

Non-destructive Tests for Butt Welded Joints of Bellows

Amended Guidance

Guidance for the Survey and Construction of Steel Ships Part N

Reason for Amendment

The International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (the IGC Code) was amended by a corrigenda announced in October 2016 that narrowed the scope of piping requiring non-destructive tests for all of its butt-welded joints. The Society has already incorporated this corrigenda into Chapter 5 of Part N of its Rules for the Survey and Construction Steel Ships as requirement 5.9.3(1).

As part of a comprehensive review of Part N, the Society further reviewed the organisation of requirements for machinery and decided to amend its independent requirements related to non-destructive tests for butt welded joints of bellows specified in Chapter 7, Annex 1 of Part N of the Guidance for the Survey and Construction of Steel Ships Part N so that they are consistent with corresponding requirements in the IGC Code.

Accordingly, relevant requirements are amended so that they are consistent with corresponding requirements in the IGC Code. This is being done as part of a comprehensive review of the ClassNK Rules.

Outline of Amendment

Amends requirements related to non-destructive tests for butt welded joints of bellows specified in Chapter 7, Annex 1 of Part N of the Guidance for the Survey and Construction of Steel Ships to be consistent with corresponding requirements in the IGC Code.

“Guidance for the survey and construction of steel ships” has been partly amended as follows:

Part N SHIPS CARRYING LIQUEFIED GASES IN BULK

**Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS
CARRYING LIQUEFIED GASES IN BULK**

Chapter 7 EXPANSION JOINTS (For Cargo Piping and Process Piping Systems)

7.3 Tests and Inspection

7.3.2 Product Test

Sub-paragraph -1(2) has been amended as follows.

1 All expansion joints are, at time of manufacture, to be subjected to the following tests and inspection:

((1) is omitted.)

(2) Non-destructive tests for butt welded joints of bellows:

100% of the welded joints of the bellows with ~~the~~ design temperatures not more than ~~-10°C, or with~~ that have inside diameters exceeding 75 mm or wall thicknesses exceeding 10 mm are to be subjected to non-destructive tests. ~~However, and for other cases other than above, it is left to~~ non-destructive tests are to be carried out at the discretion of the Society, but sampling tests are to be conducted for, at least, 10% of the bellows.

((3) and (4) are omitted.)