evo 2

WM ICE TECHNICS

Snow tank volume
4.1 m³ / compacted 5.1 m³

Water tank volume
1,200 l or 1,400 l or 1,700 l
+ Snow tank-water tank connection
2,550 l or 2,750 l or 2,950 l

Blade width
2,300 mm or 2,500 mm
Blade change < 60 seconds

Fields of operations
Pro / Heavy

CRAFT

HIGH PERFORMANCE FOR LARGE-SCALE OPERATIONS

Powerful drive with diesel, petrol or electric engines together with a large snow and water tank capacity: The WM evo² has been purpose-designed for re-surfacing large stadiums and ice rings. Technically sophisticated, with a quick blade-change system and numerous extras, the WM evo² is the perfect partner for professional resurfacing of ice surfaces over 4,200 m².

WM evo²
Max Aicher Arena

„Our arena is a training centre for international teams and a venue for major sporting events. Perfect ice quality is an absolute must! With the WM evo², I can guarantee perfect ice rinks."

MAX AICHER Arena INZELL

Toni Doppler
Ice expert at the Max Aicher Arena
Inzell / Germany

EVERYTHING UNDER CONTROL IN THE DRIVER'S CAB

The WM evo[2] is a guarantee of outstanding comfort for the driver and boasts a full, unobstructed view whether you're driving cabin-free or with all-round glazing. Three steps provide easy entry to the vehicle. All important information is clearly visible at a glance on the high-definition colour display, and all the main functions are keyboard-controlled. At a simple press of a button the automatic mode begins all work operations in a pre-defined order, while the height-adjustable Grammer suspension seat provides outstanding comfort.

evo 2
blue power

ULTRA-LIGHT BLADES, CHANGED IN 60 SECONDS

The WM evo² quick blade-change system eases working life enormously: Blades can be changed in just 60 seconds! The blades are made in a special steel, giving you both an above-average service life and an impressive weight: They are just 3.5 kilos. Blade changes can be carried out quickly and safely. Two blades together with all accessory equipment are supplied as standard in a practical wooden transport box.

