Structural Strength Requirements for Container Carriers

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Parts A and C
Guidance for the Survey and Construction of Steel Ships Parts C and M

Reason for Amendment

In response to a serious accident of a large container ship in June 2013, ClassNK established the "Investigation Panel on Large Container Ship Safety" and released "Investigation Report on Structural Safety of Large Container Ships" in September 2014. The Maritime Bureau of Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT) also established the "Committee on Large Container Ship Safety JAPAN" and released "Final Report of Committee on Large Container Ship Safety" in March 2015.

Based upon the above reports, requirements related to hull girder ultimate strength considering the effect of lateral loads and the effect of whipping were added and requirements related to direct calculation were amended.

In addition, IACS UR S34, which specifies functional requirements on load cases for strength assessment of container ships by finite element analysis, and IACS UR S11A, which specifies longitudinal strength standards for container ships, were adopted in May and June 2015 respectively. Therefore, relevant requirements were amended in accordance with IACS UR S34 and IACS UR S11A.

Outline of Amendment

The main contents of this amendment are as follows:

(1) The requirements related to hull girder ultimate strength considering the effect of lateral loads and the effect of whipping were added.
(2) The requirements related to direct strength calculations for container ships were amended.
(3) The requirements related to the longitudinal strength of container ships were amended.