



Offshore Support Vessels

The Preferred
Choice for Class

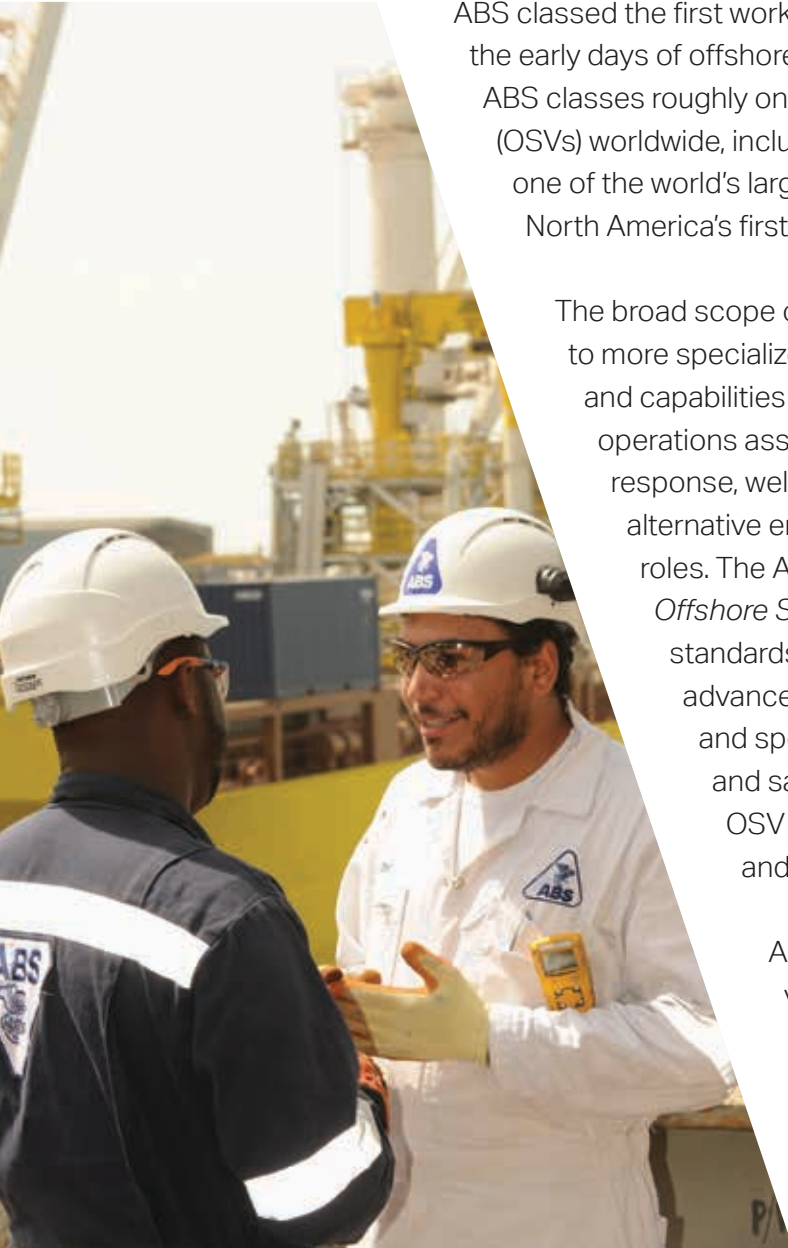


Supporting the OSV Evolution

ABS classed the first workboats to venture into the Gulf of Mexico in the early days of offshore exploration in the United States. Today, ABS classes roughly one-third of all offshore support vessels (OSVs) worldwide, including the world's largest pipelaying vessel, one of the world's largest offshore construction vessels and North America's first LNG-fueled OSV fleet.

The broad scope of offshore support operations has led to more specialized services that are changing the roles and capabilities of this critical fleet, which is carrying out operations associated with construction, emergency response, well services and subsea support and alternative energy in addition to the traditional support roles. The *ABS Rules for Building and Classing Offshore Support Vessels (OSV Rules)* provides standards for the design and construction of more advanced OSVs, including multipurpose vessels, and specifies functional equipment, arrangements and safety requirements. Recent updates to the OSV Rules encompass deepwater intervention and subsea operations.

Anticipating developments in offshore vessel design, equipment and systems, ABS is investing in updating and expanding its Rules and services to address the offshore oil and gas industry's evolving needs.





