

Anchor Windlass Design and Testing

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Parts B, D, H and Q
Rules for High Speed Craft
Guidance for the Survey and Construction of Steel Ships Parts B, D, GF and H
Guidance for High Speed Craft

Reason for Amendment

In recent years, IACS has received reports of accidents where the hydraulic motor driving a cable lifter of a windlass had broken due to overpressure causing scattered debris which had injured crew members. In response to these reports, IACS began discussing the specification of unified requirements regarding the design and testing of windlasses for preventing future occurrences of similar accidents.

These discussions led to the adoption of specific requirements related to the working load, strength and safety measures of windlasses as IACS Unified Requirement (UR) A3 in June 2017.

Accordingly, relevant requirements were amended in accordance with the IACS UR A3.

Outline of Amendment

- (1) Specified formulae for obtaining working loads in accordance with the maximum anchorage depth for windlasses which are intended to pay out anchors deeper than 82.5 m.
- (2) Specified the strength required for windlasses and chain cable stoppers.
- (3) Specified that a mean is to be provided to contain any debris consequent to severe damage of the prime mover when an axial-piston-type hydraulic motor serves as the prime mover.

Amended Requirements

Rules for the Survey and Construction of Steel Ships
Part B: 2.1.2, 2.1.3, 2.1.6
Part D: Chapter 16
Part H: 1.1.6
Part Q: 20.4.9
Rules for High Speed Craft
Part 2: 2.1.2, 2.1.3
Part 9: 1.1.1, 1.3.1, Chapter 10
Guidance for the Survey and Construction of Steel Ships
Part B: B2.3.1
Part D: D16.2.1, D16.2.2, D16.2.3, D16.2.4
Part GF: 1.2 of Annex 1
Part H: H1.1.6
Guidance for High Speed Craft
Part 2: 2.1.2
Part 9: Chapter 10