

Open-up Examinations of Propeller Shafts and Stern Tube Shafts

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part B
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Reason for Amendment

The NK Rules, in principle, require open-up examinations for propeller shafts and stern tube shafts at least once every 5 years. However, NK also specifies that said examinations may be postponed for certain kinds of shafts if partial surveys (survey in which the shaft is not withdrawn) are conducted: a maximum of 8 years for shafts Kind 1B which have oil-lubricated stern tube bearings and a maximum of 10 years for shafts Kind 1C with oil-lubricated stern tube bearings which comply with the special requirements related to the monitoring of stern tube bearing temperatures and the continuous circulation of lubricating oil, etc.

With regard to these requirements, ClassNK conducted an examination past damage records and problems related to propeller shafts for the purpose of expanding the inspection system. As a result, it is believed that for shafts Kind 1B, confirmation of bearing soundness through periodical lubricating oil analysis in addition to the aforementioned partial surveys are an effective way to detect problems at an early stage and, thus, prevent serious damage to the propeller shafts. Accordingly, relevant requirements are amended so that examination intervals may be extended for shafts Kind 1B whose proper maintenance and good bearing condition can be confirmed.

Outline of Amendment

Specified that, the open-up examination interval for shafts Kind 1B may be extended to a maximum 10 of years subject to periodical lubricating oil analysis, temperature monitoring of the stern tube bearings and confirmation of the lubricating oil consumption rate in addition to the heretofore required partial surveys.