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# DYNAMIC THROUGH AND THROUGH







## WITHOUT YOU, THERE WOULDN'T BE ME





#### **OUTSTANDING TEAMWORK – THE LATEST TECHNOLOGY, DESIGN AND COMFORT**

A large display and a multifunctional joystick, perfectly adapted to the operator's needs – that's the PRINOTH CONTROL UNIT. PRINOTH is setting new standards in the cockpit with this innovative yet simple operating concept.

#### CONVENIENT AND PRACTICAL AT THE TOUCH OF A FINGER

A tilting 12-inch touchscreen makes everything easy to see. Configure the display tiles for quick access to the custom user interface and operational settings. A shortcut to the details screen ensures easy drill down into the settings' options. The best possible rear camera view is achieved through the large tile at the top of the display. At the same time important information on the engine, tiller, winch and quick access pages are always visible. Individually adjustable heating and ventilation, head lights with special profiles, a great stereo, Bluetooth and a hands-free telephone system all add up to an exceptional driving experience.

#### **EVERYTHING UNDER CONTROL**

**BE THE BEST** 

It's simply brilliant – an improved joystick with an integrated proportional "joystick-in-joystick" function gives precise control and allows simultaneous blade movement. The latest generation of EATON's proven CAN-bus-controlled system optimizes the movements of the attachments and reduces the number of tubes, makes servicing the machine easier. An ergonomic hand rest on the joystick allows for stress-free grooming even after hours of operation.

JOYSTICK IN JOYSTICK

ADJUSTABLE JOYSTICK ORIENTATION

14/15

COLOR CODING MAKES IT EASY TO LEARN FUNCTIONS

• WINCH TENSION CONTROL: AUTO / ECO / MANUAL

SOLO VEHICLE: ONE MOVEMENT FROM CONTACT PRESSURE TO FLOAT POSITION TO TILLER COUNTERPRESSURE BISON

FLEXIBLE CAMERA DISPLAY SETTING: SMALL OR LARGE



## **AUTOMATIC WINCH**

Extreme slopes - no problem. PRINOTH's automatic winch performs reliably in all conditions and terrain. The winch pivot point is located at the center of the groomer, ensuring neutral handling regardless of the pulling direction. Additionally, the low center of gravity guarantees stability going both up and downhill.

#### MAKING THE RIGHT CHOICE EASY

The winch can be operated in three different modes with a maximum pulling force of up to 4.5 t. Automatic pulling force control is for operators of every experience level. Operators can also switch between manual and ECO modes, depending on their preference. Additionally, the operator can prioritize pulling force or working speed making the winch easy and intuitive to use.

#### USER FRIENDLY AND RELIABLE

Due to the large radius of the drum, less strain is put on the cable giving it a much longer life span. The display in the control unit shows the winch status, pulling force and recommended turning direction that together with the hydraulic system enable a smooth operation with less wear. Furthermore, the Roll-Out System option enables the operator to easily pull out the winch cable without any extra effort.



- 4.5 t PULLING FORCE
- WINCONTROL AUTO/ECO/MANUAL MODE
- ECO MODE WITH REDUCED PULLING FORCE OF UP TO 3.5 t



BISON

REAR VIEW CAMERA

CABLE LENGTH 850 m/1,050 m/1,200 m

• WINCH COOLING

#### • NEW SIDE WINGS ENSURE AN EVEN BETTER SLOPE FINISH

• EVEN PRESSURE DISTRIBUTION ON THE FINISHER

• THE TILLING TEETH ARE ARRANGED FOR PERFECT RESULTS AND THEIR SHAPE ALLOWS FOR TILLING IN EITHER DIRECTION OF ROTATION

• SNOW CHAMBER: ADJUST SNOW TRANSPORT TO SUIT THE CONDITIONS AND CREATE THE IDEAL SLOPE FINISH

## **TILLING TECHNOLOGY** FOR THE PERFECT SLOPE

The PRINOTH POWER tiller produces deep, fine-grained grooves which means sensational slope quality that lasts. Specially arranged teeth completely transform the snowpack into an even layer. The POWER tiller is equipped for all conditions, and larger side wings adapt easily to the surface. To keep an eye on everything, the optional tiller camera is perfectly positioned to give the operator the best overview.

