

VALEMAR



AMPHIBIOUS « RAPTOR »

Where the machines stop, the RAPTOR comes in!



The Raptor

The Raptor RP-56 allows you to carry out all types of aquatic work.

- **Mowing: Cutting algae, reeds, and other invasive plants**
- **Mechanical uprooting of Jussie, Brazilian Milfoil**
- **Cleaning and pumping of sludge, dredging, sludge removal, lagoons, etc.**
- **Excavation work in an aquatic environment**
- **Sampling of sediments in hostile environments (SEVESO site, ice, etc.)**
- **Decontamination of contaminated sites**
- **Collecting Sargassum seaweed in the Caribbean**

*"Any other functions or tools that can be connected hydraulically"**

The amphibious solution to your needs that will allow you to work where machinery no longer has access at a reduced cost.

The Raptor's ground lift and buoyancy allow it to move easily on water and land, making it a particularly effective tool for wetland management and conservation.

**(subject to feasibility)*

The RAPTOR is an amphibious tool carrier that has many advantages. This machine can be equipped with a very complete range of tools. Its hydraulic arm allows quick and easy tool replacement. The Raptor is equipped with a folding cabin for protection from the sun and bad weather.

The RAPTOR's weight distribution, created by the forward/rearward movement of the cockpit, helps balance the Raptor during steep climbs or descents.

The RAPTOR is transported on a 3.5-tonne double-axle flatbed trailer and can be towed by a standard vehicle. Thanks to its maneuverability and its tracks, the RAPTOR turns on itself and can work where machinery cannot access.

The **RAPTOR** is operated by a single person, which reduces operating costs.

But also, respectful of the environment and the banks because the rigid composite tracks leave little or no marks on the ground.



Mowing Tools

RP-210

Cutting bar width of 2.10m for a weight of 50 kg.

The RP-210 cutter bar is used for standard cutting of aquatic plants as well as reeds. It can be used in water as well as on land. It is equipped with 2 active knife blades.

Maximum depth of 1.20m

2.10 M CUTTING BAR



3 M CUTTING BAR

RP-300

Cutting bar width of 3.M for a weight of 55 kg.

The RP-300 cutter bar is used for standard cutting of aquatic plants except reeds. It is equipped with 2 knife blades, only 1 of which is active.

This cutter bar is not recommended for mowing on dry land.

Side cutter bar: (description on request).
This cutter bar allows you to mow the banks from the water.



NAMELY

For each cutter bar, a safety system with a pin protects the cutter bar when it encounters an obstacle on the water and underwater.



The collection tool

The RP-350 basket or rake is a basket that can be extended from 2 meters to 3.50 meters wide. This basket can be used to push and collect cut vegetation.

This basket can also be used for pulling out invasive plants such as water primrose.

The basket teeth or bars are bolted to the supporting structure and can be easily replaced or removed.

RP-350

Basket width from 2 to 3.50 meters.

The sides of the basket can be unfolded (see photos below with sides unfolded).

Basket weight: 40 kg The basket is transported on the rear of the Raptor on its support.



Pumping tools

Working depth:
Adjustable up to 2 meters



HYDRAULIC PUMP



The pump is operated by controls located next to the pilot's seat.

- Maximum working depth: 2 meters.
- Weight: 28 kg.
- Suction of solid elements: Up to 7 cm
- Pumping distance: Maximum 200 meters.
- Maximum flow rate: 150 m³/hour.
- Required oil flow rate: 40l/min
- Pressure: Between 140 and 210 bars

NAMELY

The pump motor speed is adjustable. 100mm diameter discharge pipes.



Excavation tools

EXCAVATOR



The excavator connects to the front of the RAPTOR. This tool offers a perfect combination and unique excavation possibilities.

The RAPTOR excavator is very suitable for excavation and dredging work in bodies of water, ports, lakes and rivers. The excavator arm is controlled from a control panel located in front of the driver's seat.

EXCAVATORS AND THEIR OPTIONS

RP Mechanical Excavator Excavation perimeter: 6.00 meters Excavation depth: 2.20 meters Arm weight: 250 kg. Control panel with levers to operate the arm and the excavator buckets.



ACCESSORIES

RP 30L: 25/30 litre bucket

RP 50L: 50 litre bucket - width: 60CM

RP 90: Root knife - length: 60CM



NAMELY

The excavator comes with optional hydraulic support legs that connect to the RAPTOR and allow stabilization of the Raptor on water during excavation work.



Trailer and transport

The RAPTOR is loaded onto a 3.5t double axle flatbed trailer. This maneuver can be performed by one person only. The trailer and RAPTOR can be towed by a standard vehicle.

