

# Amendments of the Rules

## Steel Barges



Hull Rule Development Team

## – Main Amendments –




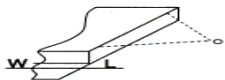
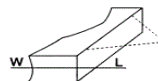



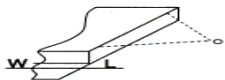
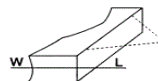



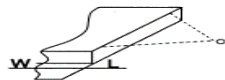
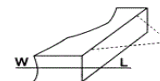



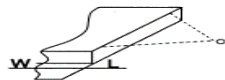
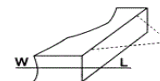



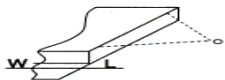
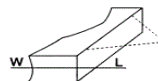



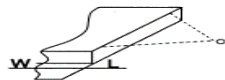
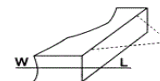
(1) Effective date : 01 July 2022 (based on contract date for construction)

© Amendment of Ch.20 Sec.13

– Deletion of the exemption text for small capacity fuel oil pumps

Present	Amendment	Reason
<p style="text-align: center;"><b>CHAPTER 20 MACHINERY</b></p> <p style="text-align: center;"><b>Section 13 Emergency Stopping Device</b></p> <p><b>1302. Emergency stopping of fuel oil pumps</b>  Fuel oil pumps <u>except those having small capacity</u> are to be capable of being stopped from an easily accessible position outside the machinery space, as well as from another position.</p>	<p style="text-align: center;"><b>CHAPTER 20 MACHINERY</b></p> <p style="text-align: center;"><b>Section 13 Emergency Stopping Device</b></p> <p><b>1302. Emergency stopping of fuel oil pumps</b>  Fuel oil pumps <del>except those having small capacity</del> are to be capable of being stopped from an easily accessible position outside the machinery space, as well as from another position.</p>	<p>* It is reflected Request for Establishment/Revision of Classification Technical Rules</p> <p>- The exemption text for small capacity fuel oil pumps is deleted taking into account a necessity preventing from the spread of fire.  (TST1000-270-2021)</p>

Present	Amendment	Note
<p style="text-align: center;"><b>〈Rules〉 – Steel Barges</b></p> <p style="text-align: center;"><b>Ch.14 WATERTIGHT BULKHEADS</b></p> <p style="text-align: center;"><b>Section 1 Arrangement</b></p> <p>101. Collision bulkheads <b>【See Guidance】</b></p> <p>The barges are to have a collision bulkhead located between <u>0.05L</u> and <u>0.08L</u> from the fore side of stem on the load line. However, in barges of 90 m and under in length, the maximum distance <u>from the fore side of stem</u> may be <u>0.13L</u>.</p>	<p style="text-align: center;"><b>〈Rules〉 – Steel Barges</b></p> <p style="text-align: center;"><b>Ch.14 WATERTIGHT BULKHEADS</b></p> <p style="text-align: center;"><b>Section 1 Arrangement</b></p> <p>101. Collision bulkheads <b>【See Guidance】</b></p> <p>The barges are to have a collision bulkhead located between <u>0.05L<sub>f</sub></u> and <u>0.08L<sub>f</sub></u> from the fore side of length of freeboard (<u>L<sub>f</sub></u>). However, in barges of 90 m and under in length, the maximum distance <u>from the fore side of L<sub>f</sub></u> may be <u>0.13L<sub>f</sub></u>.</p>	

