

MAGTRACK

DERC SALOTECH



**Modular Magnetic
Crawler**



Modular Magnetic Crawler

MagTrack is a modular system built around a universal carrier designed for flat and curved steel surfaces. The carrier can be fitted with a range of modular tools for water jetting or sandblasting, with water jetting tools operating up to 3000 bar.

MagTrack Mini is a lightweight, compact 2-wheel drive version with a fixed blast can providing up to 3000 bar pressure. By replacing the flat vacuum seal with a curved seal, it can also clean pipes radially.

The DERC MagTrack robots are magnetic crawlers, electrically driven, suitable for multi purpose applications:

- **Surface preparation**
- **Oil storage tank cleaning**
- **Industrial cleaning and washing**
- **Cargo hold cleaning**
- **Abrasive blasting**
- **Inspection**
- **Waterjet cutting**



Carrier



Modular crawler

The MagTrack base is a remote-controlled, magnetic, 4-wheel drive carrier (crawler) for flat or curved steel surfaces. This universal carrier supports various MagTrack tools or custom-designed tools.

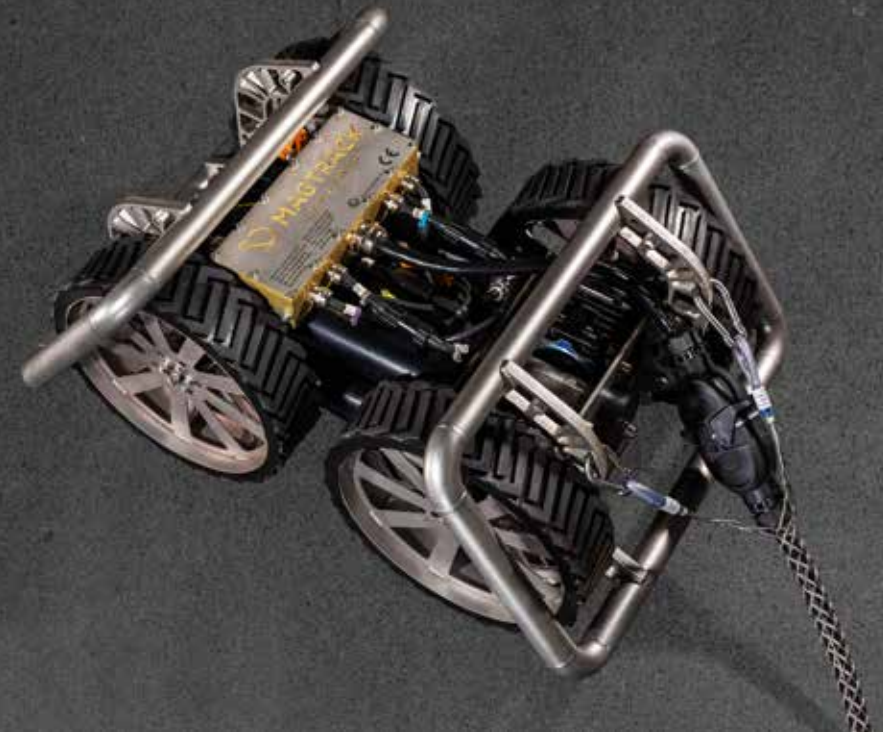
Safe and easy to operate by one person, the carrier can be equipped with your desired tool in 30 minutes. The remote control keeps the operator on the ground and out of the line of fire, eliminating the need for scaffolding or cherry pickers.

The MagTrack Carrier includes a remote controller, main control unit and transport plate.

