



WIND FARM SUPPORT CRAFT

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Foreword

The *ABS Guide for Building and Classing Wind Farm Support Craft* contains the requirements for such vessels specifically fitted with equipment for maintaining and repairing facilities in offshore wind farms, as well as transporting industrial personnel between a shore based facility and offshore wind farms. Wind Farm Support Craft may also carry cargo as part of their normal operations.

During development, requirements applied to ABS classed High-Speed Craft are considered and customized in view of the unique configurations and the typical service routines of Wind Farm Support Craft. As a result, the hull scantlings are derived based on the anticipated en route weather conditions.

This Guide is primarily intended for High-Speed Craft, but may be applied to other vessel types as indicated in 1/5.1.

The effective date of this Guide is the first day of the month of publication.

Users are advised to check periodically on the ABS website www.eagle.org to verify that this version of this Guide is the most current.

We welcome your feedback. Comments or suggestions can be sent electronically by email to rsd@eagle.org.

GUIDE FOR BUILDING AND CLASSING

WIND FARM SUPPORT CRAFT

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SECTION 1 General

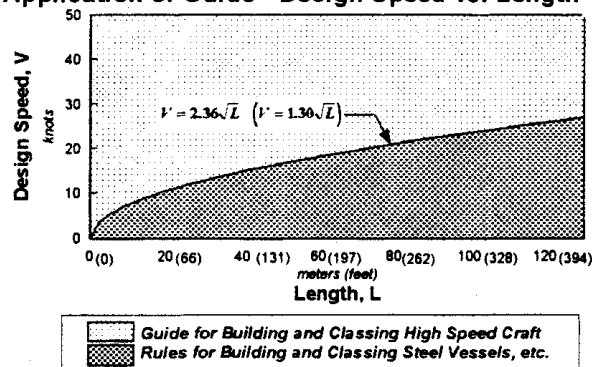
1 Application

1.1 High-Speed Craft

This Guide is applicable to high-speed craft for commercial or governmental use constructed of steel, aluminum, or FRP and having $V/\sqrt{L}$ not less than 2.36 (1.30) where L is as defined in 3.11 and V is as defined in 1/3.13. Applicable craft type and length are as follows:

Vessel Type	Applicable Length
Mono-hull	< 130 m (427 ft.)
Multi-hull	< 100 m (328 ft.)
Surface Effects Ship (SES)	< 90 m (295 ft.)
Hydro Foil	< 60 m (197 ft.)

Application of Guide - Design Speed vs. Length $\left(\frac{V}{\sqrt{L}}\right)$



High-speed wind farm support craft are to comply with the ABS *Rules for Building and Classing High-Speed Craft (High-Speed Craft Rules)* in its entirety, except as modified herein.

The criteria contained in this Guide are meant to be applicable to those features that are permanent in nature and can be verified by plan review, calculation, physical survey or other appropriate means. Any statement in this Guide regarding any other feature is to be considered as guidance to the designer, builder, owner, et al.

ABS may also consider the flag Administration's Ship Safety Regulations as an alternative to satisfying specific portions of the *High-Speed Craft Rules* and this Guide.

3 Definitions

Definitions of the following terms are used in this Guide. For additional terms, reference is made to Section 3-1-1 and 4-1-1/13 of the *High-Speed Craft Rules*.

3.1 Wind Farm Support Craft

A *Wind Farm Support Craft* is a craft specifically designed for maintaining and repairing offshore wind turbines/towers, as well as transporting industrial personnel between the offshore wind farm and a shore based facility. The wind farm support craft may also carry cargo.

3.3 Administration

Administration refers to the flag State of the wind farm support craft.

3.5 Gross Tonnage

Gross Tonnage is the measurement of the internal volume of spaces within the craft as defined by the International Convention on Tonnage Measurement of Ships, 1969 (ITC).

3.7 Industrial Personnel

Industrial Personnel means every person carried onboard a wind farm support craft for the sole purpose of carrying out the business or functions of maintaining/repairing of wind turbines/towers. Examples of industrial personnel include

- Tradesmen, such as mechanics, plumbers, electricians, and welders;
- Laborers, such as wreckers and construction workers; and
- Other persons such as supervisors, engineers, technicians, and divers;

3.9 Place of Refuge

A *Place of Refuge* is any naturally or artificially sheltered area which may be used as a shelter by a craft under conditions likely to endanger its safety.

