system supports the high-speed cleaning operation by laterally removing any snow, slush or water lifted by the rotation of the broom. The force of the 4 air jets that make the Quattro-Jet system, allows a lower angle of the broom during the operation, resulting in a wider cleaned area.



Jetbroom 10000 A

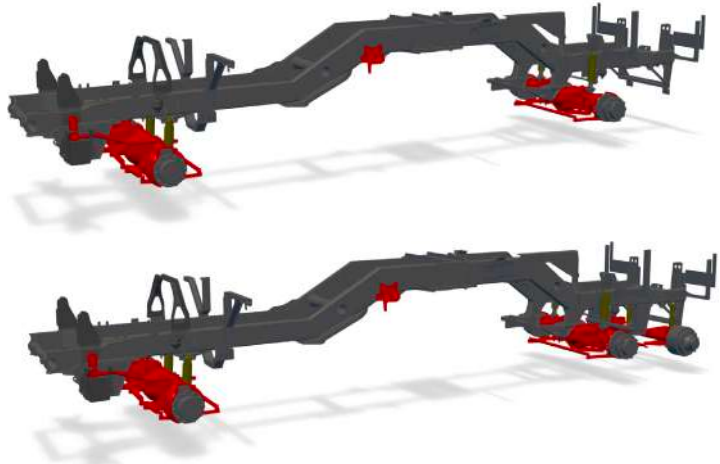
Progress, craftsmanship, multi-functional high-performance clearing system, the Jetbroom 10000 Compact and its iconic one-piece heavy-duty chassis, was built for extreme and engineered for efficiency. The over 6 m long broom is equipped with the new and patented Quattro-Jet, a system that enables a larger clearing width and an accelerated work speed. A system that makes the Jetbroom 10000 the most powerful work tool of today.

Technology	Snow Plow Width	Broom Length	Broom Diameter	Multipurpose Vehicle
<u>Quattro-Jet System</u>	<u>6.4 to 8.4 m</u>	<u>4.2 to 6.24 m</u>	<u>1.17 m</u>	<u>Summer and Winter application</u>



Parallel paths of performance

At the core of the Jetbroom is its chassis. A unique piece of steel, shaped and built to carry the weight of the machine and its powerful equipment. Available in 2 or 3 axles, the chassis is offset upwards between the front and back axle allowing space for the 1.17 m diameter broom and the Quattro-Jet system unit to attach.



Driven and steered front and rear axles
2 or 3 axle

With planetary hubs holding a 14 t load on main axles and an extra 7 t load on 3rd axle

Built for efficiency
Two engines

Work and drive Mercedes EURO 6 engines

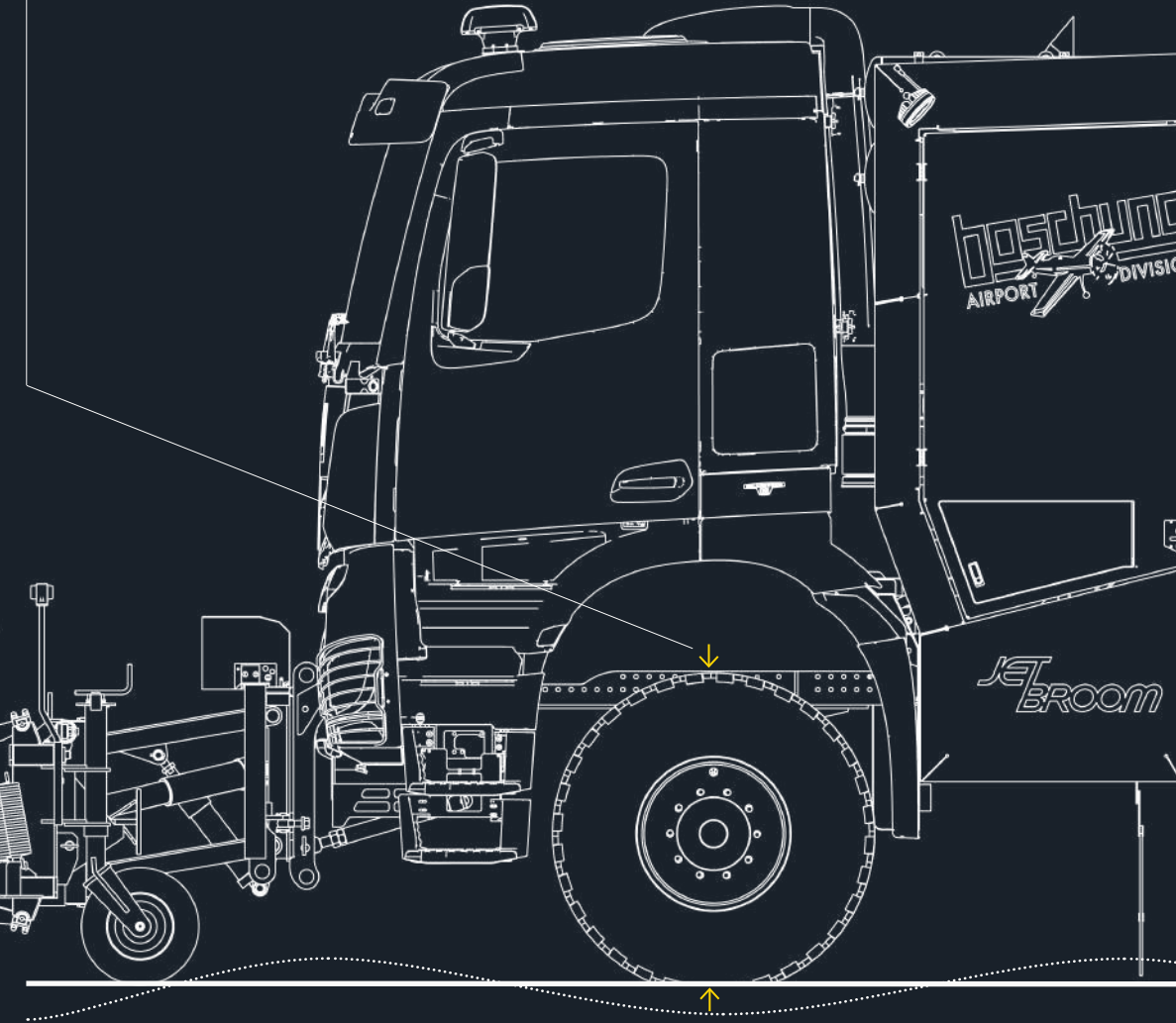


A transmission designed for
Heavy trucks

Permanent all-wheel mechanical drive system on main axles especially designed for heavy conditions

