

Environmental Tests for Automatic Equipment

Amended Guidance

Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use

Reasons for Amendment

IACS Unified Requirement (UR) E10 specifies requirements for the environmental tests to be carried out for automatic equipment such as control systems and alarm systems, etc. These requirements have already been incorporated into the ClassNK Rules.

In recent years, technological advancements and the use of wireless data communication links have increased the electromagnetic frequency used by such links from 2 GHz to 6 GHz. The IEC, therefore, reviewed and amended the upper limits of test frequency ranges related to electromagnetic compatibility also from 2 GHz to 6 GHz.

In response to the new upper limits established by the IEC, IACS reviewed requirements related to environmental tests and adopted UR E10 (Rev. 7) in October 2018 in order to align the abovementioned frequency range with IEC standards and also align requirements for dry heat tests with IEC standards.

Accordingly, relevant requirements were amended in accordance with UR E10 (Rev. 7).

Outline of Amendment

The main contents of this amendment were as follows:

- (1) Amended the test condition and test method for dry heat tests in order to separate the requirements for non-heat dissipating equipment and heat dissipating equipment.
- (2) Amended upper limits of the test frequency range for radiated radio frequency immunity tests from 2 GHz to 6 GHz.
- (3) Amended upper limits of test frequency range for radiated emission tests from 2 GHz to 6 GHz.

Amended Requirements

Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use
Part 7 Table 7.1-1