**BISON X – GET CREATIVE** 

With its extended tilling angle range, the BISON X is ideal for parks. The tiller's improved kinematics make it extremely maneuverable and help build park features accurately. Its new hydraulics also make the cutting angle quicker to adjust. The BISON X can easily till contoured areas such as waves, transitions and jumping and landing shapes.



20/21



## **CABIN COMFORT**

#### A COCKPIT FOR TOP PERFORMANCE

Modern, stylish, quiet, comfortable – the BISONS X's enlarged cabin makes grooming a pleasure. A generous footwell provides plenty of legroom and the cabin's ergonomic design, including its tailored Recaro seat, make the cockpit the home base for producing perfect slopes. Its center seat and tilting touch display give a great allround view and allow the operator to get in and out on either side, a big advantage for winch vehicles.

#### THE PERFECT TEMPERATURE

New footwell and windscreen heating fitted as standard and an integrated sunroof give full temperature control.

*Optional:* fully automatic air conditioning ensures the perfect temperature in any condition.

#### UNIQUE SLIDING SEAT TECHNOLOGY

Exclusively for the BISON X – a sideways-sliding swivel seat enables the operator to choose between a central or left seating position. The seat can slide up to 500 mm and together with the turning radius of 15°, provides the operator with the best all round view espeically when building pipes.

## FIT FOR EVERY MISSION

The shape of the blade has been developed to optimize the way snow rolls inside it. This reduces the force required to move the snow while increasing the amount of snow being pushed. Sturdy construction makes it easy to transport snow guns and other equipment. New hydraulics mean multiple blade movements can be performed simultaneously.

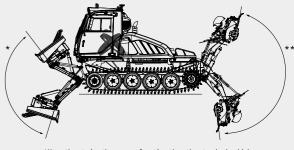
#### MASTER BLADE

This first-in-class blade can push enormous amounts of snow while producing precise slope edges. It extends beyond the tracks, which makes it much easier to work very close to obstacles. The precise angle of the blade teeth make breaking up ice and snow a breeze.

#### PARK BLADE

The BISON X can also be equipped with the PARK blade as an alternative to the MASTER blade. Its special tooth geometry facilitates maximum pushing force. The widest park blade available is ideal for getting close to structures and boundaries. Its vertical cutters help shape precise edges, reducing manual shoveling. The PARK blade also has a vertically adjustable back-blading cutter at the rear for cutting off jumps and landings more evenly and effectively.





\*More than twice the range of motion than the standard vehicle \*\*Extended tiller movement up to the vertical position

## **EUROMOT STAGE V**

#### POWERFUL, SUSTAINABLE PERFORMANCE

Clean and powerful – the engines in PRINOTH snow groomers offer unrivaled performance and impressively low emissions.

A Caterpillar straight-six engine produces 422 hp/310 kW and an impressive maximum torque of up to 1,900 Nm at an optimum engine speed of 1,400 rpm, which means full power when it is needed most. An exhaust treatment system with SCR catalytic converter and diesel particulate filter reduces emissions to a minimum, making the BISON the cleanest snow groomer in its class.

Added bonus: with its low maintenance and running costs, the Caterpillar engine is the perfect choice for a demanding snow groomer like the BISON.





## **PRINOTH TRACKS**

#### LIMITLESS POSSIBILITIES

Providing the best contact between the vehicle and snow layer. Whether new snow or powder, ice or asphalt, stony surfaces or glaciers - PRINOTH's portfolio of highgrade tracks is guaranteed to meet every need.

#### STEEL TRACKS - HARD AS NAILS FOR THE TOUGHEST CONDITIONS

PRINOTH's all-rounder boasts long life and minimum wear. Thanks to its overlapping locks, it is easy to handle and service.