Front and rear
Hydraulic suspension system

- Perfect balance of the vehicle with the different payloads
- Stable vehicle at any time
- Can be lifted and lowered to ease the mounting and dismounting of the work equipment



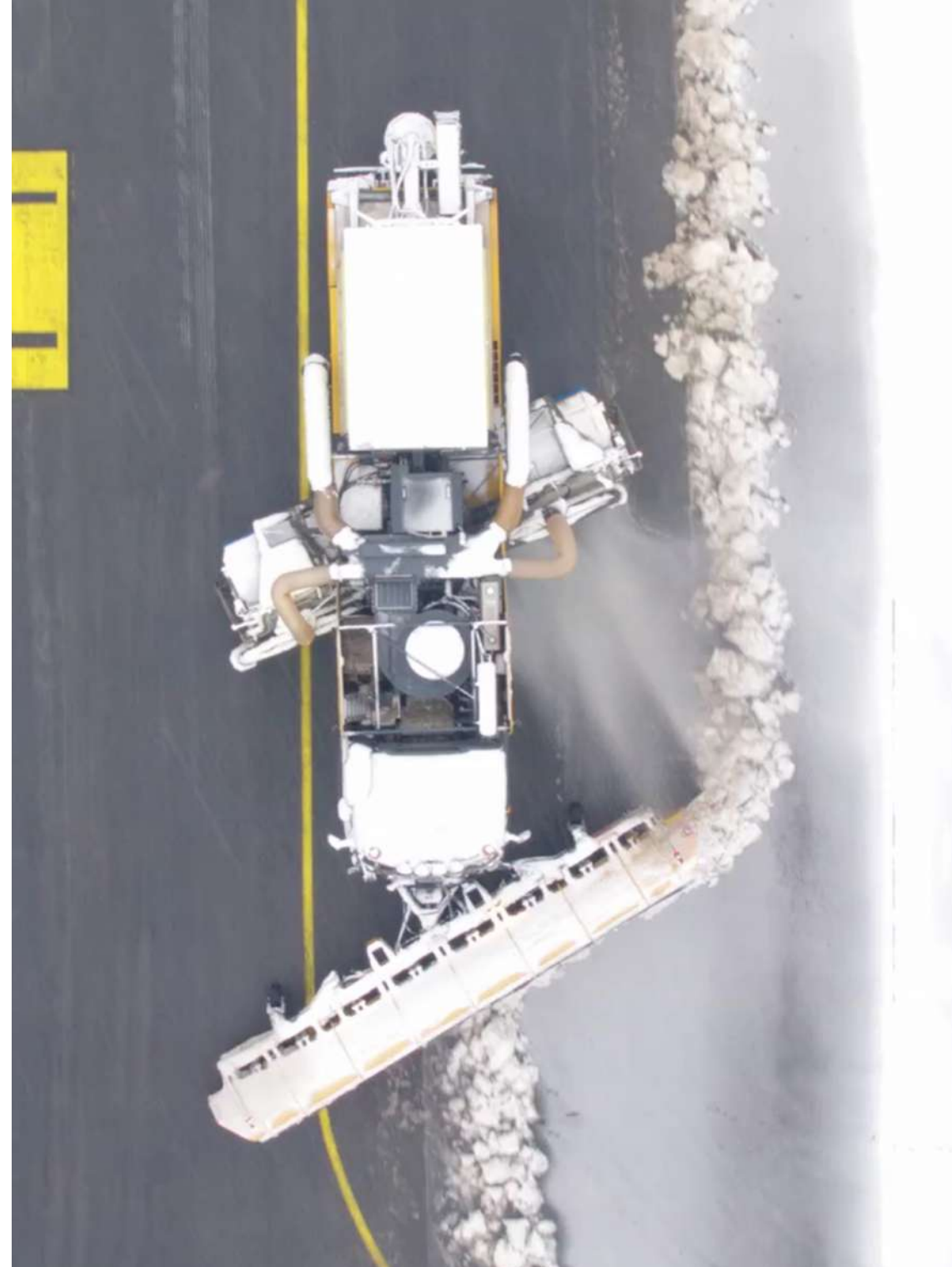
A vehicle designed to be compact for efficient storage and short convoy

Width
2,500 mm

Length
from 10,400 mm to 10,700 mm

2 or 3 axle version

The all-axle drive Jetbroom and its powerful lines pushes the boundaries of extreme.



