

Couplings between Rudder Stocks and Main Pieces

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part C and CS
Guidance for the Survey and Construction of Steel Ships Part C

Reason for Amendment

Regarding the couplings between rudder stocks and main pieces, the cases of with a key and without a key (keyless) are specified respectively in Parts C and CS of the Rules.

In the requirements, scantlings of the shear area and abutting surface area between the key and rudder stock or between the key and rudder body are specified on the assumption that all of the rudder torque is transmitted by the key in cases where a key is provided. On the other hand, in the case of keyless, standards of push-up force and push-up length are specified on the assumption that all of the rudder torque is transmitted by the friction at coupling.

However, in some cases, it is found that rudder torque is transmitted by both friction at the coupling and the key where the rudder stock is connected to the main piece using a cone coupling with a key. Therefore, the requirements for the scantlings of a key corresponding to the aforementioned case have been specified.

Outline of Amendment

Requirements for the shear areas of keys, the abutting surface areas between keys and rudder stocks or between keys and rudder bodies in cases where the rudder stock is connected to the main piece by the cone coupling with a key and rudder torque is transmitted by both friction at the coupling and the key have been specified.

In addition, the standards for couplings between rudder stocks and main pieces specified in Appendix C1 of the Guidance have been amended.