Modular design

Features

- Compact design
- Four 48V electric drives
- Wheels with profile for maximum grip
- Magnets back and front, height adjustable
- ATEX zone 2 certified
- Operating speed: 0-6 m/min
- Dimensions: 720x510x360 mm (fits through 24" manhole)
- Weight: 80 kg



Modular design

Features

- Up to 120m² per hour cleaning capacity
- Up to 50m² paint stripping capacity per hour
- Replaceable wear seal, under flexible bellow
- Adjustable vent valve for optimal extraction
- Rotating manifold suitable for 20 inserts model type P/model 965
- Atex zone 2 certified
- Optional LED lights
- Max 3000 bar @ 40 l/min
- Cleaning path: 370mm
- Dimensions: 685x630x450 mm (fits through 24" manhole)
- Weight: 40kg



Blast Can

Closed Waterblasting / Flat or Slightly Curved Surfaces

The MagTrack Blast Can (vacuum dome) is installed in front of the 4-wheel carrier for "closed" waterblasting of flat or slightly curved surfaces. Connected to a vacuum unit, it collects water and debris without leakage.

This tool is ideal for industrial cleaning and preparation jobs requiring a clean, dry surface, such as cleaning (oil) storage tanks or removing old paint from ship hulls.

Installed in front of the carrier, the Blast Can ensures a clean driving path, preventing slippage and keeping the carrier firmly attached to the steel surface.



Modular design

Features

- Up to 120m² per hour cleaning capacity
- Up to 50m² paint stripping capacity per hour
- Replaceable wear seal, under flexible bellow
- Adjustable vent valve for optimal extraction
- Rotating manifold suitable for 20 inserts model type P/model 965
- Atex zone 2 certified
- Optional LED lights
- Max 3000 bar @ 40 l/min
- Cleaning path: 370mm
- Dimensions: 685x630x450 mm (fits through 24" manhole)
- Weight: 40kg



Curved Blast Can

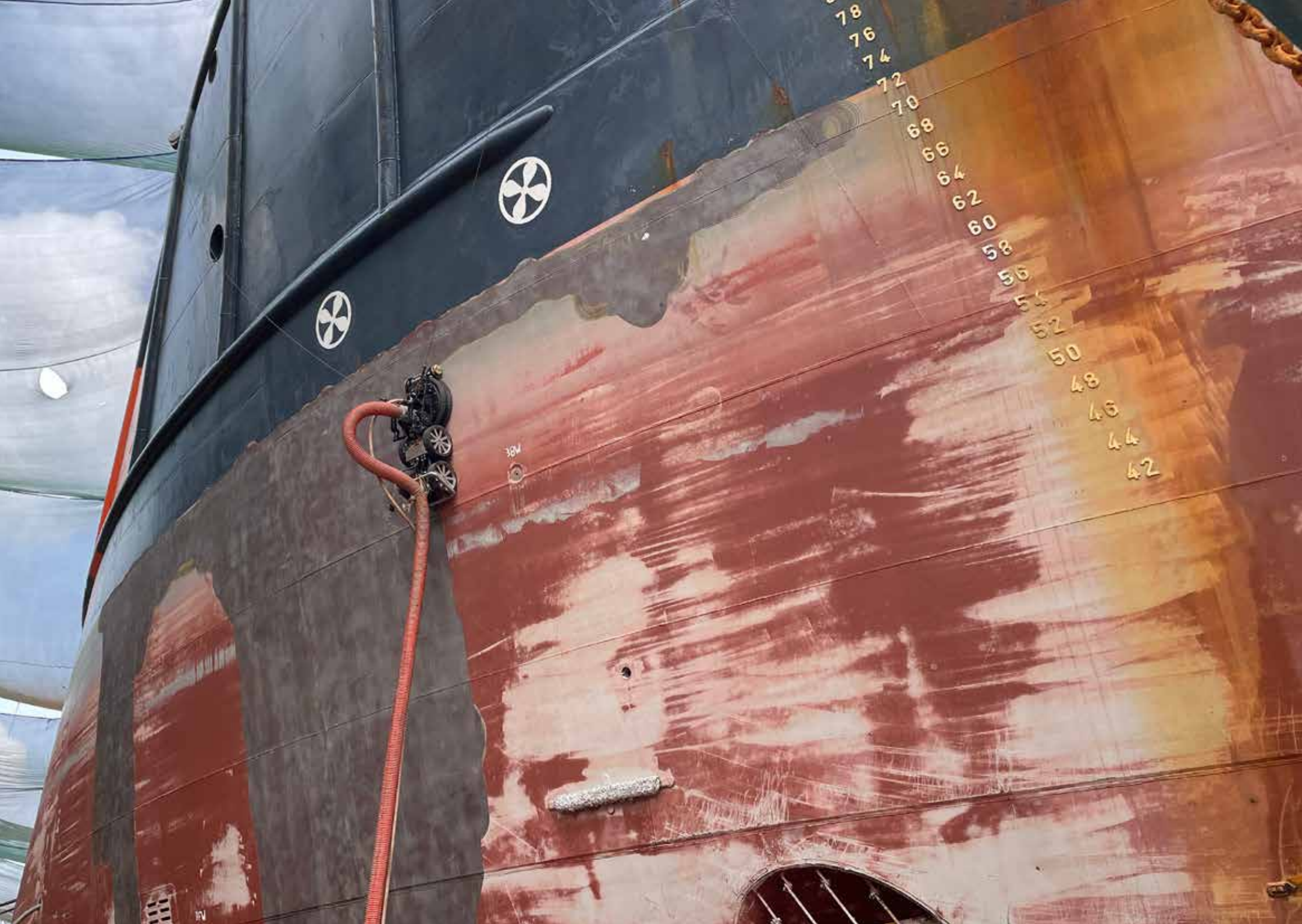
Closed Waterblasting / Flat or Highly Curved Surfaces