Agility of the dynamic all-wheel steering

Crab steering

for agility

Low speed maneuvering

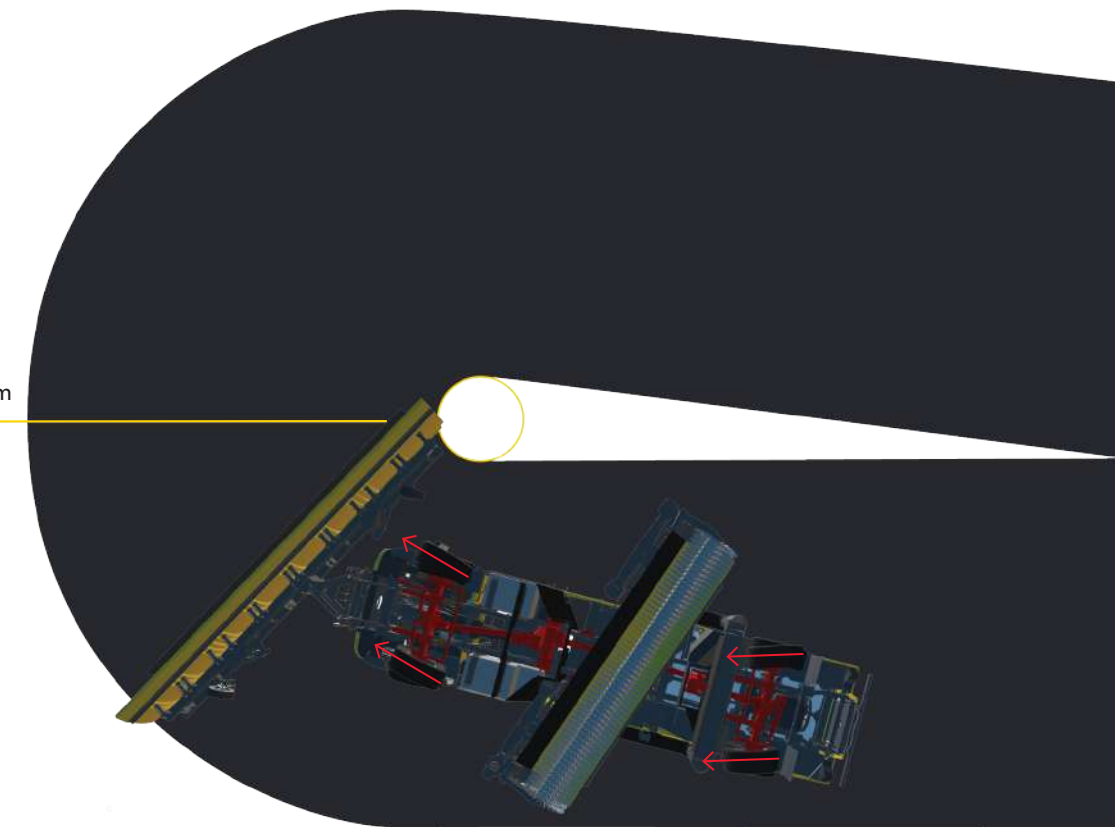
for ease

High-speed operation stability

for security

By bringing all wheels into the equation, the dynamic all-wheel steering of the Jetbroom improves minimal turning radius and stability during high speed operations.

Turning radius 8,775 mm





One machine, year-round runway maintenance

The Jetbroom was designed to respond to your needs all year round. To reduce the risk of Foreign Object Debris (FOD), the Jetbroom offers different configurations and equipment, making this one machine the largest high-speed clearing machine on the market. By reversing the blower unit into a suction unit, the sweeper-blower turns into a high-performance sweeper with a powerful suction and a cleaning width of 4.2 m. Remove the leftover glycol quickly in between aircraft deicing with the Jetbroom 10000. Swiss engineered maximum efficiency, a machine fully adapted to today's modern aviation.



Winter Equipment

Snow Plow

Width

from 6,400 mm to 8,400 mm

Working width

from approx. 5,440 mm to approx. 7,120 mm

Radial turbine

Supplying the suction/blowing units

Quattro-Jet System

Patented blowing unit system installed in front of the broom

De-icing unit

→ Solid chemicals or mixed chemicals with the IMS de-icing technology

→ FullWet® liquid chemicals with the SDA de-icing technology

Rear blowing unit

Installed behind the broom or at the rear of the vehicle

Broom

Diameter

1,170 mm

Length

from 4,200 mm to 6,240 mm

Working width

from approx. 3,900 mm to approx. 5,800 mm

The advanced de-icing technology of the Jetbroom Series

Engineered for maximum efficiency, the Jetbroom Series combines high-performance snow removal with state-of-the-art high-capacity de-icing in a single run.