EASY, QUICK AND PRECISE +

LOW INJURY RISK +

IMPROVED QUALITY OF ICE +

INTEGRATED EDGER FOR END-TO-END RINK PERFECTION

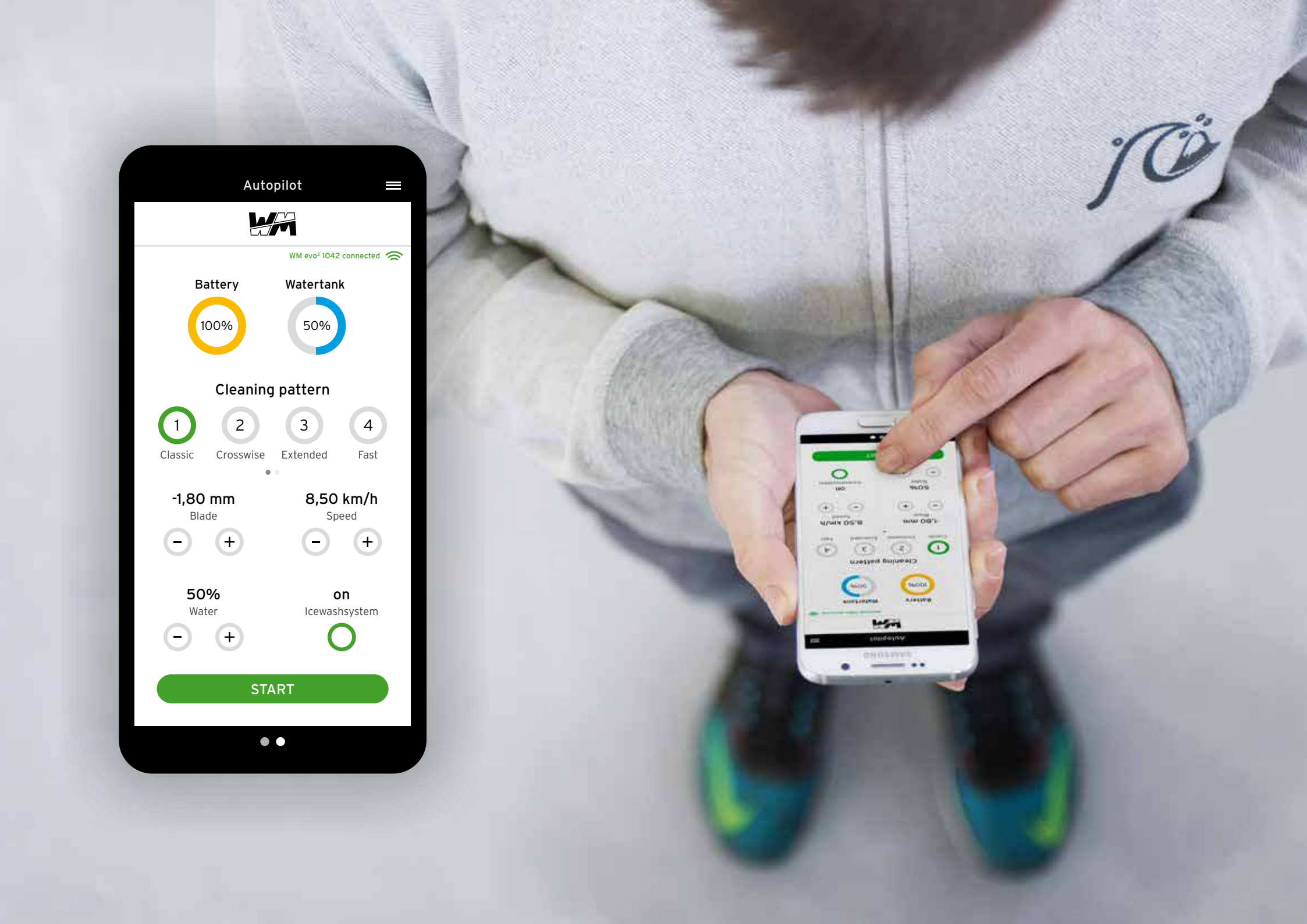
The edger is fixed to the body of the WM evo², guaranteeing you outstanding stability and performance. It can be operated easily and safely from the driver's seat. The innovative horizontal spring-loaded system with guide wheel ensures that the edger follows the contours of the rink to perfection, and planes the ice evenly, rapidly and cleanly. Edging and subsequent cleaning of the ice surface with the swivel brushes can be carried out in one simple step. The edgers are positioned between the axels and in front of the brush, to ensure an unrestricted overview of the vehicle. When not in use, the edgers are stored between the wheels, and do not affect operation in any way.

NEED MORE THAN 2,500 LITRES OF WATER? NO PROBLEM!

When you're building up ice depth or using the water sprayer, more water is a must. The WM evo² has it all taken care of! The water and snow tanks can easily be connected into one water tank with a total volume of around 2,550 litres of water. No more standing in cold water and tiresome tugging on hoses: All operations can be carried out from the comfort of the driver's cab - there's more than enough water to do the job.

Example: 1,400-litre water tank & 1,350-litre snow tank = 2,750 litres of water

evo2
blue power


Autopilot
WM evo² 1042 connected
Battery
100%
Watertank
50%
Cleaning pattern
1
Classic
2
Crosswise
3
Extended
4
Fast
-1,80 mm
Blade
8,50 km/h
Speed
50%
Water
on
Icewashsystem
START

THE FUTURE LIES IN AUTOMATION

The first step towards the future was that of the innovative integrated automatic mode, which activates all operations in a pre-defined order through the press of a button. With WM evo² autopilot, WM ice technics have now taken the next leap forward, and automisation in the work place has reached a new peak. The self-driving vehicle covers the whole ice rink on a predefined route, and is capable of completely resurfacing the ice rink without a driver. WM evo² Autopilot is controlled by means of an app, which displays all important parameters, while the redundant safety system guarantees that the vehicle can be stopped at all times when on autopilot mode. The best assistant an ice-master could ever want!

