

Earthing of Cargo Tanks, Piping Systems, etc.

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Parts B, D, N, and S
Guidance for the Survey and Construction of Steel Ships Parts B and D

Reason for Amendment

IACS Unified Requirement (UR) E9 contains requirements related to the earthing of piping systems for independent cargo tanks that are not permanently connected to the hull and piping systems which use non-conductive gaskets. These requirements stipulate that such systems are to be connected to the hull by bonding straps in order to prevent any generation of static electricity when a conductive liquid such as cargo oil flows through the pipe. These requirements have already been incorporated into the ClassNK Rules, which specify that the cargo oil tank and cargo piping systems of tankers are to be connected to the hull of the ship by bonding straps in accordance with this UR.

For ships carrying dangerous chemicals in bulk and ships carrying liquefied gases in bulk, the same treatment as given above is also being applied in common practice in accordance with general earthing requirements, but there were no specific requirements for such ships in the ClassNK Rules. Accordingly, relevant requirements were amended in order to specify detailed requirements similar to the ones for tankers.

In addition, relevant requirements were amended so that requirements concerning the confirmation of earthing conditions at periodical surveys are consistent with the current treatment.

Outline of Amendment

- (1) Specified requirements for ships carrying dangerous chemicals in bulk and ships carrying liquefied gases in bulk which are equivalent to the ones specified for tankers.
- (2) Amended requirements related to the confirmation of the earthing conditions for cargo tanks and cargo piping systems at periodical surveys so as to specify they are to be applied at Annual Surveys in addition to other periodical surveys regardless of ship type.

Amended Requirements

Rules for the Survey and Construction of Steel Ships

Part B: Table B3.2, Table B3.9, Table B4.5 to Table B4.8, Table B5.25, Table B5.27

Part D: 14.2.2

Part N: 5.7, 5.7.4

Part S 10.2, 10.2.1

Guidance for the Survey and Construction of Steel Ships

Part B: B3.2.2, B3.4.2, B3.6.2, B4.3.1, B4.4.2, B4.5.2, B4.6.2, B5.3.1, B5.4.2

Part D: D14.2.2