# Structural Strength at Bow Part for Blunt Ships

**Amended Rules and Guidance**

Rules for the Survey and Construction of Steel Ships Part C
Guidance for the Survey and Construction of Steel Ships Part C

**Reason for Amendment**

Since 2001, ClassNK has, as needed, amended requirements related to the structural strength of the bow parts of container carriers and pure car carriers having large bow flare angles in order to prevent damage due to bow flare slamming.

However, in recent years, damage to the bow parts of blunt ships such as tankers and bulk carriers sustained in consequence of bow impact pressure has been reported. Such damage occurred to shell plating, frames and web frames in way of the forepeak at the load waterline and primarily consisted of buckling deformation.

Therefore, relevant requirements for the structural strength of bow parts have been amended to prevent blunt ship bow damage.

**Outline of Amendment**

(1) For large blunt ships, relevant requirements have been amended so that special consideration is to be given to structural members assumed to be highly susceptible to the effects of bow impact pressure.
(2) For large blunt ships, requirements related to the shell plating, frames, web frames and side stringers of bow parts have been amended to apply the relevant requirements in Part CSR-T of the Rules.