BATTERY, CHARGER AND MAINTENANCE

High-performance traction batteries

State-of-the-art battery charger

Battery filling system

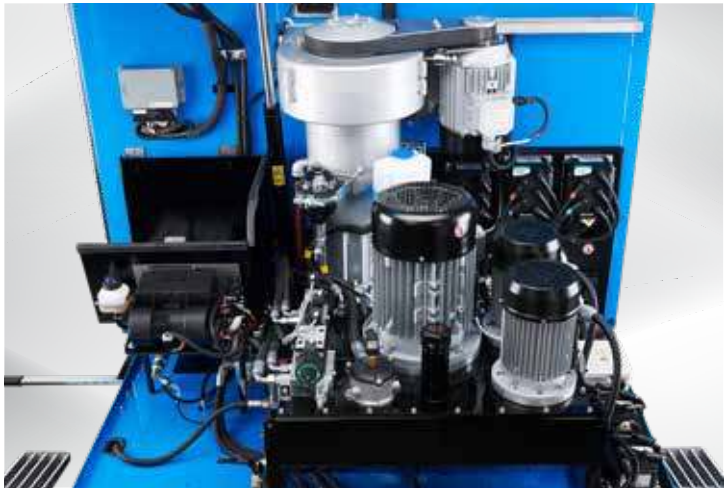
The robust, sealed lead-acid battery with tubular plates and the long-life Fronius charging system are a top-quality combo. The charging system is highly intelligent, and automatically recognises the age and state of charge of the battery, and charges exceptionally rapidly, which also means energy savings. Water is pumped rapidly into the battery via the centralised filling system.

REDUCED ENERGY COSTS +

LONG-LIFE BATTERIES +

EASY TO USE +

MAINTENANCE



Remote maintenance

The entire engine technology is easily accessible just by lifting the cab. This means that mechanics can carry out their work quickly and cleanly, which in turn saves on time and service costs. Our team also use remote monitoring to keep an eye on your vehicle monitor and rectify any faults which may occur.

COST EFFICIENT +

FREE AND EASY ACCESS +

SKILLED REMOTE MAINTENANCE +

ELECTRIC

Motor	7 asynchronous motors
Total power	33 kW

FACTS & FIGURES

Battery	80V – 625Ah (standard mode)
Battery charger	Fronius Selectiva
Battery charger connection	400V / 16A 5-pole
Power consumption	400V / 13A
Weight when empty	5,000 kg (basic outfit)
Water tank	1,200 l (optional 1,400 l or 1,700 l)
Snow tank	4.1 m³ - compacted 5.1 m³
Transmission	Continuously adjustable electric all-wheel drive
Hydraulic oil tank	50 l
Speed	0 - 13 km/h
Tyres	225 / 75 / R16 C 6 rows of spikes
Wheel rims	8“ x 16“

