

Subject

Amendment of Rules for windows located higher than the third tier above the freeboard deck and forward of the midship

ClassNK

Technical Information

No. TEC-1087
Date 14 September 2016

To whom it may concern

ClassNK has investigated behaviour of waves acting on windows located considerably above the freeboard deck of ships where the navigation bridges are located forward of the midship, such as onboard Ro-Ro cargo ships.

As a result of the investigation, it has been found out that there is possibility waves can hit the windows located considerably above the freeboard deck due to waves rolling over the foredeck and running up along the front walls, even though the wave height may not be so high that the wave directly reaches the windows. In fact, cases have been confirmed in which navigation bridge windows seem to have been damaged by the aforementioned phenomenon.

Based on these results, ClassNK amended the relevant Rules to provide the minimum design pressure for windows located considerably above the freeboard deck and forward of the midship.

This amendment ^(Note) is intended to enhance the structural reliability of windows on the front walls of deckhouses and superstructures located forward of the midship, such as the navigation bridge windows of Ro-Ro cargo ships. Even so, the possibility still exists that pressure from waves might exceed the design pressure stipulated by the amended Rules, depending on the sea state. Consequently, it is suggested that operational guidelines for safe navigation already established and implemented by each shipping company, management company, and relevant institutions should be steadfastly maintained even if such windows provided on your ships satisfy the amended Rules.

(Note)

This amendment applies to windows located in the fore end bulkheads of superstructures and deckhouses above the third tier located above the freeboard deck and forward from the midship. However, this can be dispensed with when the height of the highest deck at the fore end is not less than 22m above the designed maximum load line or when cargo is regularly placed on the exposed decks in front of the windows such as container ships.

(To be continued)

NOTES:

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This amendment applies to ships the keels of which have been laid or which are at similar stage of construction on or after 30 June 2016. Meanwhile, the potential for waves to hit the navigation bridge windows as described above also exists onboard the existing ships to which the amendment does not apply. Therefore, all parties concerned are kindly requested to pay continuous attention/consideration and to keep strict observance of the operational guidelines for safe navigation for existing ships.

For any questions about the above, please contact:

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