

The Structural Strength of Bow Flare

Amended Guidance

Guidance for the Survey and Construction of Steel Ships Part C

Reason for Amendment

Pure car carriers and container carriers tend to suffer damage due to bow flare slamming because the flare angle at the bow part is large. As a countermeasure, NK established requirements relating to the structural strength of bow flare in 2001.

However, damage due to bow flare slamming is still being reported. According to investigations into the causes of such damage, in addition to those already covered under the current requirements, new causes previously not considered have been discovered.

Taking such circumstances into account, the relevant requirements have been amended.

Outline of Amendment

- (1) The range of the application of the requirements related to the structural strength of bow flare has been extended forward of $0.2L$ from the F.P.
- (2) The slamming impact pressure formula has been amended.
- (3) Requirements for the thickness of the web plates of transverse frames and side longitudinals have been added.
- (4) Requirements for the buckling strength of the web plates of web frames and stringers due to compressive stress have been added.