3 years warranty

3-year battery guarantee

INCLUDED IN DELIVERY

WM evo²

suva CERTIFICATION
Type-tested vehicle

Fronius charger

Battery water filling system

Protective glasses

2 blades in wooden transport box

Grindstone

2 wiping cloths

2 rubber mats

Storz coupling C with nozzles ø 32, ø 40, ø 50

Fuse set

Laceration-proof safety gloves

1 set hexagonal socket screws

Adjustable 27 mm key for blade bar

Key for water filter

2 Bodywork keys 7 mm + 8 mm

Key fob

Operating instructions

STANDARD EQUIPMENT

- Cab with heated windshield in safety glass, windscreen wiper system and interior light
- PLC control
- 7 inch colour display
- USB port for installing updates and data exchange
- Button for automatic mode: Operations start automatically in a predefined order
- Spring-suspended and height-adjustable driver‘s seat (fabric)
- Armrest with storage capacity
- Power steering
- Easily-accessible engine compartment (tiltable) with cab support
- Maintenance-free asynchronous motors
- High-performance traction battery with tubular plates
- Battery charger Fronius Selectiva
- Water tank made of PE
- Snow tank-water tank connection (> 2.550 litres)
- Function for automatic water filling system with immobilizer (water stop valve as optional)
- Coated snow tank
- Footbrake and parking brake
- Hydraulically driven and swivelling side brush
- Board guide pulley
- Side mirror, rear
- Front headlights, snow bin headlight, side headlight
- Flashing warning light
- Acoustic signal for reverse drive, snow bin cover operation, reverse of the screw conveyors and blade exchange
- Proportional water metering
- System for water dosing in curves
- Planing system made of stainless steel
- Constant grinding pressure planing system
- Quick-Change-System for fast blade replacement (< 60 seconds)
- 2 blades in wooden transport box (super-light blade - 3.5 kg)
- 2 wiping clothes
- Scope of delivery-set

CE suva CERTIFICATION In compliance with Suva certification **Nr. E 7139/1.e**

Snow tank volume
4.1 m³ / compacted 5.1 m³

Water tank volume
1,200 l or 1,400 l or 1,700 l

Blade width
2,300 mm or 2,500 mm

Fields of operations
Pro / Heavy

PETROL

Motor	Ford MSG 425 - 2,500 cm³
Power	51,5 kW / 70 HP - 2,600 rpm

FACTS & FIGURES

Torque	190 Nm - 2,600 rpm
Unloaded weight	3,750 kg (basic outfit)
Water tank	1,450 l (optional 1,600 l)
Snow tank	4.1 m³ - compacted 5.1 m³
Transmission	Continuously adjustable hydraulic all-wheel drive
Fuel tank	52 l
Hydraulic oil tank	65 l
Speed	0 - 16 km/h
Tyres	225 / 75 / R16 C 6 rows of spikes
Wheel rims	8“ x 16“

INCLUDED IN DELIVERY

WM evo²

Type-tested vehicle

2 blades in wooden transport box

Grindstone

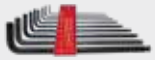
2 wiping cloths

2 rubber mats

Storz coupling C with nozzles ø 32, ø 40, ø 50

Fuse set

Laceration-proof safety gloves


1 set hexagonal socket screws

Adjustable 27 mm key for blade bar

Key for water filter

2 bodywork keys 7 mm + 8 mm

Key fob

Operating instructions

STANDARD EQUIPMENT

- Cab with heated windshield in safety glass, windscreen wiper system and interior light
- PLC control
- 7 inch colour display
- USB port for installing updates and data exchange
- Button for automatic mode: Operations start automatically in a predefined order
- Spring-suspended and height-adjustable driver‘s seat (fabric)
- Armrest with storage capacity
- Power steering
- Easily-accessible engine compartment (tiltable) with cab support
- Hydraulic oil cooler
- Water and fuel tank made of PE
- Function for automatic water filling system with immobilizer (water stop valve as optional)
- Coated snow tank
- Snow tank-water tank connection (> 2,800 l)
- Footbrake and parking brake
- Hydraulically driven and swivelling side brush
- Board guide pulley
- Side mirror, rear
- Front headlights, snow bin headlight, side headlight
- Flashing warning light
- Acoustic signal for reverse drive, snow bin cover operation, reverse of the screw conveyors and blade exchange
- Proportional water metering
- System for water dosing in curves
- Planing system made of stainless steel
- Constant grinding pressure planing system
- Quick-Change-System for fast blade replacement (< 60 seconds)
- 2 blades in wooden transport box (super-light blade - 3.5 kg)
- 2 wiping clothes
- Scope of delivery-set