3.11 Length

L is the distance, in meters (feet), on the summer load line, or if applicable, the design load waterline in the displacement mode, from the fore side of the stem to the centerline of the rudder stock. For use with this Guide, *L* is not to be less than 96% and need not be greater than 97% of the length on the summer load line. The forward end of *L* is to coincide with the foreside of the stem on the waterline on which *L* is measured.

3.13 Speed

Speed is the design speed in knots with the craft running ahead at the maximum continuous rated shaft rpm and at the summer load waterline. Operational speed is 90% of design speed.

5 Classification

5.1 General

The Class Notation of **✕ A1, HSC Wind-SC(A)** or **✕ A1, HSC Wind-SC(B)** is to be assigned to a high-speed wind farm support craft based on the specifications described in Section 1, Table 1 of this Guide provided that all the applicable requirements in this Guide are fully satisfied. For **HSC** notation, refer to 1-2-2/1 of the *Rules for Conditions of Classification – High-Speed Craft (Part 1)*.

All craft being certified as **✕ A1, HSC Wind-SC(A)** are to comply with the **OE** notation as defined by 1-1-3/Table B of the *Rules for Conditions of Classification – High-Speed Craft (Part 1)*, and the operational envelope is to be entered into the *Record*.

The **Wind-SC** notation is also available to Steel Vessels, Aluminum Vessels, or Offshore Support Vessels that comply with Sections 2/3, 2/5, 3/3, 9, & 10 of this Guide.

TABLE 1
Types of Wind Farm Support Craft

<i>Gross Tonnage (GT)</i>	<i>Industrial Personnel (IP)</i>	<i>Domestic Voyage</i>	<i>International Voyage</i>
< 500	≤ 12	Wind-SC(A)	Wind-SC(A)
	> 12	Wind-SC(A)	Wind-SC(B)
≥ 500	Any	Wind-SC(B)	

* *Note:* Maximum number of persons onboard is subject to flag Administration approval.

5.3 Operational Limits

The wind farm support craft's Operational Limits, described in 1/5.3.1 to 1/5.3.3 of this Guide are to be included in the Operating Manual. See 1/5.5 of this Guide and 3-2-1/9 of the *High-Speed Craft Rules*.

5.3.1 Domestic Voyages

Where wind farm support craft are limited to domestic voyages, the course of its voyage is not to exceed 200 nautical miles from a place of refuge (refer to 1/3.9).

5.3.2 Transit Voyages

The craft's maximum range, in nautical miles, from a place of refuge is to be such that, in the normal course of the voyage, there is a minimum reserve fuel capacity equal to 25% of the craft's aggregate fuel oil capacity. Calculations to verify the maximum range from a place of refuge are to be submitted for review.

5.3.3 Special Consideration

In addition to 1/5.3.1 and 1/5.3.2, any specific operational limits required by the flag Administration and/or port State are to be specially considered, and be documented in the craft's Operating Manual.

5.5 Operating Manual

In addition to the requirements of the 3-2-1/9 of the *High-Speed Craft Rules*, the wind farm support craft's Operational Limit (i.e., maximum range from a place of refuge) per 1/5.3 of this Guide shall be specifically defined in the craft's Operating Manual.

The craft shall be operated in accordance with the ABS Approved Operating Manual, and reference to the Operating Manual will be distinguished in the *Record* by a Special Comment as well as placed on the face of the Load Line Certificate for the guidance of the Master

7 Scope

The hull and machinery requirements to class a craft as a wind farm support craft are covered in this Guide. The requirements for Navigational Equipment and Radio Communications are not addressed except for Emergency Position Indicating Radio Beacon (EPIRB).

9 Administration Approval

In general, the approval of material for use within the accommodation, and in safety equipment, life-saving appliances, etc., is a function of the Administration.

When given specific instructions from the Administration, ABS may approve and accept material, equipment, life-saving appliances, etc., fitted on the craft. See Section 8 for specific requirements for the life-saving arrangements.