# **Propeller Shaft and Stern Tube Shaft Surveys**

### **Amended Rules and Guidance**

Rules for the Survey and Construction of Steel Ships Part B

Rules for High Speed Craft

Rules for the Survey and Construction of Inland Waterway Ships

Guidance for the Survey and Construction of Steel Ships Part B

Guidance for High Speed Craft

Guidance for the Survey and Construction of Inland Waterway Ships

### **Reason for Amendment**

The ClassNK Rules stipulate that propeller shafts and stern tube shafts with oil lubricated stern tube bearings (Kinds 1B and 1C) are to be subjected to Ordinary Surveys every five years. These surveys include the drawing out and non-destructive examination of propeller connections.

IACS Unified Requirement (UR) Z21(Rev.4) allows the extension of the due dates of such oridinary surveys for up to five years regardless of the installation of bearing temperature measuring instruments in cases where Partial Surveys are carried out to verify the condition of the lubricating oil five years after either the above-mentioned drawing out of the shaft or after the delivery date of the ship itself in which the shaft condition is confirmed to be satisfactory through verification of the results of lubricating oil analysis regularly carried out by the shipowner.

The ClassNK Rules allow extensions of due dates of such Ordinary Surveys for up to five years subject to a Partial Survey equivalent to the above-mentioned one while alternative means were allowed for ships which do not regularly carry out lubricating oil analysis. In the latter case, the maximum extensions of due dates allowed were five years for shafts with bearing temperature measuring instruments and three years for shafts without bearing temperature measuring instruments.

Accordingly, relevant requirements were amended so that the Partial Survey requirements for extensions of Ordinary Survey due dates are in accordance with the those set out in IACS UR Z21(Rev.4). In addition, requirements related to propeller shaft and stern tube shaft surveys were amended for harmonization reasons throughout the ClassNK Rules, including the Rules for High Speed Craft and the Rules for the Survey and Construction of Inland Waterway Ships, so that all relevant requirements in the ClassNK Rules would also be in line with IACS UR Z21(Rev.4). This was being done as part of a comprehensive review of ClassNK Rules.

#### **Outline of Amendment**

The main details of the amendment are as follows:

- (1) Amended maximum extensions of Ordinary Survey due dates for Kind 1B from three years to five years except for inland waterway ships.
- (2) Specified that results of lubricating oil analysis to be regularly carried out by the shipowner are also to be verified as part of lubricating oil condition verification at a survey such as Partial Surveys intended to extend Ordinary Survey due dates of oil lubricated shafts.

## **Amended Requirements**

Rules for the Survey and Construction of Steel Ships

Part B: 1.1.3, 1.3.1, 3.3.1, 6.1.3, Table B6.1, 8.1, Table B8.1

Rules for High Speed Craft Part 2 3.6.1, 3.9.1, 3.9.2, 3.9.3, 3.9.4

Rules for the Survey and Construction of Inland Waterway Ships Part 2 1.1.3, 1.3.1, 3.3.1, 6.1.3, Table 2.6.1, 8.1, Table 2.8.1

Guidance for the Survey and Construction of Steel Ships

Part B: B1.1.3, B3.3.1, B6.1.3, B8.1, Table B8.1.3-1, Annex B1.1.3-7

Rules for High Speed Craft Part 1 1.1.8, Part 2 3.6.1, 3.9.2, 3.9.4

Guidance for the Survey and Construction of Inland Waterway Ships Part 2 1.1.3, 3.3.1, 6.1.3, 8.1, Table 2.8.1.3-1