CE suva CERTIFICATION In compliance with Suva certification **Nr. E 7139.e**

Snow tank volume
4.1 m³ / compacted 5.1 m³

Water tank volume
1,450 l or 1,600 l

Blade width
2,300 mm oder 2,500 mm

Fields of operations
Pro / Heavy

DIESEL

Motor	VM R754 IE4, 4 cylinder 3,000 cm³
Power	79 kW / 107.4 HP - 2,300 rpm

FACTS & FIGURES

Torque	420 Nm – 1,100 rpm
Exhaust gas treatment	DOC, DPF with EGR emission Stage 3B
Unloaded weight	3,750 kg (basic outfit)
Water tank	1,450 l (optional 1,600 l)
Snow tank	4.1 m³ - compacted 5.1 m³
Transmission	Continuously adjustable hydraulic all-wheel drive
Fuel tank	52 l
Hydraulic oil tank	65 l
Speed	0 - 16 km/h
Tyres	225 / 75 / R16 C 6 rows of spikes
Wheel rims	8“ x 16“

INCLUDED IN DELIVERY

WM evo²

Type-tested vehicle

2 blades in wooden transport box

Grindstone

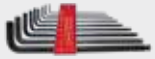
2 wiping cloths

2 rubber mats

Storz coupling C with nozzles ø 32, ø 40, ø 50

Fuse set

Laceration-proof safety gloves


1 set hexagonal socket screws

Adjustable 27 mm key for blade bar

Key for water filter

2 bodywork keys 7 mm + 8 mm

Key fob

Operating instructions

STANDARD EQUIPMENT

- Cab with heated windshield in safety glass, windscreen wiper system and interior light
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- Armrest with storage capacity
- Power steering
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- Water and fuel tank made of PE
- Function for automatic water filling system with immobilizer (water stop valve as optional)
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- Constant grinding pressure planing system
- Quick-Change-System for fast blade replacement (< 60 seconds)
- 2 blades in wooden transport box (super-light blade - 3.5 kg)
- 2 wiping clothes
- Scope of delivery-set

CE suva CERTIFICATION In compliance with Suva certification **Nr. E 7139.e**

Snow tank volume
4.1 m³ / compacted 5.1 m³

Water tank volume
1,450 l or 1,600 l

Blade width
2.300 mm or 2,500 mm

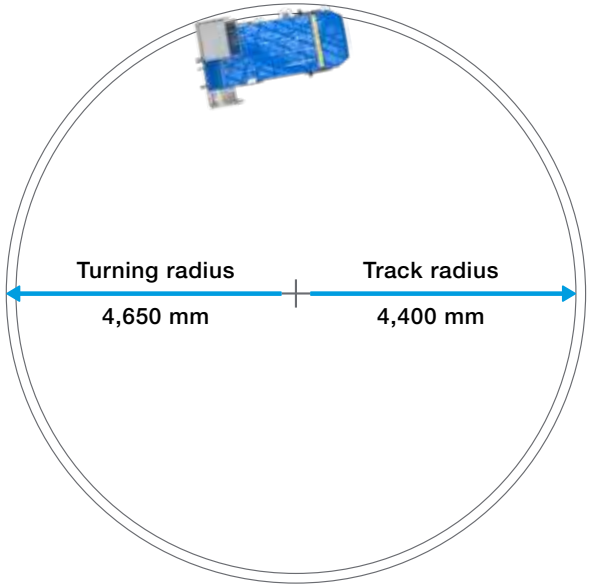
Fields of operations
Pro / Heavy

DIMENSIONS

2,640
1,950
4,300
blue power

2,629 - Blade width 2,500 mm
2,420 - Blade width 2,300 mm
1,700

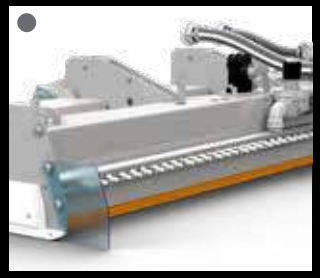
5,650
1,150
3,350
2,550
450
25%
120
blue power