IMS
Solid chemicals or mixed chemicals with the IMS de-icing technology



SDA
FullWet® 100% liquid chemicals with the SDA de-icing technology

One unit covers
two cleaned lines

Safety with the most efficiency

IMS

Solid capacity
up to 5m³

Liquid capacity
up to 2,660 l

Spreading width
up to 12 m

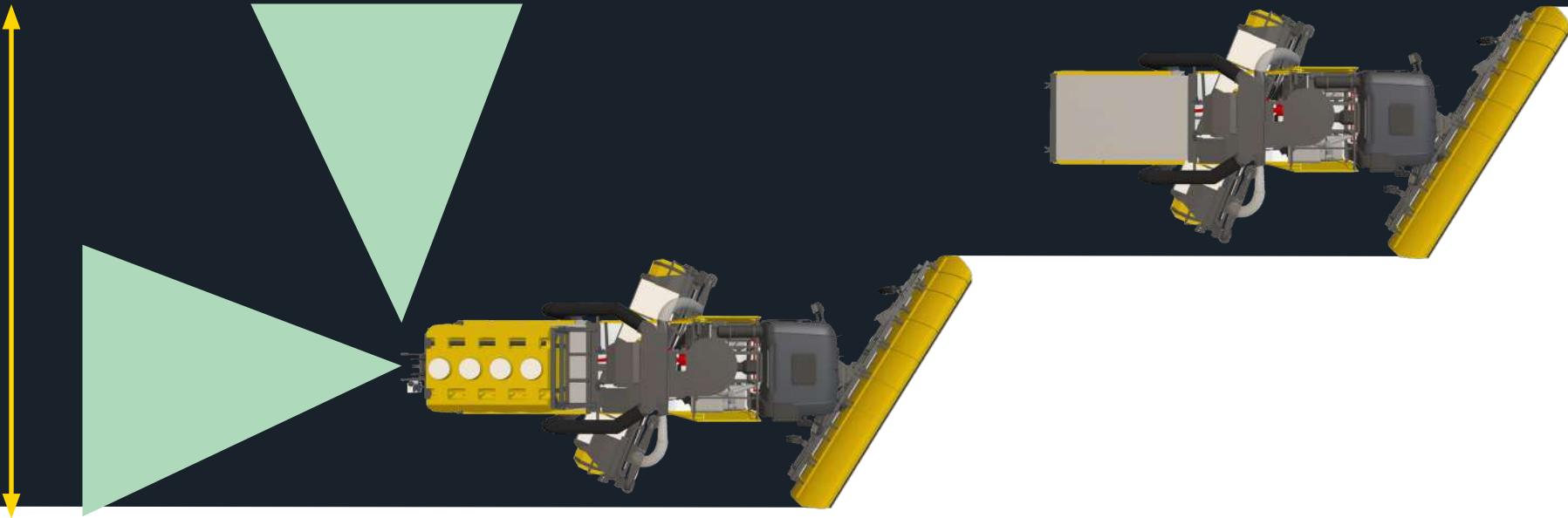
over spinner discs

SDA

Liquid capacity
up to 6,600 l

Spreading width
up to 15 m

over triple spray head system



Progress meets velocity

Scope

11 Jetbroom 10000 with Quattro-Jet System instead of 12 regular sweeper blower

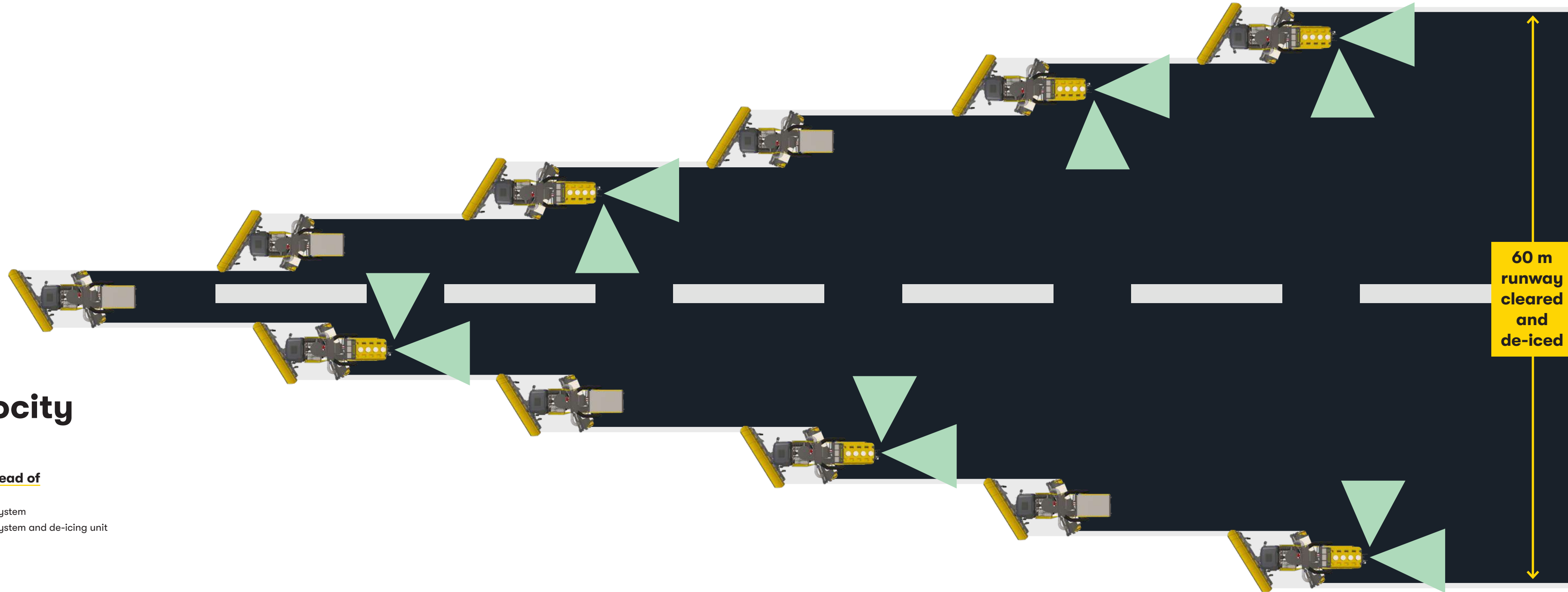
5 Jetbroom 10000 equipped for snow removal with the Quattro-Jet System

6 Jetbroom 10000 equipped for snow removal with the Quattro-Jet System and de-icing unit

The result

60m of black runway

cleared and de-iced



60 m
runway
cleared
and
de-iced

Summer Equipment

Magnetic bar
Width
from 2,500 mm to 4,200 mm

High Pressure Washer
Width
2,500 mm

Radial turbine
Supplying the suction/blowing units

Hopper
Equipped with hand suction hose

Broom
Diameter
1,170 mm
Length
4,200 mm

Front Suction Unit
Width
4,200 mm

Rear air blower
Installed behind the broom or at the rear of the vehicle



Specifications

→ **Dimensions (approx.):**

Length 2-axle chassis	10,400 mm
Length 3-axle chassis	10,700 mm
Chassis width	2,500 mm
Chassis height	3,775 mm
Turning radius	8,755 mm

→ **Weights:**

Front axle	14 t
Rear axle	14 t
3rd axle	7 t

→ **Engine:**

Drive engine	EURO 6 330 kW / 450 hp
Auxiliary engine	EURO6 330 kW / 450 hp

→ **Transmission:**

Automatic gear box type for heavy trucks	PowerShift 3
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→ **Electrical system:**