#### **GAMSKETTE TRACKS – THE MANEUVERABLE, FLEXIBLE OPTION**

With their excellent climbing abilities and maneuverability, these similarly longlasting tracks are made for all types of vehicles and also feature overlapping locks, making them easy to use and service.

# **TIME IS MONEY - CONNECTED SERVICES**

PRINOTH's Connected Services offer efficient ways of reducing workload and saving money. Modern technologies assist in managing snow as a valuable resource. They help improve operations by making work quicker, cheaper and easier. They also offer ways to increase sustainability within a ski resort and beyond. The functions shown below can be used easily, simply by accessing Skadii - the resort management platform. Data from different software and hardware providers are shown together in one integrated user interface.

#### **FLEET MANAGEMENT\***

Using the latest transmission technology, live location and working data from all vehicles within the ski resort regardless of vehicle manufacturer can be transmitted. Web-based applications such as Task Manager and Maintenance Overview show information, services due, and work operations in real-time, making it easier and more efficient to manage a ski resort than ever before.

#### **SNOW DEPTH MEASUREMENT\***

The satellite-based snow depth measuring system guarantees precise snow management at any speed. Snow depth is determined using three measurement points beneath the blade and another beneath the vehicle itself. This generates highly accurate data in real time.

#### USER FRIENDLY

The tools offered on the Skadii platform are intuitive and easy to use. The digital solutions are developed in close collaboration with customers with a focus on the essentials: no unnecessary information or software applications to tie up processor power, so data loads quickly.

#### CONNECTIVITY

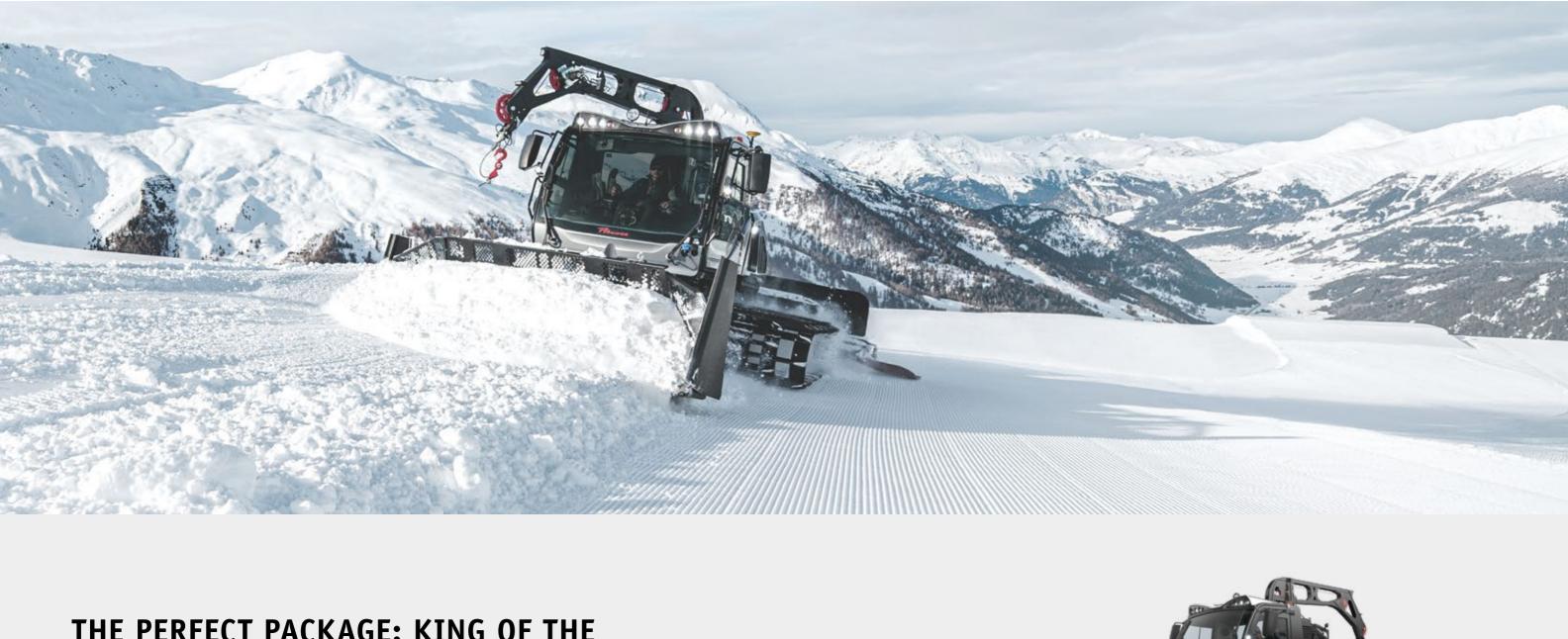
The data is displayed via a single user interface. This means there is no need to switch between different programmes. The advantage is a solution that saves time while ensuring constant connection to the data, helping manage slopes and ski resorts more efficiently.







