

ROBOT PLATFORM "ROVO"



WITH FULLY ELECTRIC DRIVE SYSTEM
FOR OFF-ROAD USE

ROVO - THE ELECTRIC ROBOT PLATFORM FROM HAWE MATTRO



COMPACT, AGILE AND POWERFUL

The ROVO robot platform has a fully electric drive system and runs on caterpillar tracks. It has been specially developed for off-road use. The agile chassis is equipped with a robust drive and a proprietary exchangeable rechargeable battery. The standard chassis is very well equipped to accept a wide variety of built-on equipment and superstructures. Many options are also available to adapt it to your requirements. Partner companies have developed suitable hardware and software extensions for this purpose. This allows it to determine its route by follow-me instructions or GPS waypoint navigation, or it can find its own way autonomously.

... AND VERSATILE TO BE USED

The ROVO has been developed for off-road use. The sophisticated high-performance technology offers an optimum basis for creation of prototypes right through to series production vehicles. Many interfaces, different gearbox variants, drive modes, and a very wide range of power supplies and accessories are available ex works to satisfy your requirements.



APPLICATION FIELDS

- Inspections and measurements in hazardous areas
- Transport and logistics
- Construction sites and infrastructure
- Mowing, mulching and watering on rough ground
- Mapping and cartography
- Marking out work
- Taking ground samples
- Disinfection of chambers and surfaces
- Use by search and rescue, mountain rescue, fire brigade and emergency response services
- Use underground and in tunnels

You can choose between two types of caterpillar tracks to suit different ground conditions and characteristics: ROVO Performance and ROVO Heavy Duty.

THE ROVO

HIGH-VOLTAGE SYSTEM

Power electronics and software with high intrinsic safety. Built using hardware components suitable for automobile applications. Internal/external communications by CAN bus.

PRECISE MOVEMENT CONTROL

with speed-dependent drive programs. Radio remote control with display, joystick and control knobs. Interface for external control by CAN bus implemented.

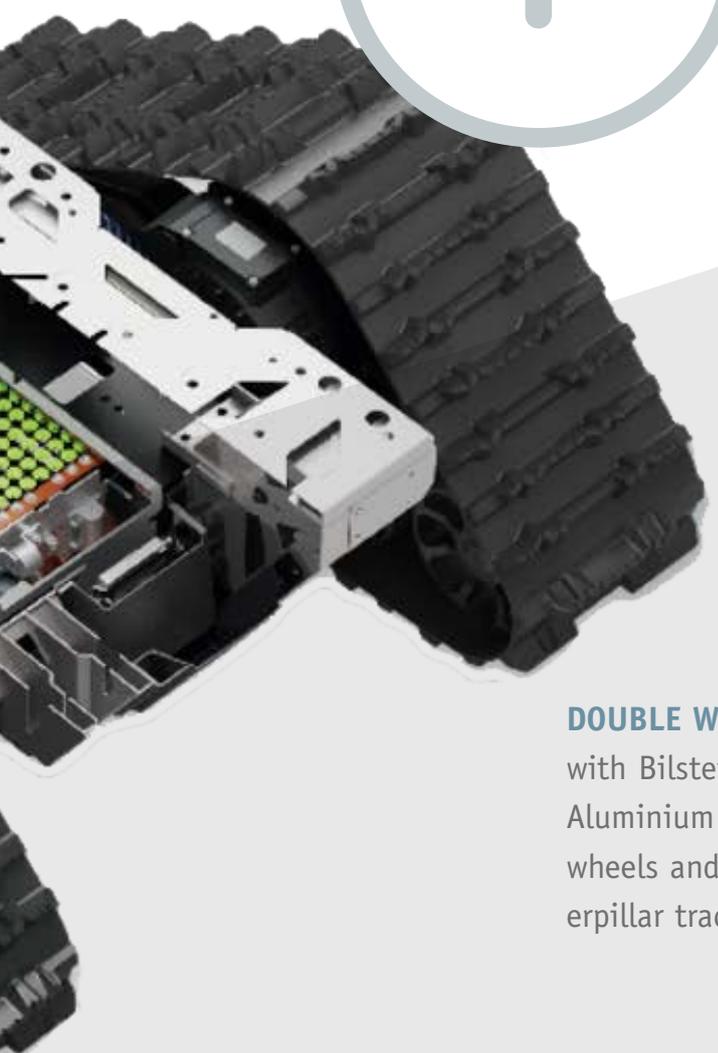
CHASSIS OF HIGH-TENSILE STEEL

with two powder-coated layers of paint. Base plate protected with 3 mm aluminium. Universal fixing hole pattern including screw-on sockets for built-on equipment and superstructures.





