

Welding Consumables for Windlass and Welding Procedure for Pipes

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Parts D, and M
Guidance for the Survey and Construction of Steel Ships Parts D, and M

Reason for Amendment

IACS established a new unified requirement (UR) in 2017 that specified design and test requirements for windlasses as UR A3, and its requirements have already been incorporated into the Rules.

Thereafter, IACS further examined the welding consumables used in the welding work of windlasses, and adopted an amendment to UR A3 as UR A3(Rev.1) in July 2019. This amendment clarified that not only welding consumables approved by IACS member classification societies may be used, but also welding consumables complying with recognized standards are acceptable.

Accordingly, the UR A3(Rev.1) was incorporated into the Rules; moreover, relevant requirements were also amended as part of a comprehensive review of the ClassNK Rules in order to clarify their correspondence with UR A3 (Rev.1).

In addition, since this is an amendment relevant to the welding for machinery installations and thus is related to the approval tests for the welding procedures applicable to pipes, the approved range of welding positions for rotating pipes and fixed pipes were clarified; furthermore, with respect to the requirements for the welding procedures for pipes categorized as Group I and Group II, relevant requirements were amended in order to clarify the correspondence to UR P2.5.1 (Corr.).

Outline of Amendment

The main contents of this amendment are as follows:

- (1) Amended the requirements of welding consumables used in the welding work of windlasses so as to stipulate that usage of welding consumables which conform to a standard deemed appropriate by the Society (e.g. JIS, ISO) may be used instead of welding consumables approved by the Society. The suitability of such welding consumables is, however, to be confirmed by deposited metal tests whose test results are then recognized as appropriate by a Society surveyor
- (2) Amended the requirements related to the approval ranges of welding positions for approval tests for the welding procedures of pipes so as to stipulate that pipes passing the tests required for fixed pipes may also be considered as passing the tests required for rotating pipes.
- (3) Amended the requirements so as to stipulate that welding of pipes categorized as Group I and Group II is to be carried out in accordance with approved welding procedures.
- (4) Amended the test requirements related to the approval of welding procedures for pipes.

Amended Requirements

Rules for the Survey and Construction of Steel Ships

Parts D: 11.2.1, 11.2.2, 11.2.3, 12.4.1, 16.2.3

Parts M: Table M3.2, 4.1.1, 4.1.2, 4.1.3, 4.1.4, Table M4.2, Table M4.4, Table M4.5, Table

M4.6, 4.2.3, Fig.M4.1, 4.3.1, 4.3.2, 4.3.3, Fig.M4.6, 4.3.7, 4.4.1, 4.4.2, 4.4.3, Fig.M4.8,
4.5.1, 4.5.2, Fig.M4.10, 4.5.7, Fig.M4.12, 4.6, Fig.M4.13
Guidance for the Survey and Construction of Steel Ships
Parts D: D11.2.2, Table D11.2.2-1, D11.2.3, D12.4.1, D16.2.3
Parts M: M2.1.1, Table M2.1.1-1, Table M2.1.1-3, M4.1.4, Table M4.1.4-2, Table M4.1.4-3,
Fig.M4.1.4-1