skadii skadii.global



# THE PERFECT PACKAGE: KING OF THE PARK AND STAR OF THE SLOPES.

Unbeatable as King of the Park, BISON also offers maximum efficiency on slopes and trails. A powerful engine with impressive torque and enormous pushing power, outstanding climbing ability, and excellent maneuverability all mean the very best in slope preparation. For perfect tracks on cross-country trails the NORDIC LINER can be easily attached making BISON one of the most versatile snow groomers. The NORDIC LINER guarantees cross-country ski trails that meet the high FIS standards. The NORDIC LINER prepares precise, long-lasting cross-country tracks. The two or four track plates and the tillers can be engaged individually, making them truly efficient in creating perfect cross-country trails and tracks.

#### HANDLING RESOURCES RESPONSIBLY

Low emissions and low fuel consumption coupled with low maintenance and operating costs – the BISON boasts unbeatable cleanliness, impressive efficiency and a long service life. PRINOTH's groomers offer the latest technology combined with sustainability.

BISON WITH WINCH AND POWER TILLER •------

BISON WITH POWER TILLER •-







## THE RIGHT PARTNER FOR **EVERY ASPECT OF GROOMING**

Innovation, quality, professionalism, care - for over 60 years, PRINOTH has set the standards not only on the slopes, but also in terms of service. With its dependable all-round packages, ranging from top-level advice, to outstanding customer service, to attractive training courses.

## **PRINOTH CUSTOMER SERVICE**

Expert support and technical assistance during inspections, repairs and maintenance work are all part of PRINOTH's customer service.

- Worldwide infrastructure with qualified service partners and trained field staff on location
- Fast, flexible, reliable service
- Available around the clock, including emergency helpline
- PRINOTH genuine spare parts and special tools for any emergency

### **PRINOTH ACADEMY**

Knowledge and skill are the foundations for perfectly groomed slopes, parks and trails. PRINOTH offers technicians and operators the opportunity to acquire unique groomer expertise.

- Learn from the best an experienced team of trainers teach comprehensive theoretical and practical knowledge
- eLearning flexible online training courses any time, any place
- PRINTOH's three-level system Basic, Advanced and Expert, takes the participant step-by-step through the training material. Graduates receive an official certificate upon completion.

#### www.prinoth.com/academy

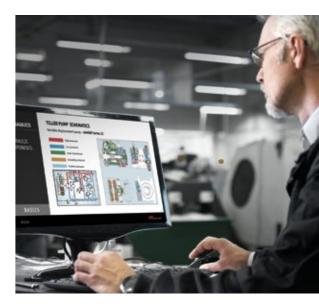
#### **PRINOTH PARTS SHOP**

Simple, quick, straightforward – getting the right parts is easy. Available at any time, clearly laid out, no long waiting times - make decisions quickly and improve planning through the PRINOTH parts shop.

