

Strength Requirements for Ventilators and Air Pipes Fitted on Exposed Fore Decks

Amended Guidance

Guidance for the Survey and Construction of Steel Ships Parts C, CS and D

Reason for Amendment

IACS Unified Requirement (UR) S27 specifies strength requirements for fore deck fittings and equipment. These requirements have already been incorporated into the ClassNK Rules.

The aforementioned requirements define the “velocity of water over the fore deck” (hereinafter referred to as “green sea velocity”) as a flat application when used in the design load calculations for the strength of ventilators and air pipes fitted on exposed fore decks, regardless of the height of those decks from the waterline. The current requirements, therefore, make no distinction between ships whose exposed fore decks are located quite high from the waterline such as car carriers and Ro-Ro vessels and other ships whose exposed fore decks are not.

For this reason, IACS held discussions on ways to make the requirements more rational for ships with exposed fore decks located high from their waterlines. As a result, IACS adopted UR S27(Rev.6), which amended the green sea velocity values used in the requirements so that they take into account of the height of the exposed fore decks from the waterline, in June 2013.

Accordingly, relevant requirements were amended based upon UR S27(Rev.6).

Outline of Amendment

Amended the values for green sea velocity used in the strength calculations of ventilators and air pipes fitted on exposed fore decks to take into account the actual height of the decks from the waterline.