# Offshore Mooring Chains and Accessories for Offshore Mooring Chains

#### **Amended Rules and Guidance**

Rules for the Survey and Construction of Steel Ships Parts K, L, and PS Guidance for the Survey and Construction of Steel Ships Parts K and L Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use

#### **Reason for Amendment**

In response to a report received from industry members regarding the failure of offshore mooring chains and their accessories, IACS conducted a review of its Unified Requirement (UR) W22 (Rev.5), which specifies requirements related to the approval of manufacturing processes and inspections at the time of shipment for the chains and accessories.

During this review, IACS discussed amending existing requirements related to matters such as the clarification of requirements related to dimensional tolerance and the non-destructive tests for final products as well as adding new requirements related to the regular temperature measurements of heat treatment furnaces. As a result, UR W22 (Rev.6) was adopted by IACS in June 2016.

Accordingly, all relevant requirements were amended based upon Unified Requirement W22 (Rev.6).

### **Outline of Amendment**

The main details of the amendment are as follows:

- (1) Added documents to be submitted regarding the approval of manufacturing processes of offshore mooring chains (hereinafter referred to collectively as "offshore chains") and accessories.
- (2) Added requirements related to CTOD tests for the approval of manufacturing processes of offshore chains and accessories.
- (3) Specified the approval of heat treatment furnaces used in the manufacturing of offshore chains and accessories.
- (4) Specified requirements related to dimensional tolerances of links of offshore chains.
- (5) Specified requirements related to alternative breaking tests and mechanical tests.
- (6) Added requirements related to non-destructive tests for offshore mooring chains and their accessories.

## **Amended Requirements**

Rules for the Survey and Construction of Steel Ships

Part K: 3.6.5, 3.6.8, Fig. K3.2, 3.6.10, Table K3.25, 3.6.13, 5.2.4, 5.2.5, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 5.2.12, 5.2.13, 5.2.14, 6.3.4, 6.3.7, 6.3.8, 6.3.9, 6.3.10, 6.3.11, 6.3.12 Part L: 3.2, 3.2.1, 3.2.5, 3.2.7, 3.2.9, Table L3.9, 3.2.11, Table L3.11, 3.2.12, 3.2.13, 3.2.14, 3.2.15, 3.2.16, 3.2.19

Part PS: 3.9.1

Guidance for the Survey and Construction of Steel Ships

Part K: K3.6.10, K3.6.13, K5.2.10, K5.2.14, K6.3.7, K6.3.8, K6.3.9, K6.3.12

Part L: L3.2, L3.2.5, L3.2.7, L3.2.11, L3.2.13, L3.2.14, L3.2.18

Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use Part 1 Table 1.1-2, Part 2 2.2.2, Fig. 2.2-1, 2.4.3, 2.4.4, 2.9, 3.2.2, 3.4.1, 3.4.3, Table