Power supply	24 V
2 batteries	12 V / 220 Ah
Alternator	28 V, 150 A

→ **Drive and steering:**

Full mechanical	4x4 drive all-wheel steering
Crab steering	

→ **Driving performance:**

Driving speed	0 - 80 km/h
Working speed depending on operational conditions	up to 60 km/h

SNOW REMOVAL

Quattro-Jet system	Optional
Broom	Cassette or wafer (steel, poly, mixed)
Broom diameter	1,170 mm
Broom length	from 4,200 mm to 6,240 mm

Quattro-Jet broom working width	from approx. 3,900 mm to approx. 5,800 mm
Standard broom working width	from approx. 3,640 mm to approx. 5,500 mm

Snow plow

Plow width	from 6,400 mm to 8,400 mm
Plow working width	from approx. 5,440 mm to approx. 7,120 mm

DE-ICING

Liquid chemicals De-icer installed on the platform (serial tank system) with spray head technology (left, right, middle inside vehicle width)	Spreading width 3 m - 15 m
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Solid chemicals De-icer installed on the platform (steel hopper) with spinner disc technology	Spreading width 3 m - 12 m
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Mixed chemicals De-icer installed on the platform (steel hopper with side tanks) with spinner disc technology	Spreading width 3 m - 12 m
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SUMMER EQUIPMENT

High-speed vacuum	
Hopper capacity	9 m³
Fresh water capacity	up to 3,000 l
Sweeping width	4,200 mm

Rear suction unit

Width	2,500 mm
	Installed to the hopper at vehicle rear to suck any kind of liquids (water, oil, glycol, etc)

Magnetic bar

Width	2,500 mm - 4,200 mm
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Subject to technical modifications without prior notice. 03/2022

Jetbroom 10000 T

High-performance clearing system of progress, the Jetbroom 10000 Towed and its newly engineered chassis concept was built to perform with the most efficiency on the busiest airports of the world. The over 6 m long broom is equipped with the new and patented Quattro-Jet system, enabling a larger clearing width and an accelerated work speed during the most extreme winter conditions.

Technology
Quattro-Jet
System

Snow Plow Width
6.4 to 8.4 m

Broom Length
4.2 to 6.24 m

Broom Diameter
1.17 m



Bold path of performance

The Boschung developed Jetbroom T chassis was designed and built to easily perform winter services during heavy operating conditions. Made out of three key elements, the corner chassis houses the work engine along with the technical installations, the longitudinal beams holds the sweeping/blowing unit and the fork couples the Jetbroom to the towing vehicle.



Made for heavy winter operating conditions

Fork

- Strong binding element
- Support point adjustable in height and adapted to the carrier vehicle

Longitudinal beam

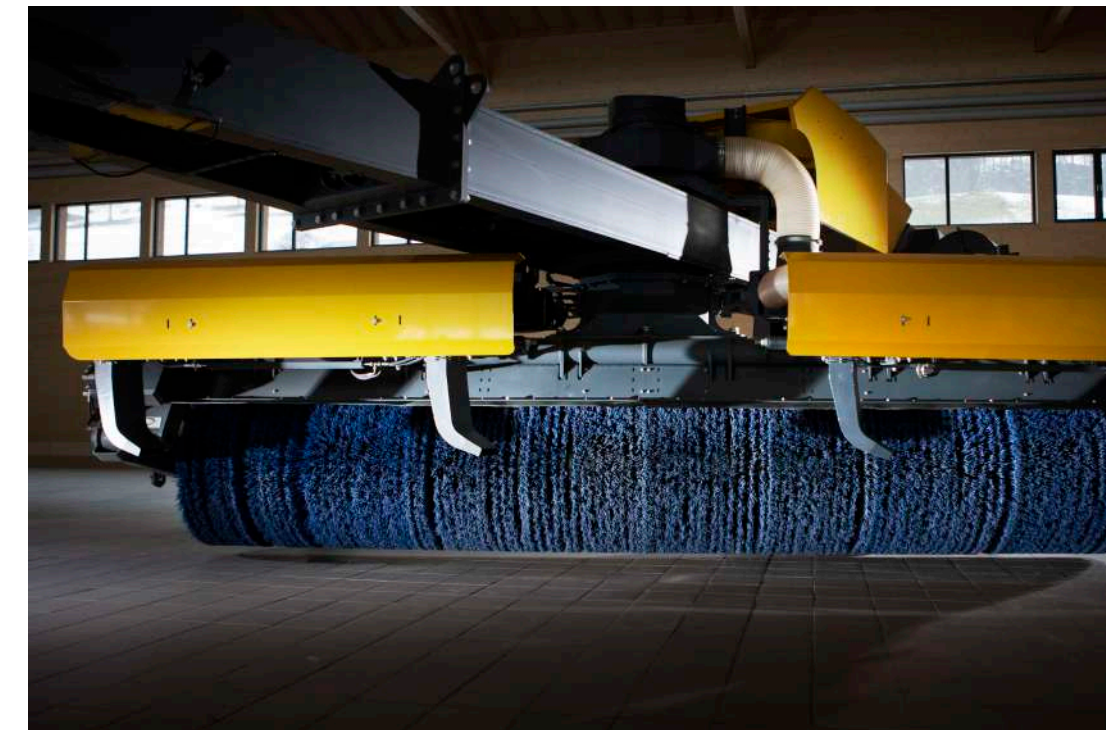
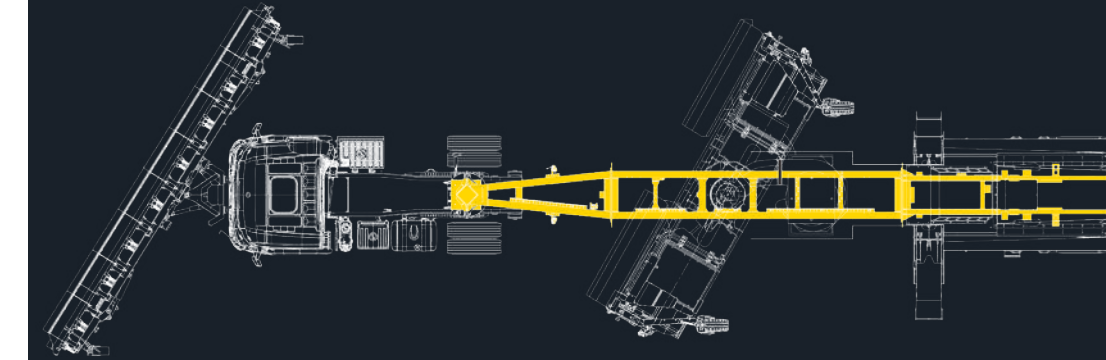
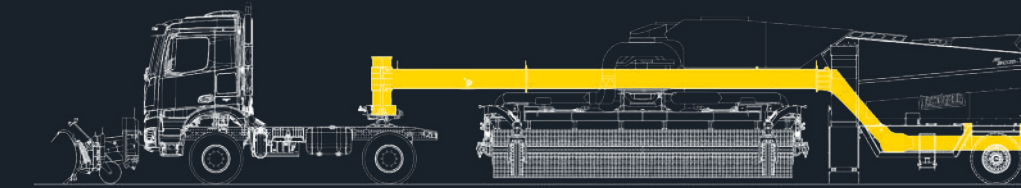
- Variable length depending on the broom width

