



TECHNICAL SPECIFICATIONS

TYPE:
Hot-Rolled bars, of rectangular cross-section (Flats)

- STEEL GRADE:**
- S235JR according to ELOT-EN 10025 (St 37- 2 according to DIN 17100)
 - S275JR according to ELOT-EN 10025 (St 44-2 according to DIN 17100)
 - S355J2 according to ELOT-EN 10025 (St52-3 according to DIN 17100)

FORM - DIMENSIONS:
Straight bars with side length from 10 to 150mm & thickness from 3 to 20mm

LENGTH - TOLERANCE:
Bar length 6m with tolerance -0 / +100mm

PACKING - WEIGHT:
Bundles weighing approximately 2,500kg

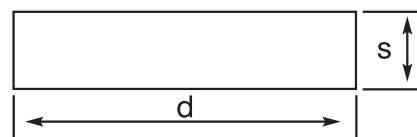
DIMENSIONS - WEIGHT - TOLERANCES:
According to EN 10058 (DIN 1017)

FLATS

Hot-Rolled bars of rectangular cross-section



Rectangular flat bars (flats) are manufactured at SIDENOR's factory in Thessaloniki, at a length of 6 metres, with widths from 10mm to 150mm and thickness ranging from 3mm to 20mm. Due to the wide range of available sizes, flats are used in various metal constructions, traditional railings, drillings, metal frames, machine parts, mechanical equipment, etc.



SALES OFFICES

www.sidenor.gr

CENTRAL OFFICES SIDENOR SA

33, Amaroussiou-Halandriou str.
GR-15125, Maroussi, Athens, Greece
Tel.: (+30) 210-6787854,
(+30) 210-6787700
Fax: (+30) 210-6787740

THESSALONIKI PLANT SIDENOR SA

12th klm National Road
Thessaloniki-Veria GR-57008,
Ionia, Thessaloniki, Greece
Tel.: (+30) 2310-790133
Fax: (+30) 2310-790144



CHEMICAL COMPOSITION & MECHANICAL PROPERTIES

STEEL GRADE	CHEMICAL COMPOSITION			MECHANICAL PROPERTIES		
	C (%) max	P (%) max	S (%) max	YIELD STRENGTH (N/mm ²) min	TENSILE STRENGTH (N/mm ²)	ELONGATION 50g, (%) min
S235JR (St 37-2)	0.170	0.040	0.040	235	360 - 510	26
S275JR (St 44-2)	0.210	0.040	0.040	275	410 - 560	23
S355J2 (St 52-3)	0.200	0.030	0.030	355	470 - 630	22

DIMENSIONS, WEIGHTS & TOLERANCES OF FLATS

WIDTH d (mm)	ALLOWED WIDTH DEVIATION (mm)	THICKNESS s (mm)								
		3	4	5	6	8	10	12	15	20
		PERMISSIBLE THICKNESS DEVIATION (mm)								
		±0.3				±0.5				
NOMINAL WEIGHT (kg/m)										
10	± 0.75	0.24	0.31	0.39	-	-	-	-	-	-
12		0.28	0.38	0.47	0.57	-	-	-	-	-
14		0.33	0.44	0.55	0.66	0.88	-	-	-	-
15		0.35	0.47	0.59	0.71	0.94	1.18	-	-	-
16		0.38	0.60	0.69	0.95	1.00	1.86	1.88	2.36	-
20		0.47	0.63	0.79	0.94	1.26	1.57	1.88	2.36	-
25		0.59	0.79	0.98	1.13	1.57	1.96	2.36	2.94	-
30	± 1.0	0.71	0.94	1.18	1.41	1.88	2.36	2.83	3.53	4.71
35		0.82	1.10	1.37	1.65	2.20	2.75	3.30	4.12	5.50
40		0.94	1.26	1.57	1.88	2.51	3.14	3.77	4.71	6.28
50		1.18	1.57	1.96	2.39	3.14	3.93	4.71	5.89	7.85
60		1.41	1.88	2.36	2.83	3.77	4.71	5.65	7.07	9.42
70		1.65	2.20	2.75	3.30	4.40	5.50	6.59	8.24	11.00
80		1.88	2.51	3.14	3.77	5.02	6.28	7.54	9.42	12.60
90	± 1.5	2.12	2.83	3.53	4.24	5.65	7.07	8.48	10.60	14.10
100		2.36	3.14	3.93	4.71	6.28	7.85	9.42	11.90	15.70
120		-	-	4.70	5.70	7.54	9.42	11.30	14.10	18.80
140	± 2.5	-	-	-	-	8.79	11.00	13.20	16.50	22.00
150		-	-	-	-	9.42	11.80	14.10	17.70	23.60