

PERMISSIBLE REDUCTION OF THICKNESS

Normal and High-Tensile Shipbuilding Steels	Longitudinal Strength	Local Strength	
		On large surface	Locally
Strength deck plating	Max. permissible reduction of midship section modules: 10 % (3)	For $t \leq 1.5$ mm 1.5 mm For $t > 1.5$ mm $0.09t + 0.45$ mm (max. 3 mm) (t = plate and/or web thickness as stipulated in Construction Rules, mm)	20 %
Continuous longitudinal hatch coamings			20 %
Deck plating within inside line of hatches			25 % *
Forecastle and poop deck plating			25 % *
Tween deck plating			25 % *
Side sheel plating			20 %
Sheer strake plates			20 %
Bilge strake plates			20 %
Bottom plating			20 %
Keel plate			20 %
Inner bottom plating			20 %
Longitudinal bulkheads			20 %
Wing tank and hopper tank sloped plating			20 %
Transverse bulkheads, transverses, bulkhead web stiffeners and stringers, brackets and hatch side girders (1)			25 % *
Longitudinal frames, girders			20 %
Plates in way of tank top			20 %
Underdeck box girders (longitudinal and transversal)			20 %
Hatch covers (2) , hatch coamings and brackets			25 % *
Bridge deck plating, superstructure end bulkheads			25 % *
<p>(1) Bulk carriers for which TL rules applies to the corrugated transverse bulkhead between cargo holds no.1 and 2 are to be assessed in accordance with TL Rules.</p> <p>(2) The hatch covers of bulk carriers for which TL Rules applies are to comply with steel renewal procedure of said rules.</p> <p>(3) Local reductions are to be allowed for up to the reduction of 10 % in midship section module. In all cases, midship section module calculation is to be carried out for reduced situation.</p> <p>Notes:</p> <p>* For ships other than ESP ships, structural elements of them not involving the longitudinal strength of ship can be allowed with 25% diminution. For ESP ships see following table.</p>			

Maximum Allowable Diminution of Plate Thickness

Table not to be used for areas subject to IACS UR S19 to UR S31.

Original as- built thickness (mm)	Difference (mm)	Minimum thickness (1) (mm)	Substantial corrosion (2) thickness (mm)
4.0	1.5	2.5	2.8
4.5	1.5	3.0	3.3
5.0	1.5	3.5	3.8
5.5	1.5	4.0	4.3
6.0	1.5	4.5	4.8
6.5	1.5	5.0	5.3
7.0	1.5	5.5	5.8
7.5	1.5	6.0	6.3
8.0	1.5	6.5	6.8
8.5	1.5	7.0	7.3
9.0	1.5	7.5	7.8
9.5	1.5	8.0	8.3
10.0	1.5	8.5	8.8
10.5	1.5	9.0	9.3
11.0	1.5	9.5	9.8
11.5	1.5	10.0	10.3
12.0	1.5	10.5	10.8
12.5	1.6	10.9	11.3
13.0	1.6	11.4	11.7
13.5	1.7	11.8	12.2
14.0	1.7	12.3	12.7
14.5	1.8	12.8	13.1
15.0	1.8	13.2	13.6
15.5	1.8	13.7	14.1
16.0	1.9	14.1	14.5
16.5	1.9	14.6	15.0
17.0	2.0	15.0	15.5
17.5	2.0	15.5	15.9
18.0	2.1	15.9	16.4
18.5	2.1	16.4	16.9
19.0	2.2	16.8	17.3
19.5	2.2	17.3	17.8
20.0	2.3	17.8	18.3
20.5	2.3	18.2	18.7
21.0	2.3	18.7	19.2
21.5	2.4	19.1	19.7
22.0	2.4	19.6	20.1
22.5	2.5	20.0	20.6

Original as- built thickness (mm)	Difference (mm)	Minimum thickness (1) (mm)	Substantial corrosion (2) thickness (mm)
23.0	2.5	20.5	21.1
23.5	2.6	20.9	21.5
24.0	2.6	21.4	22.0
24.5	2.7	21.9	22.5
25.0	2.7	22.3	22.9
25.5	2.7	22.8	23.4
26.0	2.8	23.2	23.9
26.5	2.8	23.7	24.3
27.0	2.9	24.1	24.8
27.5	2.9	24.6	25.3
28.0	3.0	25.0	25.7
28.5	3.0	25.5	26.2
29.0	3.0	26.0	26.7
29.5	3.0	26.5	27.2

(1) For local corrosion patterns a maximum diminution of up to 20% is allowable.

(2) Substantial corrosion is an extent of corrosion such that assessment of corrosion pattern indicates wastage in excess of 75% of allowable margins, but within acceptable limits.