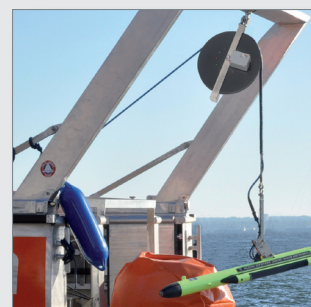




emma-MB8M - the environmental survey solution

- ➔ Multipurpose platform
- ➔ Robust and seawater resistant aluminium hull
- ➔ Proven design with adaptive solutions
- ➔ Installation and integration package deal for new equipment or customer supplied products



The aluminum hard chine multi-purpose survey vessel for shallow water applications

The multi-purpose vessel shall be employed to carry out hydrographic, oceanographic, limnological or geophysical surveys as well as water column or sediment sampling.

The concept behind the vessel is to create a multi-purpose platform on which state-of-the-art survey techniques, communication technology and sampling methods could be employed to fulfill a broad cross section of survey tasks in shallow water in a more economical way.

Deck

The vessel's deck consists of 4 mm aluminum. Deck beams are 40 mm T sections with frames 300 mm apart. Cabin roof and walls are 4 mm aluminum without interfering with frame spacing or dimensions.

Bulkheads

All bulkheads are made from 5 mm aluminum and are welded watertight with inert gases.

Vessel's hull

The hull is made from seawater resistant 5mm AlMg4.5Mn. Frames are made from 4mm plate aluminum, longitudinals from 40 mm T sections.

Fuel tank

A fuel tank with a minimum capacity of 140l has to be integrated into the bilge approx. 800mm from astern. The filler neck is located starboard below the gunwale. Two extraction lines, one each to the outboard engine and to the generator, have been installed.

Rails

Rails are made from 25 mm round tube and welded to the cabin from the aft deck to the foredeck.

Optional A-frame construction which can be slid inwards onto the aft deck and lowered outboard.

Engine

Proper engines are available upon request. Whether 2 or 4-stroke, one or two engines, your needs will be addressed.



Installations

The inside cabin is covered by insulating materials 8-tempered safety glass windows and minimum 2 with sliding mechanism

2x skylight window on the cabin roof

2x windshield wiper

2x fan with solar panel

4x Interior lights to illuminate working places

Outboard spot for aft deck illumination

Signal horn

fire extinguisher DIN EN 3

First aid kit DIN 13157

Foundations for winches, batteries, generators and pumps are already built into the floor.

6 welded cleats made from aluminum round tube.

There is a toilet cubicle next to the cabin on the aft deck.

The aft deck offers work spaces. At the port wall, there are two folding seats installed. One more seat is located amidships and at the cabin wall on the aft deck.

There are 2-3 working places in the cabin

A bulkhead allows access from the cabin to the bow in order to store equipment

Power Supply System and equipment

Onshore power supply plug

Generator with 2,8kVA and remote control

generator with extraction line access to fuel tank

Battery power with 2x 12/120Ah batteries

Power supply has different circuits for ship's operation and for equipment.

3 different electric circuits:

- 230V/10A
- 24V/125 A
- 12V/200 A

2x microcontroller for power selection

3x 10A fuses

1x ground fault circuit interrupter

1x Sinus inverter with remote control and control panel

8x electrical socket 230 V inboard

4x electrical socket 230 V outboard

3x RJ 45 LAN outlet

9x USB socket

1x PC i5, 4 GB, 120 GB SSD

1x industrial TFT 17" metal frame/ glass covering

1x industrial TFT 15" metal frame/ glass covering

Chart plotter with depth and temperature indication and GPS antenna

Echosounder frequencies: 50 kHz, 83 kHz and 200 kHz

Installations for survey equipment

For hydrographic surveys a multibeam echosounder shall be installed in a moonpool. The moonpool interiority allows the lifting and lowering of the equipment to dedicated positions and provides bell-crank lever to fix the instrument.

At the bow there is an additional adaptor for mobile equipment For over the side installations an additional bracket for mobile equipment is installed. An easy to attach/ detach mechanism is offered

Technical Data/Dimensions

Length over deck	8.00 m
Width over deck	2,40 m
Draught	ca. 0,35 m
Displacement	approx. 2,50 to
Engine(s)	acc. to customer's needs
Transport	Two-axle trailer licensed for road use