Corner Chassis

- Accommodates all technical equipment needed for operation

An intelligent swiveling system for easy storage and fast deployment

Built with maximum efficiency in mind, the longitudinal beams are adjusted to the length of the broom and will hold enough space to store the 1.17 m diameter broom completely under the chassis. The patented connecting system automatically links and unlinks the Quattro-Jet blowing unit for an effortless swiveling of the broom and fast intervention.



Snow Plow

Width

from 6,400 mm to 8,400 mm

Working width

from approx. 5,440 mm to approx. 7,120 mm

Fork

Support point is adjustable in height
and can be adapted to the carrier
vehicle

Quattro-Jet System

Patented blowing unit system installed
in front of the broom

Corner chassis

Accommodating the work engine along
with all technical equipment

Broom

Diameter

1,170 mm

Length

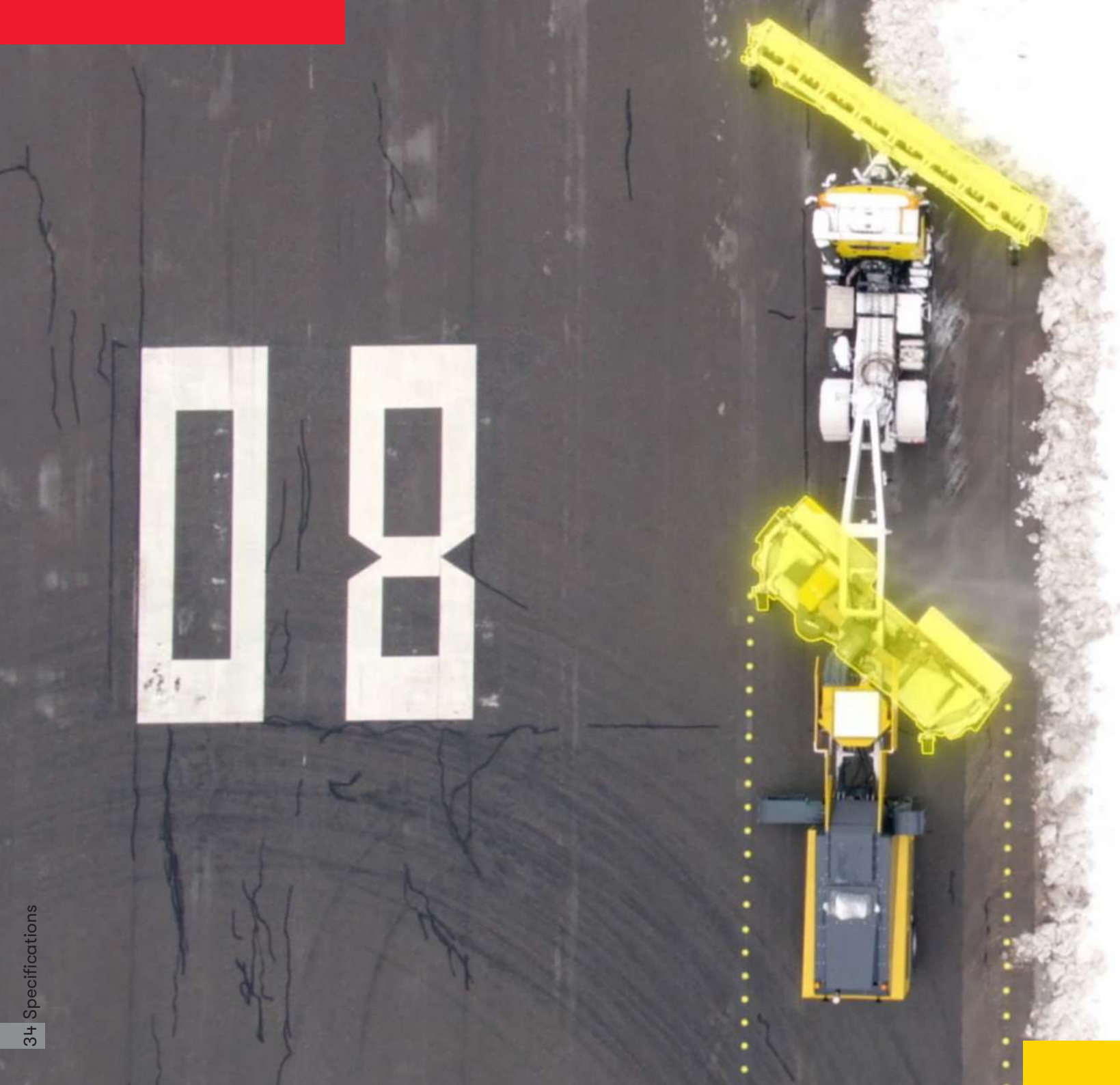
from 4,200 mm to 6,240 mm

Working width

from approx. 3,600 mm to approx. 5,800 mm

Rear blowing unit

Installed behind the broom



Specifications

→ Dimensions (approx.):

