

Guidance for the direct strength assessment

■ Summary of Major Amendments

Related Rules/Guidance	Effective date
Pt. 3 Hull Structure	- ships contracted for construction on or after 1 July 2020

■ Major Amendments

○ Reason for Amendments

1. Direct Global Structural Analysis

- (1) As the performance of analysis resources develops, the modeling criteria for girder spacing has been changed to stiffener spacing for more detailed analysis.
- (2) If the target load calculated by the long-term analysis exceeds the value suggested by the rule, the value can be replaced with the value suggested by the rule.
- (3) Added local structural strength analysis requirements for the areas with high stress concentration.

2. Reflects the buckling strength calculation procedure in Pt. 13.

○ Amendments

1. Direct Global Structural Analysis

- (1) Modeling method updated (Annex 3-2 II.3.(1))
- (2) Modification of design wave calculation procedure (Annex 3-2 II.6.(1))
- (3) Added local structural strength analysis (Annex 3-2 II.9.)

2. Newly add the buckling strength calculation procedure (Annex 3-2 IV. - moved and revised)

○ Impact Analysis

- ✓ Increased structural safety by improving the precision of the structural analysis model and adding local strength analysis
- ✓ If the local strength analysis is not satisfied, a partial dimension increase is required.