

## Ship plate

Hot-rolled structural steel for ship plate has excellent welding properties and is specially intended for shipbuilding.

### Standard

Ship plate meets the requirements of grades A and B, specified by Lloyd's Register of Shipping.

### Mechanical properties

The values shown for the mechanical properties in table 51 below are for test pieces taken transverse to the rolling direction, except as indicated.

### Chemical composition

Hot-rolled structural steel for ship plate meets the requirements of the cast analysis in the standard shown in table 52 below.

### Dimensions

The width and thickness limits are shown in table 53 below.

**Table 51: Mechanical properties: Lloyd's Register of Shipping**

Grade	$R_{eL}$ (N/mm <sup>2</sup> )	$R_m$ (N/mm <sup>2</sup> )	A (%)	Impact test	
				Temp	Min energy
	Min	Min-max	Min	°C	J
			$L_0 = 5.65\sqrt{S_0}$		
A	235	400-520	22	–	–
B	235	400-520	22	0	27 (see note)

**Note:** Tests for impacts on grade B are carried out in the rolling direction.

**Table 52: Chemical composition: Lloyd's Register of Shipping**

Grade	C	Mn	P	S	Si	
	Max	Min	Max	Max	Max	
A	0.21	–	0.525	0.035	0.035	0.5
B	0.21	0.80	–	0.035	0.035	0.5

**Notes:**

- Where grade B is impact tested, the minimum manganese content may be reduced to 0.60%.
- Values are in weight percentages.

**Table 53: Dimensions: Lloyd's Register of Shipping**

#### Mill finish

Thickness		Width	
		Min	Max
>	≤		
1.49	1.60	700	1170
1.60	1.70	700	1280
1.70	1.80	700	1367
1.80	1.90	700	1442
1.90	2.00	700	1517
2.00	2.20	700	1592
2.20	2.40	700	1730
2.40	2.60	700	1806
2.60	2.80	700	1882
2.80	3.12	700	1958
3.12	20.00	700	2070

**Note:** Dimensions are in millimetres.