

New Rules for Offshore Service Vessels

On 1 January 2010, new Rules for Hull Structures of Offshore Service Vessels will come into force. These rules apply to ships intended for offshore support and supply, offshore towing, well stimulation, and other specialised offshore services. For these ships the class notation OFFSHORE SERVICE VESSEL will be assigned, complemented by optional further notations, such as HNLS for ships carrying hazardous and noxious liquid substances, AH for anchor handling tug/supply ships, WSV for well stimulation vessels, and WTIS for wind turbine installation/construction support ships.

Design and operation of offshore vessels differ significantly from those of general cargo ships. Comprehensive international regulations are needed to specifically account for practical demands of OSVs. The new rules reflect today's offshore support vessels. Compared to their predecessors, these ships are larger, more specialised, and technically more sophisticated to meet demands of complex deepwater field developments. The latest review of the OSV rules are intended to support design and build safer and more robust offshore service vessels while minimizing operational risks.

Today, the term "supply" substitutes the broader term "support" or "service," referring to an expanded definition of an OSV that includes not only traditional supply boats, but also anchor handling tug/supply ships, well stimulation ships, standby ships, and even ships built to carry hazardous and noxious substances, to fight fires, or to occasionally recover oil.

These rules, subdivided into 32 sections, constitute Part 6 of the chapter Ship Technology. Sections 2 to 21 of these rules are based on the existing GL Hull Structural Rules for Seagoing Ships fitted to the relevant design aspects for offshore service vessels. Amended requirements of these sections concern particular reinforcements of superstructures and weather decks subject to green sea loads and concentrated loads from heavy cargo items. Scantlings of side shell and frames are increased to account for berthing impacts on offshore installations. These rules also offer the option to make use of aluminium in the design of helicopter decks, including respective requirements for structural fire protection.

The Hull Outfit section incorporates specific provisions regarding arrangement of side scuttles and windows. They specify applicable design loads as well as requirements for glass panes and glass thickness.

Section 22, Structural Fire Protection, was subdivided into special requirements for ships with a total of 60, 240 or more than 240 persons. Furthermore, requirements for the carriage of crude oil and petroleum products are included.

From Section 26 onwards, requirements for particular ship types, services, and operational profiles are specified, such as vessels for carrying hazardous and noxious substances, which are equipped with systems for vapor detection and alarm as well as emergency shutdown.

Section 27 includes design criteria for anchor handling and towing of ships. Substructures and foundations for winches, stern rollers, etc., as well as stability requirements for towing operations are specially considered.

Other ships having functional equipment, such as well stimulation vessels, fire fighters, oil/chemical recovery and transportation vessels, and special purpose ships, are addressed in subsequent sections. The final section treats wind turbine installation ships. Ships with or without jack-up capability are classified separately.