- One-stop shopping
- A complete range of certified OEM parts
- Real-time availability
- Attractive spare parts kits
- Transparent prices

parts-shop.prinoth.com







## **TECHNICAL SPECIFICATIONS**

#### DIMENSIONS AND WEIGHT

Total vehicle length	4,630 mm
Total length: vehicle with attachments	8,880 mm
Total height with tracks (without winch)	2,900 mm
Track working width	4,210 / 4,260 mm
Transport dimensions (length/width/height)	7,020 / 2,535 / 2,770 mm
Clearing blade with side wing open (Standard)	5,360 mm
Clearing blade with side wing open (Park)	5,674 mm
Clearing blade with side wing closed (Standard)	4,510 mm
Clearing blade with side wing closed (Park)	4,625 mm
Tiller with raised side wings	5,400 mm
Tiller with lowered side wings	6,085 mm
Weight with tracks, blade and tiller	from 9,712 kg
Weight winch (850 m cable)	from 2,096 kg

#### DRIVING SPECIFICATIONS

Maximum speed	
Turning circle	0 (around its own axis)

#### ENGINE

Model	C9.3B	
Emission standard	Euromot Stage V	
Fuel types	Diesel, HVO, GTL and BTL*	
Power output (ECE)	310 kW / 422 PS ECE @ 1.800 min <sup>-1</sup>	
Torque	1.897 Nm @ 1.400 min <sup>-1</sup>	
Capacity	9,300 cm <sup>3</sup>	
Cylinder configuration	straight-6	
Tank capacity diesel	320 l** / 265 l	
Tank capacity AdBlue®	30 l	

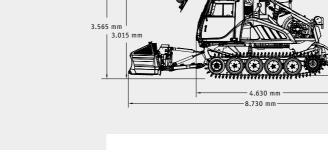
#### AUTOMATIC WINCH

Maximum pulling force	44.1 kN / 4.5 t
Maximum cable length	up to 1,200 m
Cable diameter	11 mm
Cable breaking load	150 kN
AUTOMATIC winch	selectable modes AUTO / ECO / MANUAL

#### LIGHTS

Four halogen working headlights front
Two high beam / low beam lights
Two LED direction indicators and position lamps
Two rotating lights

Four halogen working headlights rear Two LED lights on the mirror holders on each side BISON X: full LED lights



#### **OPERATOR CABIN**

Operator seat: RECARO comfort center seat with pneu
Passenger seat on left, storage box right with compa
PRINOTH Control Unit: new 12" touch display, new a
multimedia box with digital radio, MP3/WMA, Blueto
Heated side mirrors, heated front, rear and side wind
Automatic heating and ventilation with touchscreen
Electro-hydraulic tilting cab
ROPS tested pursuant to EN 15059

2.885 mm

#### PARK FUNCTIONS

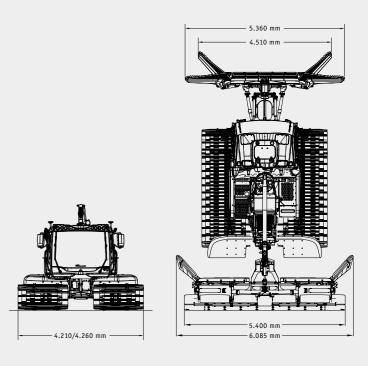
Inclinometer for vehicle and blade
Distance meter, LED lights, premium sound, rear view
Increased range of motion of blade and tiller for const
PARK blade with side cutters

#### STANDARD FUNCTIONS

Hydraulic track tensioning
Cruise control
On-board diagnostics
Personalized operator settings saved to memory
Reversing alarm
Automatic heating system
Engine preheating
Loading platform (standard vehicles)
Blade floating position

#### OPTIONS

Automatic seatbelt tensioning system Additional siren BISON



#### eumatic suspension, height adjustable

partment for radio set armrest with multifunctional joystick, steering lever, cooth, AUX-In, USB, Bluetooth hands-free system ndows n control, footwell heating system ergänzen

## w camera nstructing parks

Snow dep	ch measurement	
Front hyd	raulics	
Branch pr	otection	
PRINOTH	carpet	
Shaping t	pol	
Instructo	r seat on the storage box right	
Filled wit	n bio-oil ex works	
Rear view	camera on solo vehicle	
Snow cha	nber on the POWER tiller	
Tiller cam	era with LED lighting	
Air condit	ioning system	
Towing ho	ok	
Sliding-Se	at	