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<p>⟨omitted⟩</p>	<p>⟨same as the current Rules⟩</p>																									
<p><math>R_w</math> : wave making resistance as obtained from the following formula</p>	<p><math>R_w</math> : wave making resistance as obtained from the following formula</p>																									
$R_w = 0.014CF_2A_2V^2$ (ton)	$R_w = 0.014CF_2A_2V^2$ (ton)																									
where,	where,																									
$C$ : resistance coefficient of rough sea condition, 1.2	$C$ : resistance coefficient of rough sea condition, 1.2																									
$A_2$ : hull cross sectional area below the waterline (m²)	$A_2$ : hull cross sectional area below the waterline (m²)																									
$V$ : towing velocity (knots)	$V$ : towing velocity (knots)																									
$F_2$ : bow shape coefficient as obtained from the following table	$F_2$ : bow shape coefficient as obtained from the following table																									
<table><tr><th>Bow shape</th><th><math>F_2</math></th></tr><tr><td></td><td>0.2/0.4</td></tr><tr><td></td><td>0.3/0.5</td></tr><tr><td></td><td>0.4/0.6</td></tr><tr><td></td><td>0.3/0.5</td></tr><tr><td></td><td>0.8/1.0</td></tr></table>	Bow shape	$F_2$		0.2/0.4		0.3/0.5		0.4/0.6		0.3/0.5		0.8/1.0	<table><tr><th>Bow shape</th><th><math>F_2</math> (2022)</th></tr><tr><td></td><td>0.2/0.4</td></tr><tr><td></td><td>0.3/0.5</td></tr><tr><td></td><td>0.4/0.6</td></tr><tr><td></td><td>0.3/0.5</td></tr><tr><td></td><td>0.8/1.0</td></tr></table>	Bow shape	$F_2$ (2022)		0.2/0.4		0.3/0.5		0.4/0.6		0.3/0.5		0.8/1.0	
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<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Ch.3 Type Approval</p> <p style="text-align: center;">Section 25    Securing Devices</p> <p>2501.    〈omit〉</p> <p>2502. Type tests</p> <p>    1.    〈omit〉</p> <p>Table 3.25.1    Design Braking Loads and Proof Loads (2020)</p> <table><tr><th colspan="3" rowspan="2">Item</th><th colspan="2">Min. design breaking load (kN)</th></tr><tr><th>SWL ≤ 400</th><th>SWL &gt; 400</th></tr><tr><td rowspan="6">Lashings</td><td colspan="2">Wire rope</td><td>3 × SWL</td><td rowspan="6">-</td></tr><tr><td rowspan="2">Rod</td><td>mild steel</td><td>3 × SWL</td></tr><tr><td>higher tensile steel</td><td>2 × SWL</td></tr><tr><td rowspan="2">Chain</td><td>mild steel</td><td>3 × SWL</td></tr><tr><td>higher tensile steel</td><td>2.5 × SWL</td></tr><tr><td colspan="2">Fittings and securing devices</td><td>2 × SWL</td><td>SWL+ 400</td></tr></table> <p>NOTES:</p> <p>1. Higher tensile steel is defined for this purpose as steel having a yield stress not less than 315 N/mm<sup>2</sup></p> <p>2. <del>Breaking and proof loads for lashings of material other than steel will be determined by tests.</del></p> <p>2. ~ 6.    〈omit〉</p> <p>2503.    〈omit〉</p>	Item			Min. design breaking load (kN)		SWL ≤ 400	SWL > 400	Lashings	Wire rope		3 × SWL	-	Rod	mild steel	3 × SWL	higher tensile steel	2 × SWL	Chain	mild steel	3 × SWL	higher tensile steel	2.5 × SWL	Fittings and securing devices		2 × SWL	SWL+ 400	<p style="text-align: center;">〈Guidance〉</p> <p style="text-align: center;">Ch.3 Type Approval</p> <p style="text-align: center;">Section 25    Securing Devices</p> <p>2501.    〈same as current〉</p> <p>2502. Type tests</p> <p>    1.    〈same as current〉</p> <p>Table 3.25.1    Design Braking Loads and Proof Loads (2021)</p> <table><tr><th colspan="3" rowspan="2">Item</th><th colspan="2"></th></tr><tr><th></th><th></th></tr><tr><td rowspan="6">Lashings</td><td colspan="2">Wire rope</td><td></td><td rowspan="6">〈omit〉</td></tr><tr><td rowspan="2">Rod</td><td>mild steel</td><td></td></tr><tr><td>higher tensile steel</td><td></td></tr><tr><td rowspan="2">Chain</td><td>mild steel</td><td></td></tr><tr><td>higher tensile steel</td><td></td></tr><tr><td colspan="2">Fittings and securing devices</td><td></td><td></td></tr></table> <p>NOTES:</p> <p>1. Higher tensile steel is defined for this purpose as steel having a yield stress not less than 315 N/mm<sup>2</sup></p> <p>2. <u>If a material other than steel is intended to be used for lashing equipment, it must be verified that the breaking load, proof load and other mechanical properties of the material are equivalent to that of steel.)</u></p> <p>2. ~ 6.    〈same as current〉</p> <p>2503.    〈same as current〉</p>	Item							Lashings	Wire rope			〈omit〉	Rod	mild steel		higher tensile steel		Chain	mild steel		higher tensile steel		Fittings and securing devices				
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