



E-PUSHER™ TYPE M

E-PUSHER SERIES

The E-Pusher type M is part of the KOTUG E-Pusher Series, a range of modular and scalable electrically powered pusher tugs for transporting a wide range of cargo. The series consists of four models to cover the inland waterways: the E-Pusher CityBarge (for inner cities) and the E-Pusher S, M and L for larger waterways.

Combining modular building with the globally patented design of the zero-emission E-Pusher - a PE hull assembly with a steel/aluminium frame and electric drive - is an entirely new approach in shipbuilding. The design of the E-Pusher offers the unique ability to switch containerised energy sources, varying from fossil, hydrogen, and fully electric energy. With the 100% electric E-Pusher, KOTUG supports companies that want to build a more resilient and sustainable supply chain.

DIMENSIONS

Length over all	16 m
Width	7.4 m
Max. draught	1.35 m
Min. air draft	4.30 m
Max. eye height	9 m

All components are the size of standard containers or can be delivered in containerized sections for transport to assembly location.

PROPULSION

- 2 * electric azipods of various kWh each
- Easy and quick changeable if up-, or downgrade of power is needed.

POWER SUPPLY

Containerized interchangeable containers which can carry all available energy sources such as:

- Stage V diesel generators
- LNG/CNG/Bio gas
- Hydrogen
- Methanol/ethanol
- Ammonia
- Battery packs

ACCOMMODATION

- 2 units with TEU footprint
- Self-supporting due to solar panels and battery packs
- Back up from main power source
- Various layouts possible
- Easy changeable

HULL AND FRAME

Steel frame to support all (horizontal) forces and distributes (vertical) weights of the various components on deck.

The hull is made of Polyethylen (PE) which provides the buoyancy and resists water forces of the vessel during sailing.

- 100% recyclable
- Fast and cheap building process
- Lightweight
- Extremely tough due to PE properties
- Redundant due to 18 watertight compartments
- No anti-fouling
- Very low resistance

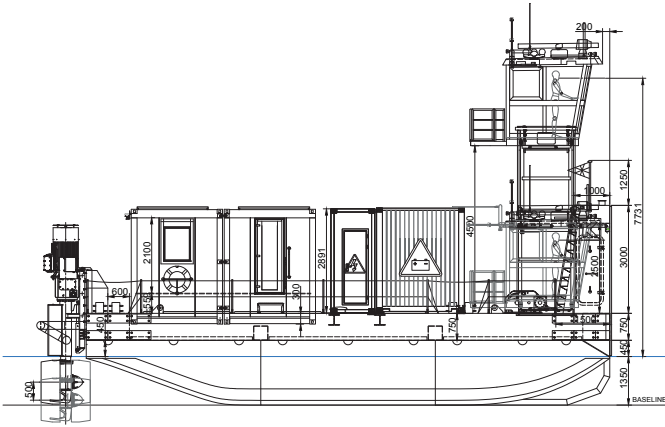
PRODUCTION & ASSEMBLY

All components can be fabricated by different builders at the same time and delivered to a central assembly location.

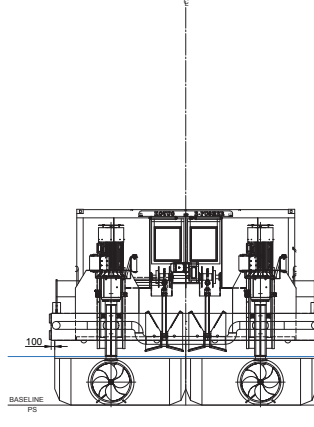
CERTIFICATION

Communautair (EU, CESNI, ESTRIN) +/- 5.000 m3

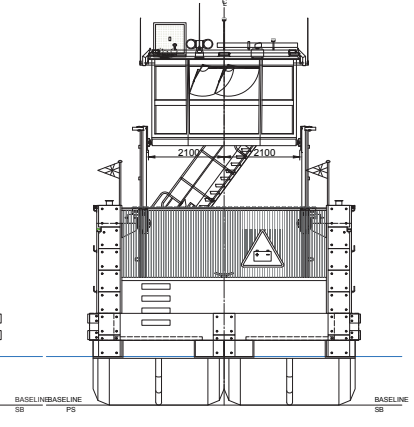
SIDE VIEW



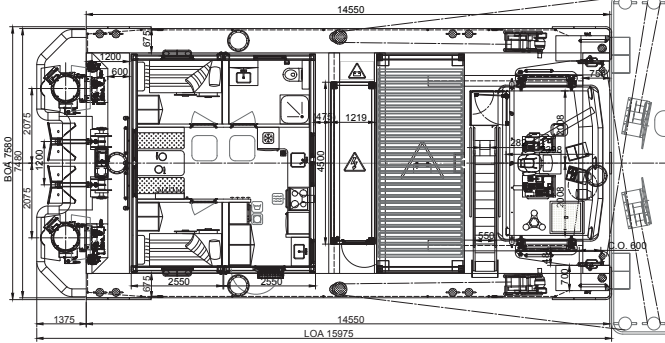
AFT VIEW



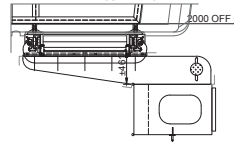
FRONT VIEW



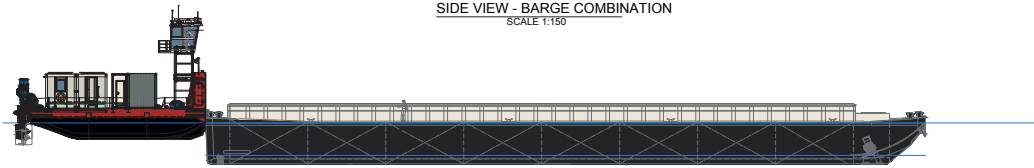
TOP VIEW



SECTION 2500 AB DECK



SIDE VIEW - BARGE COMBINATION
SCALE 1:150



KOTUG is a leading international towage and maritime company. Driven by our passion 'Ahead in Maritime Excellence' we empower our clients with the complete portfolio. From designing, building, chartering and operating vessels to training people and providing innovative consultancy services on a worldwide scale. With roots going back as far as 1911, KOTUG is a family-owned company and trusted voice and partner of leading companies within the Maritime Industry.

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