Turning radius
4,650 mm
Track radius
4,400 mm

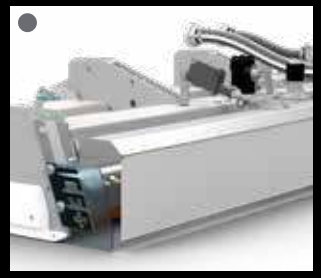
OPTIONALS

Edger
Stainless steel,
electric height adjustment

Ice wash system Multijet
with suction ledge



ICEplus
water spraying system



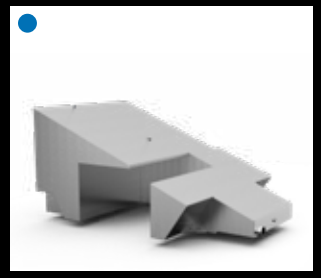
ICEplus + electrically powered cloth support

Cab heating

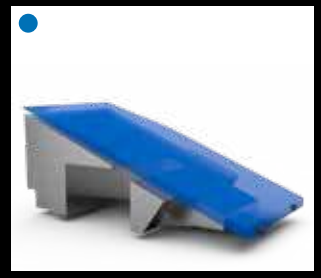
Driver‘s seat heating
seat pad

Radio

LED headlights



Water tank 1,400 l
in stainless steel
Electric model



Water tank 1,700 l
in stainless steel
Electric model

Water tank 1,600 l
in stainless steel
Petrol / Diesel model

Water stop valve
1“1/4 for water filling system

Electrically powered cloth support

Device for washing systems

Snow bin wash system

OPTIONALS

Screw conveyor wash system, horizontal

Vertically screw conveyor wash system

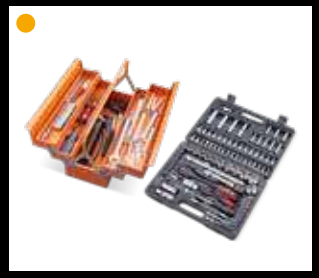
Dynamic steered wheel wash system

Side mirror
front right

Side mirror
front left

Heated side-view mirrors

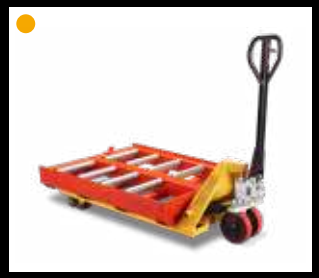
WM Autopilot



Tool set

Lifting jack
with bar 10t

Spare wheel 16“
with cross-key



Battery trolley

Kit diagnostic cables

Battery charger for charge conservation of the starter battery
Petrol / Diesel model

Optional Battery
various capacities

Ice quality · Comfort · Overview · Heating · Service

ATTACHMENTS

Groove harrow
Curling rinks

Groove milling unit
Curling rinks

Water sprayer

Custom colour body
paint, 1 RAL colour

Wrapping

OUR COMMITMENT

User friendliness

Through the use of top-quality components together with a well-planned design, maintenance work is extremely simple and is reduced to a minimum.

Quality guarantee

The WM evo^2 is a product which has been developed, built and assembled in house, from start to finish. Only by doing so can we guarantee top quality and punctual delivery times.

Detailed operating instructions

You can find all information on operation, maintenance and safety in the operating manual.

The right spare part at all times

Do you need a spare part? We will deliver it to you immediately.

Service and support

Our well-networked, international team of technicians undergo constant training and will be delighted to help you whenever you require assistance.

Series production

All WM ice technics machinery is series-produced. We know exactly which parts have been used in each series run, and can deliver the correct spare parts to you at all times. At the same time, a number of optionals can be retrofitted with minimum effort and maximum precision, even years later.

Quality consciousness

From the manufacture of individual parts right through to the final quality-control inspection: Every step of the process is carried out and monitored with the utmost of precision. Each and every member of our staff is well-trained in his specialist field, and carries out all tasks conscientiously. This is a great advantage for our customers, who can be sure of receiving a technologically sophisticated product which has been manufactured to the very highest of quality standards.

WM evo²
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www.wm-on-ice.com
Italy

A company from Südtirol

Mobil / Event

Pinguino Compact

Pro / Heavy

Shira Mammoth evo2

03 2020 / Subject to technical modifications.