



Hopper Dredger

Embla R

Embla R is a split trailer suction hopper dredger, and possibly the most advanced and sustainable of its kind. It is a diesel-electric hybrid with hydrodynamic design, along with the latest environmental technology. Power from the batteries ensures an emission-free port stay. The three diesel generators are running on their most economical speed, and they will automatically be turned on and off depending on the power needed. The Blue diesel electrical system, Drive Plus C system, full LED lighting system, selective catalyst reduction (SCR), diesel particulate filters (DPF), and engines that are prepared to run on the most climate responsible fuels, ensure minimal emissions and the most environmentally sustainable operation. This both fulfils and exceeds the latest regulatory and industry standards, such as the European Emission Standard Stage V. All hydraulic oil is biodegradable hydraulic fluid. Embla R is using highly advanced technology for positioning and dredging operations, including RESON PDS 2000. Embla R is specially designed for operation in shallow waters as well as offshore and is capable of surveying with its integrated RESON multibeam system. Schottel azimuth thrusters with full 360° steerability and two bow thrusters provide exceptional manoeuvrability. An incredibly shallow draught, combined with advanced Dynamic

Positioning (DP2) system, makes the vessel ideal for execution of the most challenging work, both in extremely shallow waters and offshore. Embla R is classified as a ULEV: Ultra Low Emission Vessel. Furthermore, Embla R is certified with both a Green Passport and Cleanship super notation.

The load can be discharged quickly by splitting, which is faster than all other means of discharging, regardless of soil conditions, also achieving the highest precision and compaction. Alternatively, the hopper load can be discharged into a trench through the suction pipe, over the bow as rainbowing approximately 100m or through the bow connection to a pipeline of approximately 2.5km.

The vessel is state-of-the-art, with a green design and passport, a one-man operated bridge with an unhindered 360° view around the horizon, self-support from 3 heavy-duty cranes, and an innovative design that allows the vessel to operate on even keel with a draught of merely 3.1m. With an innovative extension dredge pipe, with heavy gantries and a submerged pump, it is possible to dredge down to well below 50m. With very high efficiency, exceptionally low energy consumption, and very high number of workable days, the vessel will outperform the competition.

Specifications

IMO	9896048	Dredging depth	52.0m
Call sign	OYVG2	Main engine	3x2,350kW
MMSI	219027309	Bow thruster	2x315kW
Gross tonnage	2,999GT	Pump ashore power	3,360kW
LOA	85.4m	Total power installed	7,050kW
Breadth	17.4m	Speed ballast	11.5kn
Hopper capacity	2,700m ³	Speed loaded	10.0kn
Draught loaded	5.1m	Flag	Danish
Draught unloaded	3.1m	Class	Bureau Veritas

Nordic mythology

Embla was the first woman created by the gods. According to Nordic mythology, she and Ask were the ancestors of all mankind. Out of wood logs found at the seashore, they were formed and bestowed with spirit, will, and beauty, by Odin and two other gods.