Practical and Technical Experience

Over the years, OSVs have evolved dramatically in terms of diversification, worldwide operation and water-depth capabilities. ABS has been part of this evolution, being selected to class some of the industry's most innovative OSVs. ABS is the OSV classification leader for vessels providing:

- **Construction Support**
Pipe Lay, Cable Lay, Heavy Lift
- **Well Services and Subsea Support**
Intervention, Stimulation and Test, and Diving and ROV Support
- **Emergency Response Services**
Safety Standby, Rescue, Oil Spill Recovery, Firefighting
- **Traditional Support**
Offshore Anchor Handling, Towing and Supply
- **Alternative Energy Support**
Wind Turbine Installation, Maintenance and Repair



Advanced Capabilities

New generation OSVs have become more technologically advanced to meet diverse operational and environmental demands, particularly in deepwater drilling and subsea operations. Vessels serving the offshore industry now come equipped with increased cargo capacity, panoramic navigation bridges, large accommodation spaces, enhanced crew amenities, state-of-the-art propulsion and automation systems and feature streamlined bow forms for harsh-environment operations, as well as:

- Well intervention, well stimulation and well test services in addition to top-hole drilling
- Heavy lift cranes and moon-pools to perform inspection, maintenance and repair functions
- Diving and remotely operated vehicle (ROV) functionality
- Harsh environment capabilities and features for extreme polar ice conditions



Notations for Specialized Services

ABS provides optional notations for OSVs, including the **CCO** notation for vessels designed, equipped and intended to operate in low temperatures. The **DPS-0, DPS-1, DPS-2** or **DPS-3** notations are available for vessels fitted with dynamic positioning systems. The **ENVIRO** or **ENVIRO+** notations designate that vessels meet enhanced standards for environmental protection. In addition, the **HAB(WB), HAB+(WB)** and **HAB++(WB)** notations are awarded to vessels that comply with the criteria for crew accommodations and ambient environments (i.e., vibration, noise, indoor climate and lighting).

OSVs in Harsh Environments



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Harsh-environment OSVs have unique designs and additional capabilities for icebreaking and ice management. Their role is critical because they have the potential to extend the drilling season window and reduce the need for the production unit to disconnect.

ABS is working with partners in industry and academia through its Harsh Environment Technology Center in St. John's, Newfoundland, to develop scenario-based ice load models and technical solutions unique to this operating environment.

ABS provides guidance for OSVs operating in harsh environments in the *ABS Guide for Vessels Operating in Low Temperature Environments*, which supplements the requirements for Ice Class related to the hull, machinery and safety systems.

Anticipating the need to align Ice Class notations with the IMO Polar Code, ABS implemented the IACS Unified Requirements for Polar Class vessels into the ABS Rules, effectively replacing the ABS General Ice Classes.

LNG Fueled Vessels

With the increasing global concern for the environment, clean gas-based energy plays an integral role within that framework. In North America, some owners and operators are pursuing LNG as a fuel solution to meet more stringent exhaust emissions requirements, improve operational efficiency and reduce cost over the vessel's lifetime.

ABS is providing guidance and support for the first LNG as fuel initiative under the US flag, which involves building a new class of LNG-powered offshore supply vessels for the US Gulf of Mexico. Class, industry and US regulators have worked together to develop written regulations and processes for addressing the technical challenges related to this next generation of support vessels.

Drawing on its global experience and knowledge of gas fuel systems and equipment as well as regulatory and statutory requirements, the ABS Global Gas Solutions team is well positioned to provide global support for companies considering the switch to an LNG propulsion system.



The Classification Leader for OSVs

ABS has moved with the offshore industry from classing basic workboats to classing the OSVs that will take on tomorrow's challenges. From its Energy Corridor location in Houston and specialized offshore offices around the globe, ABS continues to monitor OSVs worldwide, working with industry to anticipate needs as operating environments become more demanding. As the leading provider of classification services to the global offshore industry, ABS is in a unique position to support the evolving OSV market sector.

Experienced ABS professionals can guide OSV projects during the initial design concept, through the plan approval process, during construction and throughout the entire service life of the asset.



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For more information:

Contact an ABS technical advisor today to discuss the unique aspects of your next project, and access ABS Rules and Guides online at www.eagle.org under the Resources tab.

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