RELIABILITY

The RAPTOR has few electronics, which is a guarantee of reliability.

Technical specifications

| Technical Data Sheet – Amphibious Tool Carrier RAPTOR RP56 | |
|--|---|
| Engine | <p>HATZ 3H50 TICD Diesel, liquid-cooled, Euro 5 compliant</p> <p>3 cylinders delivering 43 kW (56 hp) at 2,800 rpm, German-made</p> <p>Displacement 1.463 L</p> <p>Equipped with a diesel particulate filter (DPF)</p> <p>Latest-generation engine with reduced weight and compact dimensions, commonly used in mobile construction machinery</p> <p>Very quiet operation, with additional sound insulation on the engine protection covers</p> |
| Propulsion System | Tracks fitted with HDPE blades |
| <p>Chassis : Chassis made of hot-dip galvanized steel, resistant to salt water</p> <p>Height 1050 mm</p> | |
| <p>Aluminum pontoons</p> <p>Aluminum pontoons designed and engineered by a naval architect for optimal strength and durability</p> <p>Each pontoon includes two compartments and four bilge pumps with non-return valves</p> <p>Marine-grade aluminum construction with 4 mm side walls and 5 mm bottom plates</p> <p>Pontoons protected from track friction by high-performance HDPE plates on both the upper and lower surfaces</p> | |
| Dimensions and Weight | |
| Length | 4,90 m |
| Width | 2,04 m |
| Height | 2,10 m |
| Weight | 1 470 kg |
| Electrical System | 12 volts, 45-amp generator, 65 Ah battery |
| Hydraulic Tank | <p>80 liters, filled with Total Biohydran biodegradable hydraulic oil</p> <p>Includes return filter and desiccant air filter</p> |
| Hydraulic System | <p>DANFOSS piston pump and DANFOSS control valves</p> <p>6 hydraulic outlets with push-pull connectors (4 front, 2 rear)</p> <p>Integrated oil cooler</p> |
| Hydraulic Motors | Two DANFOSS OMS 160 cc motors for track traction, equipped with double balance valves |
| Hydraulic Pressure | 175 bar <input type="button" value="▼"/> |

Technical specifications

| | |
|--|-------------|
| Travel Speed | 0–120 m/min |
| Loading time | 30 s |
| Unloading time | 36 s |
| Fuel consumption : approximately 4.5 liters per hour | |
| Stainless steel diesel tank capacity : 50 liters | |
| <p>Front Lifting Arm Four-cylinder lifting arm Semi-automatic quick coupler (mini-excavator type) for fast tool changes Lifting capacity 300 kg Lifting height from ground level 1.80 m</p> | |
| <p>Operator Station</p> <p>Comfort seat with PVC upholstery, adjustable in length and inclination, featuring adjustable armrests Foldable soft cabin with stainless steel frame and high-quality marine-grade canvas Hydrostatic control system operated by two DANFOSS joysticks</p> <p>Left joystick: controls machine movement (forward, reverse, right, left) and hydraulic outlets 1 and 2 (front) as well as 5 and 6 (rear) Joysticks are adjustable on three axes for optimal ergonomics</p> <p>Right joystick: controls hydraulic outlets 3 and 4 (rear), horn, and forward/backward movement of the cabin block</p> <p>Main power cut-off switch located next to the seat Seat presence sensor for operator safety Hydraulic cylinder allowing cabin translation of 80 cm</p> | |
| <p>Dashboard</p> <p>Waterproof industrial-grade control box with key start, temperature warning light, hydraulic pressure warning, engine hour counter, and fuel gauge Full engine monitoring and parameter settings with adjustable RPM</p> | |
| <p>Equipment</p> <p>Two LED work lights and one rear position light Onboard toolbox and fire extinguisher</p> | |

Technical specifications

| <i>Warranty</i> | |
|-------------------------------------|--|
| Amphibious RAPTOR | <u>1 year warranty</u> (excluding wear parts, misuse, impacts, or poor maintenance of the Mobitrac) Wear parts such as transmission chains, tracks, and any damage caused by improper handling or lack of maintenance (e.g., track or chain tension adjustment) are not covered |
| HATZ Engine | <u>1 year</u> manufacturer warranty, with optional extension available |
| <u>Tools and Attachments</u> | <u>1 year warranty</u> (excluding wear parts, misuse, impacts, or poor maintenance) Wear parts include teeth, gears, bearings, and cutting bar structures, as well as collection bar components In general, any damage caused by improper use, impacts, or insufficient maintenance is excluded |
| <u>Trailer</u> | <u>2-year warranty</u> |

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RAPTOR

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