Maximum length	14,300 mm
Width	2,500 mm
Height	3,250 mm

→ Weights:

Rear axle	max. 11 t
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→ Engine:

Auxiliary engine	EU Stage IV / US TIER 4f 350 kW / 470 hp
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→ Electrical system:

Power supply	24 V
2 batteries	12 V / 225 Ah

→ Steering:

Rear axle steering	
Sensor on the king pin connector for steering angle	

Subject to technical modifications without prior notice. 03/2022

SNOW REMOVAL	
Quattro-Jet system	Optional
Broom	Cassette or wafer (steel, poly, mixed)
Broom diameter	1,170 mm
Broom length	from 4,200 mm to 6,240 mm
Quattro-Jet broom working width	from approx. 3,900 mm to approx. 5,800 mm
Standard broom working width	from approx. 3,600 mm to approx. 5,500 mm
Snow plow	
Plow width	from 6,400 mm to 8,400 mm
Plow working width	from approx. 5,440 mm to approx. 7,120 mm

Jetbroom 4000

Built to give unrestrained high-speed performance, the Jetbroom 4000 and its kinetic design is compact and highly maneuverable. With a 13.7 m turning circle on the outer-wheel, the Jetbroom 4000 exceeds expectations when it comes to flexibility and mobility around narrow apron areas. Equipped with a 5.4 m wide snow plow, a 4.2 m long broom and a blowing unit placed behind the rear axle, the Jetbroom 4000 is a machine engineered with innovative and progressive technologies.

Snow Plow Width
5.4 m

Broom Length
4.2 m

Broom Diameter
920 mm



Progressive path of performance

With a perfect balance of smart design and impressive performance for high-speed snow clearance capacity, the Jetbroom 4000 is ideal for runways, taxiways and narrow apron areas.



Designed to be compact and workable

Experience the agility and dynamic workability of the Jetbroom 4000, engineered with innovative and progressive technology providing the perfect balance of smart design and impressive performance. The lower cab height gives it an easy access making the Jetbroom 4000 a user-friendly working vehicle.

Maneuverability meets efficiency

The powerful Jetbroom 4000 merges exceptional performance and fast snow clearing operation. The very small turning radius of the vehicle is achieved by a special rear axle configuration giving the Jetbroom 4000 the ability to work on runways, taxiways and apron areas with ease and efficiency.



Intelligent and innovative snow removal equipment

Broom Diameter

920 mm

Length

4,200 mm

Snow Plow Width

5,400 mm

Fixed directly onto the chassis, the mounted broom frame can hold the weight of accumulated snow or other forces without it having any lift effect on the inside of the broom. Built with a two-cylinder system, the broom is supported and adjusted to perfection ensuring a perfect work at all time and in all condition.

Connected to the traction drive engine, the snowplow can also be used without the work engine.

The bold blowing unit at the back of the Jetbroom 4000 has been engineered in the most thoughtful way, leaving no chance to snow, slush and other contaminants. The powerful airflow is pushing everything out laterally ensuring the surface is left clean behind.



Specifications

→ Dimensions (approx.):

Length 2-axle chassis	9,700 mm
Chassis width	2,500 mm
Chassis height	3,880 mm
Turning circle on outer-wheel	13,700 mm

→ Weights:

Front axle	11 t
Rear axle	11 t

→ Engine:

Drive engine	EURO 6d 265 kW / 360 hp
Auxiliary engine	EU Stage V 260 kW / 354 hp

→ Transmission:

Automatic gear box type for heavy trucks	PowerShift 3
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→ Electrical system:

Power supply	24 V
2 batteries	12 V / 220 Ah
Alternator	28 V, 150 A

→ Drive and steering:

Full mechanical	4x4 drive all-wheel steering
Crab steering	

→ Driving performance:

Driving speed	0 - 80 km/h
Working speed	Up to 60 km/h
depending on operational conditions	

SNOW REMOVAL	
Quattro-Jet system	Optional
Broom	Cassette or wafer (steel, poly, mixed)
Broom diameter	920 mm
Broom length	from 4,200 mm variable sizes upon request
Broom working width	from approx. 3,560 mm
Snow plow	
Plow width	from 5,400 mm variable sizes upon request
Plow working width	approx. 4,480 mm

DE-ICING	
De-icer installed between cab and auxilliary engine with spray head technology (left, right, middle inside vehicle width)	Spreading width 3 m - 15 m Capacity approx. 3,000 l

Subject to technical modifications without prior notice. 03/2022





Management

Vpad

**High performance meets
intuitive technology**

Intuitive and sophisticated, the Vpad offers a simplified interface to control nearly every aspect of your working experience. The engaging operating system and its 7inch touchscreen color display is the link between your mind and your machine. The voice guidance system was engineered to increase safety and help the driver monitor its working adventures while keeping his focus on the runway while the automated GPS controlled spreading ensure the work is done with most efficiency and safety.

