Criteria for the Use of High Tensile Steel

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part C, Part CS, Part N and Part P Rules for the Survey and Construction of Passenger Ships Guidance for the Survey and Construction of Steel Ships Part C and Part CS

Reason for Amendment

IACS Unified Requirements S4 gives the criteria for high tensile steel with specified minimum yield stress with respect to longitudinal strength, and material factor "K" which is the ratio of section moduli of athwartship section on basis of mild steel to section moduli of athwartship section on basis of high tensile steel with a specified minimum yield stress of 315 N/mm² and 355 N/mm². For other criteria of strength, the material factor specified in IACS Unified Requirements S4 is also applied as well.

Thereafter, IACS adopted Unified Requirements S4 (Rev.2) in April 2007 which gives new criteria for high tensile steel with specified minimum yield stress of 390 N/mm² which has been based on performance of high tensile steel in recent years.

This amendment has been introduced to incorporate Unified Requirements S4 (Rev.2) into ClassNK Rules and Guidance.

Outline of the amendment

- (1) The material factor for high tensile steel with a specified minimum yield stress of 390 N/mm^2 was specified as 0.68 and in instances where high tensile steel was being used, the requirement was amended to cite this new material factor.
- (2) The requirements for high tensile steel with a specified minimum yield stress of 390 N/mm^2 has been added in application of steels.