



# 7. Plates

Flat steel product that can be used for structural and construction applications, shipbuilding and offshore equipment.

- 7.1 Plates
- 7.2 Sheets
- 7.3 Chequered Plates

# Plates

## Standard specifications

Material	Yield strength							Tensile strength N/mm <sup>2</sup>	Min. Elongation L <sub>0</sub> =5.65√S <sub>0</sub>	Min. Charpy V-notch.	Dimensions & Tolerances
	N/mm <sup>2</sup>										
<b>AS 3678</b>	≤8mm	>8 - ≤12mm	>12 - ≤20mm	>20 - ≤32mm	>32 - ≤50mm	>50 - ≤80mm	>80 - ≤150mm				<b>AS 3678</b>
Grade 250	280	260	250	250	250	240	230	min. 410	22%	27J @ 0°C	
Grade 300	320	310	300	280	280	270	260	min. 430	21%	27J @ 0°C	
Grade 350	360	360	350	340	340	340	330	min. 450	20%	27J @ 0°C	
Grade 400	400	400	380	360	360	360	-	min. 480	18%	27J @ 0°C	
Grade 450	450	450	450	420	400	-	-	min. 500	18%	27J @ 0°C	
<b>ASTM A36 (1996)</b>	min. 250							400-550	20-21 %	-	<b>ASTM A6</b>
<b>ASTM A131</b>											
Grade AH36	355							490-620	22%	50J @ 0°C	
Grade DH36	355							490-620	22%	50J @ -20°C	
Grade EH36	355							490-620	22%	50J @ -40°C	
<b>API 2W</b>											<b>ASTM A6</b>
Grade 50	345							448	23%	41J @ -40°C	
<b>EN 10025</b>	≤16mm	>16 - ≤40mm	>40 - ≤63mm	>63 - ≤80mm	>80 - ≤100mm	>100 - ≤150mm	>150 - ≤200mm	3-100mm			<b>EN10029</b>
S275JR	275	265	255	245	235	225	215	410-560	18-23 %	27J @ 20°C	
S355JR	355	345	335	325	315	295	285	470-630	17-22 %	27J @ 20°C	
S355J0	355	345	335	325	315	295	285	470-630	17-22 %	27J @ 0°C	
S355J2	355	345	335	325	315	295	285	470-630	17-22 %	27J @ -20°C	
S460M	460	440	430	410	400	385	-	500-720	17%	40J @ -20°C	
<b>EN 10225</b>	≤25mm	>25 - ≤40mm	>40 - ≤63mm	>63 - ≤100mm							<b>EN10029</b>
S355G10+M / S355MLO	355	345	335	325	-	-	-	470-630	22%	50J @ -40°C	
<b>JIS 3101</b>	≤16mm	>16 - ≤40mm	>40 - ≤100mm	>100mm				t<100mm			<b>JIS 3193</b>
SS400	245	235	215	205	-	-	-	400-510	17-23 %	-	
SS490	285	275	255	245	-	-	-	490-610	15-21 %	-	
SS540	400	390	-	-	-	-	-	540	13-17 %	-	
<b>JIS 3106</b>	≤16mm	>16 - ≤40mm	>40 - ≤75mm	>75 - ≤100mm	>100 - ≤160mm	>160 - ≤200mm		t<100mm			
SM400A	245	235	215	215	205	195	-	400-510	18-24 %	-	
SM400B	245	235	215	215	205	195	-	400-510	18-24 %	27J @ 0°C	
SM400C	245	235	215	215	205	195	-	400-510	18-24 %	47J @ 0°C	
SM490A	325	315	295	295	285	275	-	490-610	17-23 %	-	
SM490B	325	315	295	295	285	275	-	490-610	17-23 %	27J @ 0°C	
SM490C	325	315	295	295	-	-	-	490-610	17-23 %	47J @ 0°C	
SM490YA	365	355	335	325	-	-	-	490-610	15-21 %	-	
SM490YB	365	355	335	325	-	-	-	490-610	15-21 %	27J @ 0°C	
SM520B	365	355	335	325	-	-	-	520-640	15-21%	27J @ 0°C	
SM520C	365	355	335	325	-	-	-	520-640	15-21 %	47J @ 0°C	

## 7.2 Sheets

Dimensions 4ft x 8ft to 5ft x 20ft

Specification EN10025/ ASTM A 36

Size Range Thickness 3mm to 6mm

Metric units 7.85kg/mm m<sup>2</sup> - 0.7293 kg/mm ft<sup>2</sup>

Thickness	Unit Weight	Width x Length (ft)						
		4 x 8	4 x 16	5 x 10	5 x 20	6 x 20	8 x 20	10 x 30
t mm	M kg/ft <sup>2</sup>	Weight / pc kg	Weight / pc kg	Weight / pc kg	Weight / pc kg	Weight / pc kg	Weight / pc kg	Weight / pc kg
1.2	0.875	28.0	-	43.8	-	-	-	-
1.5	1.094	35.0	-	54.7	-	-	-	-
1.6	1.167	37.3	-	58.3	-	-	-	-
1.9	1.386	44.3	-	69.3	-	-	-	-
2.3	1.677	53.7	-	83.9	-	-	-	-
2.6	1.896	60.7	-	94.8	-	-	-	-
3	2.188	70.0	-	109	219	-	-	-
3.2	2.334	74.7	-	117	-	-	-	-
4.5	3.282	105	210	164	328	394	-	-
5	3.647	117	233	182	365	438	-	-