The MagTrack Curved Blast Can (vacuum dome) is installed in front of the 4-wheel carrier for "closed" waterblasting. Connected to a vacuum unit, it collects both water and debris without leakage.

Engineered for flat and highly curved surfaces with a radius up to 3 meters, this tool is ideal for cleaning or preparing small storage tanks (up to 6 meters) and curved ship contours, delivering precise performance in challenging environments.

Installed in front of the carrier, the Curved Blast Can ensures a clean driving path, preventing slippage and keeping the carrier firmly attached to the steel surface.





Modular design

Features

- Manual tilt by threaded rod
- Optional tilt function by electric actuator, remote operated
- Up to 140 m² per hour cleaning capacity
- No need for vacuum supply
- Rotating manifold suitable for 8 inserts model type P/model 965
- Max 3000 bar @ 30 l/min
- Cleaning path: 1500 mm
- Dimensions: 925x510x750 mm (fits through 24" manhole)
- Weight: 25 kg

(Tilt) Swing Arm



Open Waterblasting

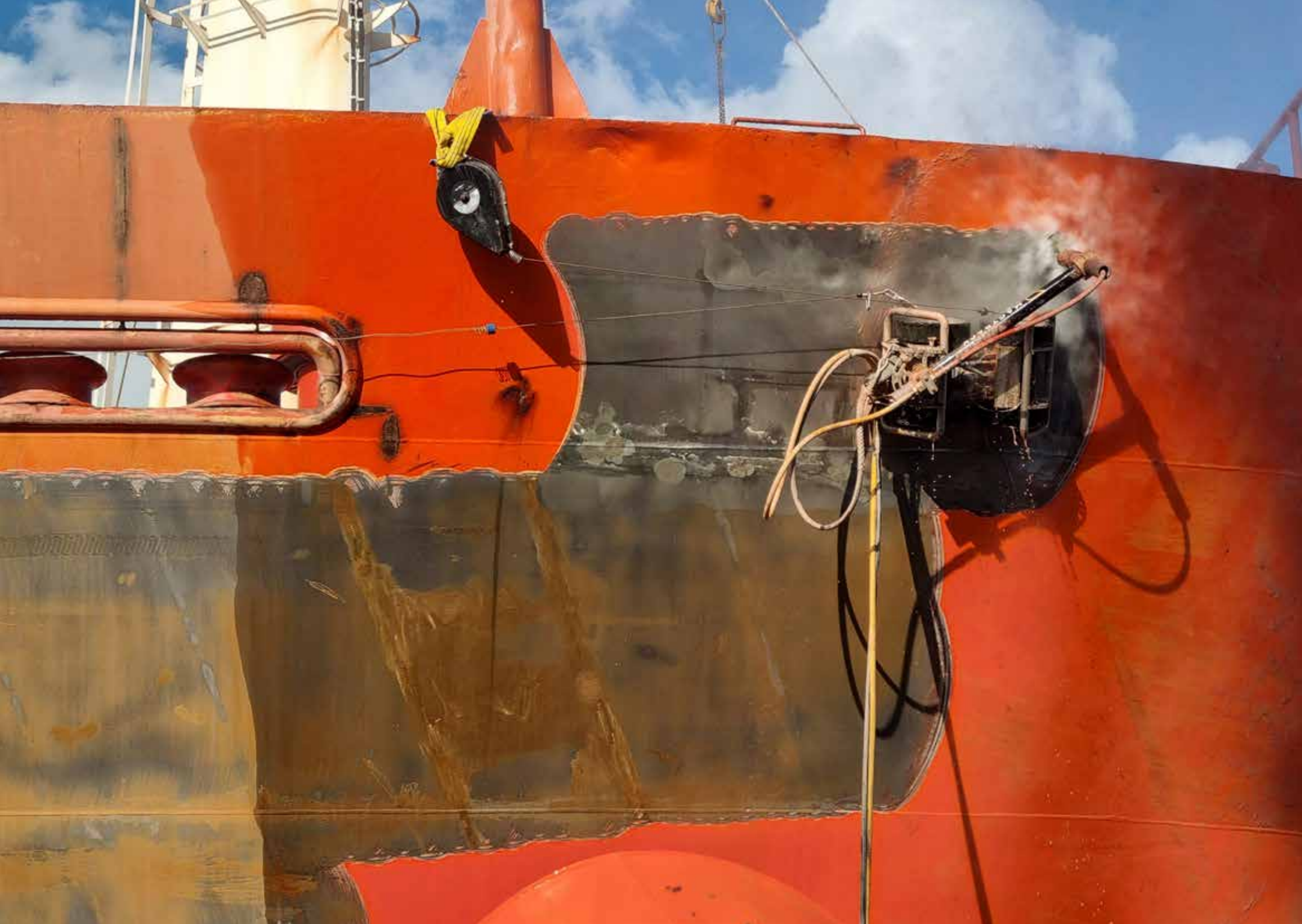
The MagTrack (Tilt) Swing Arm is used for open water blasting or cleaning. It can be installed by one person on our 4-wheel carrier in under 30 minutes.

We offer two versions of the (Tilt) Swing Arm: one with a hand-operated tilt mechanism and one operated by a remote-controlled actuator.

Ideal for industrial cleaning or surface preparation when dirt collection isn't needed, it's a cost-effective alternative to "closed" water blasting since no vacuum pump is required. The cleaning head's distance to the surface is adjustable with the actuator while driving, making it also perfect for cleaning (oil) storage tank wind girders and similar structures.

The automatic drive mode allows control of swing speed, drive speed, and step size. The swing arm comes standard with a swivel and rotating manifold for pressures up to 3000 bar. It can also be fitted with a fixed washing manifold.





Modular design

Features

- Manual tilt by threaded rod
- Optional tilt function by electric actuator, remote operated
- Easy to fix and adjust nozzle holders for adjusting pitch and angle
- Up to 3 nozzles
- 2 joints for height and angle adjustment of nozzles
- Cleaning path: 1500 mm
- Dimensions: 925x510x750 mm (depends on the adjustment of the nozzles)
- Weight: 20 kg

Sandblaster (Tilt) Swing Arm

Open Sandblasting

The MagTrack Sandblaster (Tilt) Swing Arm is used for open sandblasting and can be installed on our 4-wheel magnetic carrier by one person in under 30 minutes.