Intuitive, sophisticated and wireless operating system

Be connected for smart fleet management

With the refined engineering of Boschung and the limitless possibilities of today's connectivities, bVision, the Boschung Road and Runway Management platform gives you the keys to dominate the seasons. Experience the connection of tomorrow and bring together all the tools you need for smart decision making on your runway.

→ Course tracking

Follow the path of the Jetbroom live or analyze it later.

Time at the start of the routine, km traveled, current speed and average speed.

→ Work performance analyzing

Total operating hours and more

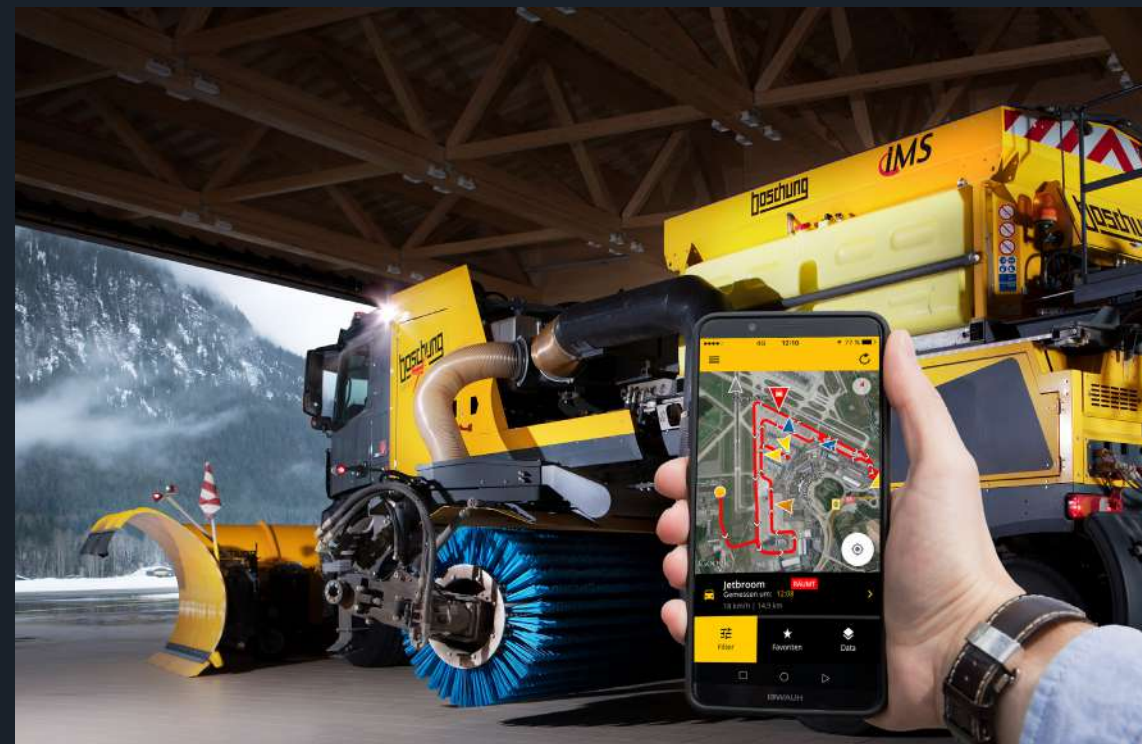
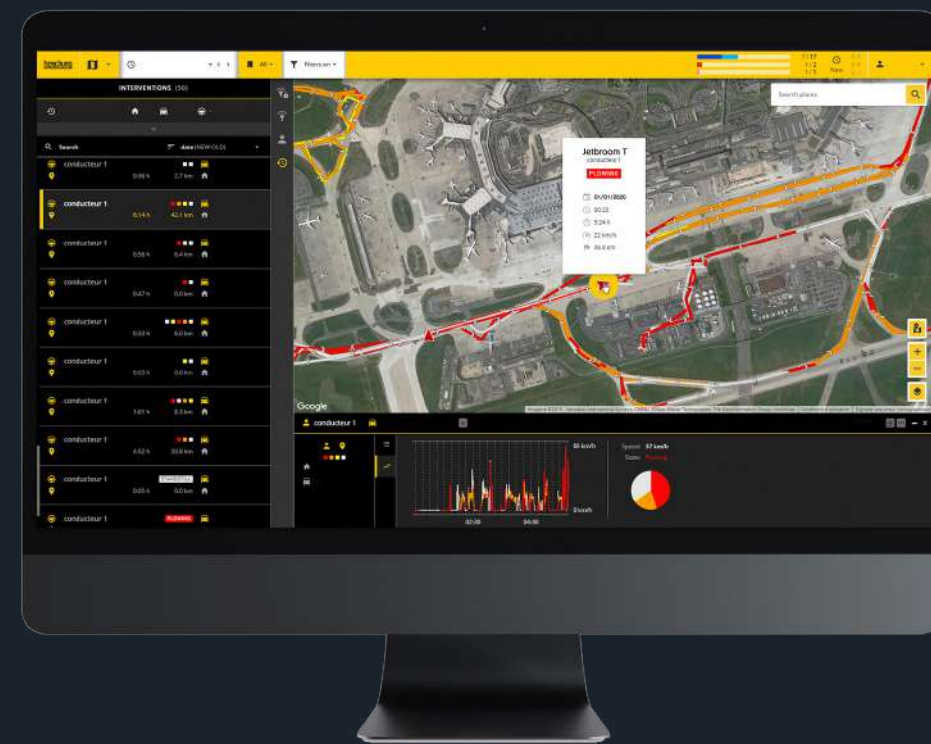
→ Keep track of the equipment

Analyze the equipment in use.

→ Outside air temperature

→ Mission planning

Organize and schedule your missions easily and with efficiency. Trigger missions and send them directly to your operators and to your vehicle's control units.



boschung

Surface Condition Management

A single source solution built
for your needs

We Detect



We Act



We Manage





boschung

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