

CONSTRUCTION VESSEL

Since Vuyk Engineering Rotterdam operates not only in ship design but also in ship operations, we contribute to developments in both disciplines. Our experience with the design of working vessels and in the field of Marine Operations gives us a good basis for the development of new ship concepts.

Recently we started the development of a concept design of a modular offshore construction vessel. One of the functions of the vessel is to be a platform for pipelay equipment as designed by our sister company IHC Engineering Business in the U.K.

An offshore construction vessel has to fulfil the demands of the offshore market. It needs to be employable for installation and construction for the oil and gas industry, installation and transport of wind turbines, float on/off operations of equipment and cargo, for offshore support and optionally for heavy transport and bridge installation.

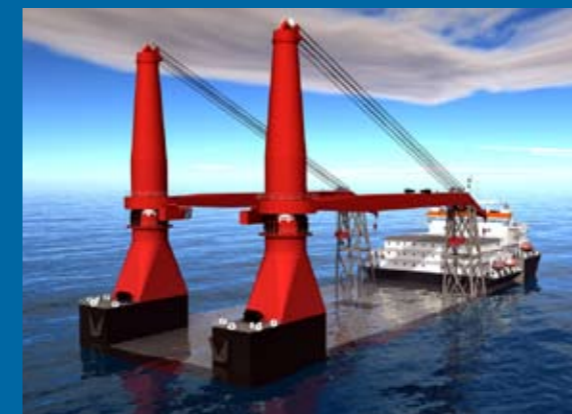
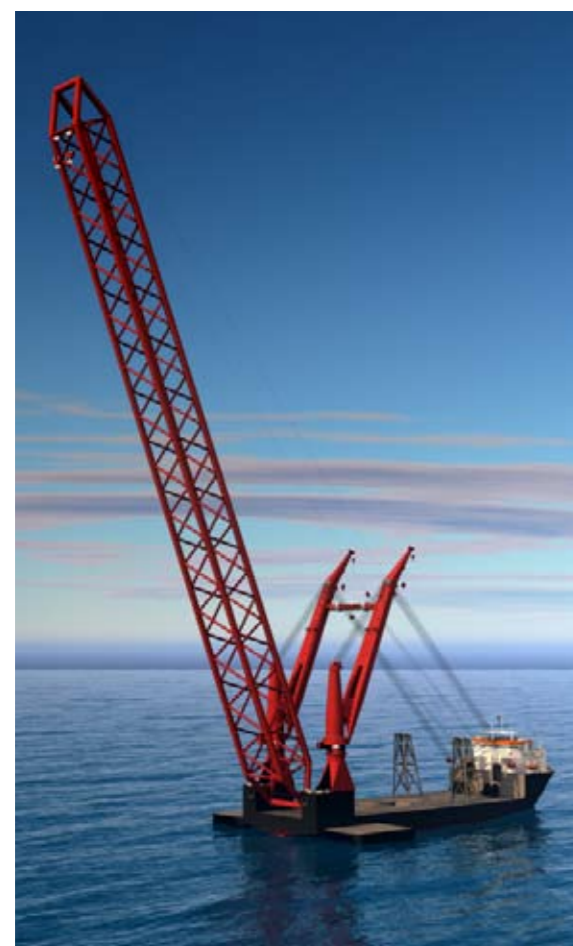
So it has to be a multi purpose vessel which can be fitted with a wide range of equipment that is partly designed as modular systems. The vessel can have the capability to submerge and load floating deck equipment or cargo.

Specifications:

Lifting	3 000 t
Deck area	3 000 m ²
Payload	10 000 t
Service speed	14 kn.
Submersible	7.5 m
Moonpool	
Dynamic positioning capability (DP2)	

Main characteristics:

Length overall	161.50 m
Length b.p.p.	150.00 m
Breadth moulded	42.00 m
Depth to main deck	14.50 m
Draught sailing	7.5 m
Draught lifting (max)	9.00 m



The vessel can be fitted with two heavy lift mast cranes, which gives the advantage of controlled tandem hoisting with maximum load and redundancy for single crane operations. The arrangement of the cranes also provides space for modular equipment and deck load to be positioned and operated between the cranes. Optionally the vessel can be fitted with a longboom for installation of bridges and civil constructions.

The vessel can occasionally be fitted with modular equipment, such as J-lay equipment, reel lay equipment or trenching equipment and, when necessary, with a modular accommodation unit for extra personnel. This self-floating unit is installed on the vessel during a submerging operation.

This concept is developed as a starting point for further specification based on clients' requirements. These requirements will be incorporated in the basic design to follow.

