



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 ²	Min. Elongation L ₀ =5.65√S ₀	Min. Charpy V-notch.	Dimensions & Tolerances
	N/mm ²										
AS 3678	≤8mm	>8 - ≤12mm	>12 - ≤20mm	>20 - ≤32mm	>32 - ≤50mm	>50 - ≤80mm	>80 - ≤150mm				AS 3678
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	
ASTM A36 (1996)	min. 250							400-550	20-21 %	-	ASTM A6
ASTM A131											
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	
API 2W											ASTM A6
Grade 50	345							448	23%	41J @ -40°C	
EN 10025	≤16mm	>16 - ≤40mm	>40 - ≤63mm	>63 - ≤80mm	>80 - ≤100mm	>100 - ≤150mm	>150 - ≤200mm	3-100mm			EN10029
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	
EN 10225	≤25mm	>25 - ≤40mm	>40 - ≤63mm	>63 - ≤100mm							EN10029
S355G10+M / S355MLO	355	345	335	325	-	-	-	470-630	22%	50J @ -40°C	
JIS 3101	≤16mm	>16 - ≤40mm	>40 - ≤100mm	>100mm				t<100mm			JIS 3193
SS400	245	235	215	205	-	-	-	400-510	17-23 %	-	
SS490	285	275	255	245	-	-	-	490-610	15-21 %	-	
SS540	400	390	-	-	-	-	-	540	13-17 %	-	
JIS 3106	≤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	

7.3 Chequered Plates

Dimensions 4ft x 8ft to 5ft x 10ft

Specification EN10025/ ASTM A 36

Size Range Thickness 3mm to 6mm

Metric units 8.08kg/mm m² - 0.7507 kg/mm ft²

Width x Length (ft)		4 x 8	4 x 10	4 x 16	4 x 20	5 x 10	5 x 20
Thickness	Weight	Weight / pc					
		32	40	64	80	50	100
mm	kg/ft2	kg	kg	kg	kg	kg	kg
2.3	1.73	55.3	69.1	111	138	86.3	-
3	2.25	72.1	90.1	144	180	113	-
3.2	2.40	76.9	96.1	154	192	120	-
4	3.00	96.1	120	192	240	150	-
4.3	3.23	103	129	207	258	161	-
4.5	3.38	108	135	216	270	169	-
5	3.75	120	150	240	300	188	-
5.8	4.35	139	174	279	348	218	435
6	4.50	144	180	288	360	225	450
7.5	5.63	180	225	360	450	282	563
8	6.01	192	240	384	480	300	601
9	6.76	216	270	432	541	338	676
12	9.01	288	360	577	721	450	901