

Amendments of the Rules

(For external opinion inquiry)

Guidance on Strength Assessment of Container ships Considering the Whipping Effect



2024. 2.

Hull Rule Development Team

– Major revisions –

1. Modification of loading conditions for whipping evaluation (container ship)

- Present: “ ... the hogging longitudinal bending moment is close to design bending moment in the full load condition.”
- Reason for modification: It is difficult to select the loading condition that simultaneously satisfy the full load condition and the maximum hogging bending moment condition.
- Amendment: Unification of relatively important maximum still water hogging bending moment condition.

Present	Amendment	Note
<p style="text-align: center;">CHAPTER 1 GENERAL <omitted></p> <p style="text-align: center;">CHAPTER 2 Selection of design wave and dominant sea state</p> <p style="text-align: center;">Section 1 General</p> <p>101. General <omitted></p> <p>102. Loading condition</p> <ol style="list-style-type: none"> 1. For container ships, the loading condition shall be selected <u>where the hogging longitudinal bending moment is close to design bending moment in the full load condition.</u> 2. For other ships, the loading conditions shall be selected whose longitudinal bending moments in the still water give the maximum sagging and maximum hogging bending moment considering the ballast and full load condition with high operation ratio. <p>103. Linear load analysis <omitted></p> <p style="text-align: center;">Section 2 ~ Section 3 <omitted></p> <p style="text-align: center;">CHAPTER 3 Hydro-elastic simulation <omitted></p> <p style="text-align: center;">CHAPTER 4 Evaluation of hull girder strength considering the whipping effect <omitted> ⚓</p>	<p style="text-align: center;">CHAPTER 1 GENERAL <same as the current Rules></p> <p style="text-align: center;">CHAPTER 2 Selection of design wave and dominant sea state</p> <p style="text-align: center;">Section 1 General</p> <p>101. General <same as the current Rules></p> <p>102. Loading condition</p> <ol style="list-style-type: none"> 1. For container ships, the loading condition shall be selected <u>whose longitudinal bending moments in the still water give the maximum hogging bending moment</u> 2. For other ships, the loading conditions shall be selected whose longitudinal bending moments in the still water give the maximum sagging and maximum hogging bending moment considering the ballast and full load condition with high operation ratio. <p>103. Linear load analysis <same as the current Rules></p> <p style="text-align: center;">Section 2 ~ Section 3 <same as the current Rules></p> <p style="text-align: center;">CHAPTER 3 Hydro-elastic simulation <same as the current Rules></p> <p style="text-align: center;">CHAPTER 4 Evaluation of hull girder strength considering the whipping effect <same as the current Rules> ⚓</p>	<p>* It is difficult to select the loading condition that simultaneously satisfy the full load condition and the maximum hogging bending moment condition.</p> <p>Unification of relatively important maximum still water hogging bending moment condition.</p>