

# Welding for Machinery Installations

## Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Parts D and M  
Rules for the Survey and Construction of Passenger Ships  
Rules for the Survey and Construction of Inland Waterway Ship  
Guidance for the Survey and Construction of Steel Ships Parts D and M

## Reason for Amendment

- (1) Based on IACS Unified Requirement (UR) A3, our Rules had specified that welding procedures and related specifications applied to the welding work of windlasses are to be in accordance with national or international standards. However, the application of the requirements for the approval of these welding procedures and related specifications had been unclear. Accordingly, relevant requirements were amended based on ISO 15614-1, an international standard related to the approval of welding procedures for steels.
- (2) Although our Rules had specified requirements for pipe connections (i.e. the uses, structures and designs of butt welded joints, slip-on sleeve welded joints and threaded joints) based on IACS UR P2.7, the wording of some of these requirements had been unclear. Accordingly, related requirements were amended in order to make them consistent with the UR.

Additionally, our Rules had specified requirements related to the ranges of approval of welding procedures and their related specifications for the rolled steels used for hull structures. Although these requirements permit the use of actual welding conditions which may differ from those used during the approval tests in cases where their equivalence is recognized and the welding is easily carried out, the ranges of approval for pipes had been not clearly stipulated. Accordingly, relevant requirements were amended to clarify the consideration to be given to the ranges of approval for pipes.

## Outline of Amendment

The main contents of this amendment are as follows:

- (1) Specified requirements for the approval of welding procedures and related specifications applied to the welding work of windlasses which use materials not specified in Part K of the Rules
- (2) Specified butt welded joints of pipe lengths are to be of full penetration type
- (3) Clarified the uses of piping systems for which slip-on sleeve welded joints and threaded joints may be used
- (4) Specified ranges of approval for welding procedures and related specifications for pipes depending on the welding conditions used during approval tests

## Amended Requirements

Rules for the Survey and Construction of Steel Ships

Part D: 11.2, 12.4.1, 12.4.2, 16.2.3

Part M: Table M3.1, 4.1.4, Table M4.1 to Table M4.12, 4.2.1, 4.2.2, Fig. M4.1, 4.2.5, 4.2.6, 4.2.7, 4.2.9, 4.2.11, 4.3.1, 4.3.3, Fig. M4.6, 4.3.6, 4.3.9, 4.4.1, Fig. M4.8, 4.4.6, 4.4.8, 4.5.1, Fig. M4.10, 4.5.6, 4.5.9

Rules for the Survey and Construction of Passenger Ships

Part 2: 2.1.7

Rules for the Survey and Construction of Inland Waterway Ships

Part 7: 9.2

Guidance for the Survey and Construction of Steel Ships

Part D: D11.2, D12.4.2

Part M: M4.1.4, Table M4.1.4-2 to Table M.1.4-8, M4.2.3, M4.2.7