



GM Constructor - a decommissioning and installation vessel

The GM Constructor was designed to fulfill a variety of needs surrounding marine operations related to decommissioning and construction support activities. By combining multiple modes in one primary and safe vessel design, the GM Constructor provides a flexible and cost efficient approach to offshore projects. The semi-submersible hull structure design has integrated technology solutions, which offer an exciting alternative to those available in the current marketplace. This innovation will improve efficiency and reduce offshore work time, while maintaining safe and low-risk marine operations. The detail design and computer modelling have been conducted by Global Maritime. Model testing has been carried out verifying the analytical work. DNV has issued a Certificate of Fitness for the design.



GM Constructor Mode 1 – Topside Removal

The vessel will carry out a single lift and remove the topside using transverse lifting beams, specifically arranged for each topside to be removed. The lifting operation is estimated to take one day. The beams are fitted with dynamic load absorbers, customized locking, and a sea fastening system. Once secured on the GM Constructor, the topside will be transported ashore. Inshore offloading in sheltered waters is then carried out via cargo barge.



GM Constructor Mode 2 – Jacket Removal

The vessels pictured below are ready for jacket removal. Hydraulic Stand Jacks are the primary lifting equipment, which are installed on the existing lifting beams. The jacket can be lifted in one piece. The vessel is kept in position using DP, and the guidance and sea fastening system will ensure the jacket is both lifted and locked correctly for transport. The jacket will be transported to an inshore pre-defined location where it will be set aground and cut in two sections. The GM Constructor will then lift both sections onto a barge for final transport ashore.



GM Constructor Mode 3 – Construction Support & Accommodation

The vessel pictured below is hooked up to a fixed installation using the telescopic gangway. The vessel will use the DP3 system for positioning in this mode. Construction support can include: preparing a platform for removal, lifting operations, power supply, ROV operations, etc. Accommodation is provided for 300 people in single cabins.



GM Constructor Mode 4 – Module Lifting

The vessel pictured to the right is prepared for module lifting. A crane ship (The Rambiz), has been fitted onto the GM Constructor. The geometry of some topsides will not allow for a single lift, but in the mode shown, all modules can be removed separately. The modules are lifted away in single lifts and transferred by the vessel's DP system to a barge with pre-installed grillage and sea fastening.



Key Characteristics

Lifting capacity	16 000 Mts with no additional buoyancy 23 000 Mts with additional designed buoyancy
Class 3 DP System	6 x 68 t Thrusters
Towing Gear	250 T Bollard Pull
Helideck	Sikorsky s61-N, Super Puma
Cranes	2 x 15 T / 50 T SWL @ 50 m radius offshore
Safety Certificate	300 persons
Class Notation	+1A1 Column- stabilizes unit
Gangway	Telescopic Gangway, 36,5 m
Design Life	20 years

Main Specifications

Overall Length	115,0 m
Overall Width	93,5 m
Height (to top of girders)	47,0 m
U- slot dimensions	77,5 m x 57,7 m
Submerged Depth	6,5 m - 39,0 m
Accommodation	300 single cabins
Engines	6 x 4 840 kW diesel generator 1x 910 kW emergency generator
Ballast capacity	8 off, 6 000 m ³

For details, contact:

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