We offer two versions of the Sandblaster (Tilt) Swing Arm: one with a hand-operated tilt mechanism and one operated by a remote-controlled actuator. With the actuator, the distance from the cleaning head to the surface is adjustable while driving.

Automatic drive mode allows control of swing speed, drive speed, and step size. It operates with 1, 2, or 3 abrasive nozzles, adjustable in height, angle, and pitch for perfect overlap.

Ideal for surface preparation jobs where dirt collection isn't needed, it leaves the surface completely dry and ready to paint or coat instantly. The Sandblaster (Tilt) Swing Arm produces a rougher finish than water jetting tools.





ReCycleBlaster

Closed Circuit Sandblasting

The MagTrack ReCycleBlaster is an add-on tool installed in front of the 4-wheel carrier for "closed-circuit" vacuum blasting. It uses high-pressure compressed air mixed with abrasive material to remove contaminants, coatings, rust, and other undesired materials.

The vacuum system collects and recovers the used abrasive and debris, separating contaminants and dust. The cleaned abrasive is reintroduced into the blasting process.

This makes the ReCycleBlaster ideal for industrial cleaning and preparation, establishing surface roughness without releasing harmful airborne particles. It reduces environmental impact, ensures a safer work environment, and is cost-effective by recycling abrasive material.

Modular design

Features

- 3 nozzles
- Cleaning path: 2000 mm
- Dimensions: 2000x300x300 mm
- Weight: 35 kg





MagTrack Mini



Closed Waterblasting

The MagTrack Mini is a lightweight 2-wheel drive crawler with a fixed blast can (vacuum dome) for closed waterblasting. Connected to a vacuum unit, it collects water and debris without leakage.

Ideal for industrial cleaning and preparation jobs needing a clean, dry surface, its compact design makes it easy to transport and suitable for narrow spaces, including offshore oil rigs. By replacing the flat vacuum seal with a curved seal, it can also clean pipes radially.

The MagTrack Mini comes with a remote controller, main control unit and transport plate.

Compact design

Features

- Compact design
- Two 48V electric drives
- Wheels with profile for maximum grip
- Height adjustable magnet
- ATEX zone 2 certified
- Main control box with 50m cable to carrier (optional in ATEX)
- Dimensions: 800x330x340 (fits through 24" manhole)
- Weight: 45kg
- Max 3000 bar @ 30 l/min
- Cleaning path: 180 mm
- Vacuum dome integrated with carrier
- Flat or curved seal



Accessories

Remote Controller



- Joystick operation, hard wired operation by cable is optional
- ATEX zone 2 (optional)
- Charger cable
- 150 meters free space range
- Battery life approx. 45h
- Auto drive function
- Trim function
- Auto program for swingarm applications
- Pump control (pressure on/off)

Main Control Unit



- Fits through a 24" manhole
- Stainless steel main control box, trolley mounted
- Input needs to be specified 230VAC or 110VAC
- Input power cable standard 1 meter
- 50 meter cable for 48V power supply to the crawler
- Grounding point
- Upgrade main control to EX 2 Zone with overpressure system (optional)
- Pump control integration (optional)

Transport Plate



- For easy use of the MagTrack all robots are supplied with a transport plate for easy transport and safe deployment of the MagTrack to the surface

Fall Arrestor (optional)



- Necessary safety for working on vertical surfaces
- Fall arrestor as quoted has 30 meter cable
- Minimum 2 pieces required

LED Lights (optional)



- Optional the MagTrack can be equipped with LED zone 2 ATEX lighting. For use inside tanks this is a big benefit

Wall Contact Switch (optional)



- For extra safety a surface/wall contact switch can be installed on the Magnetic Crawler 4 wheel drive carrier
- This wall contact switch is in connection with the main control box
- In the rare event the robot would accidentally detach from the surface it automatically switches off the high pressure water
- Optional in combination with pump control integration



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