- + UP TO 30 KM/H TOP SPEED
- + UP TO 500 KG PAYLOAD
- + UP TO 100% INCLINE



**PROPRIETARY LITHIUM-ION
RECHARGEABLE BATTERY**

with 100 V nominal voltage and 9.4 kWh capacity, exchangeable battery version. Integral battery management system and integral heater.

DOUBLE WISHBONE SUSPENSION

with Bilstein shock absorbers and Eibach helical springs. Aluminium caterpillar track carriers with Robalon running wheels and exchangeable ball bearings. Solid rubber caterpillar tracks available in two tread variants.

MOTOR-GEARBOX UNIT

with brushless synchronous disc motor combined with a planetary gearbox. Integral electric permanent magnet safety brake with hill-holder function.

TECHNICAL DATA

ROVO PERFORMANCE

The Performance configuration is designed for use on hard surfaces such as asphalt and applications where high speed matters. The road-going caterpillar tracks with a tread depth of 15 mm ensure quiet running and avoid vibration.



ROVO HEAVY DUTY

The Heavy Duty configuration ensures even better capability on rough ground and in addition can carry very high payload weights. With the cleat tread and tread depth of 30 mm even the roughest ground is reliably mastered.



Dimensions & weight	ROVO 2 or 3 Performance	ROVO 3 Heavy Duty
Length	1,200 mm	1,200 mm
Height (caterpillar tracks/max.)	532 mm	550 mm
Chassis height (top edge)	494 mm	510 mm
Width	1,227 mm	1,227 mm
Tare weight (incl. battery)	295 kg	287 kg
Ground clearance	155 mm	165 mm
Ground pressure (unladen)	5.4 kg/dm ²	5.1 kg/dm ²

Performance data	ROVO 2 or 3 Performance	ROVO 3 Heavy Duty
Top speed	30 km/h	15 km/h
Torque	500 Nm	1,000 Nm
Tractive effort	up to 3,000 N	up to 6,000 N
Payload	300 kg	500 kg
Nominal power of motor	2 x 4.4 kW	2 x 4.4 kW
Operating time/range (1 battery)	up to 4 h / 40 km	up to 4 h / 40 km

Operating Conditions	
Operating temperature range	-20°C to +45°C
Protection class	IP65

Options	
Hydraulic lifting gear	
Hydraulic supply unit	Mini hydraulic unit HICON
Power tap high voltage	100VDC / 10kW / 125A
Power tap low voltage	12/24/48 VDC 450W or 830W
Power tap low voltage performance	12/24VDC with 1.6 or 2.5KW

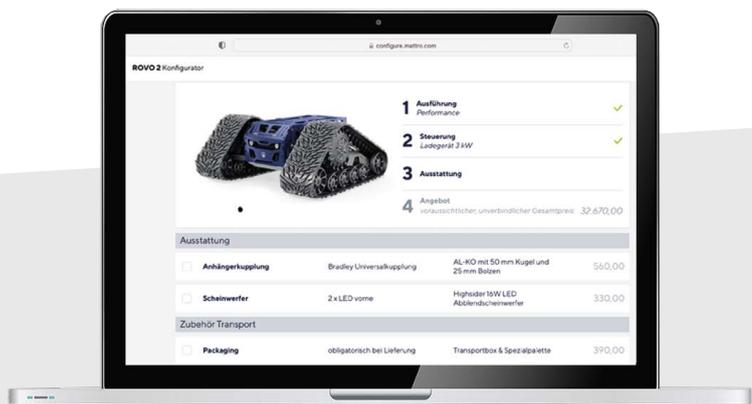
Power supply	
Mattro Battery pack	Lithium-ion exchangeable rechargeable battery
Capacity	9.4 kWh
Voltage	100 V
Charger (standard/optional)	3 kW 230 V / 5kW 400 V
Charging time (standard/rapid)	4 hours / 2.5 hours

Control & Software	Performance
Remote control	434 MHz, up to 300 m
External control	available (CAN interface)
Protocol/bus system	Mattro CAN protocol

Configure your ROVO at:



<https://www.hawe.com/products/robot-platform/easily-configured/>



EASY TO ADAPT
TO YOUR NEEDS!

ANY WAY
ELECTRIC



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For further information about
the robot platform ROVO scan
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