

MERCHANT BARS

SQUARES - FLATS - ROUNDS - EQUAL ANGLES - IPE - UPN



TECHNICAL SPECIFICATIONS



TYPE:

Hot-Rolled bars of equal angles having round edges (Equal Angles)



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)



FORM - DIMENSIONS:

Straight bars with diameter from 20 to 100mm and side thickness from 3 to 12mm



LENGTH - TOLERANCE:

Bar length 6m - 12m with tolerance $-0 / +100\text{mm}$



PACKING - WEIGHT:

Bundles weighing approximately 2,500kg



DIMENSIONS - WEIGHT - TOLERANCES:

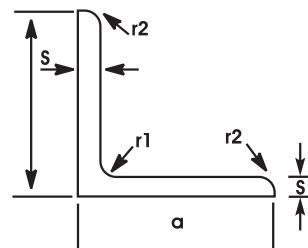
According to EN 10056 (DIN 1018)

EQUAL ANGLES

Hot-Rolled bars of equal angles having round edges



Equal angle bars are manufactured at SIDENOR's factory in Thessaloniki, at a length of 6 metres, with a leg length ranging from 20mm to 50mm and with a leg thickness of between 3mm and 6mm. Moreover, STOMANA's factory in Bulgaria manufactures angles with a leg length from 60mm to 100mm and a leg thickness from 6mm to 12mm, at lengths of 6 and 12 metres. Angles are products with a wide range of applications, being used in fencing, as support piles for sheds in vineyards, for sheds and roofs, coachworks, and for the construction of steel power towers, etc.



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STEEL CHEMICAL COMPOSITION & MECHANICAL PROPERTIES

STEEL GRADE	CHEMICAL COMPOSITION			MECHANICAL PROPERTIES		
	C (%) max	P (%) max	S (%) max	YIELD STRENGTH (N/mm²) min	TENSILE STRENGTH (N/mm²)	ELONGATION 5d₀, (%) 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 EQUAL ANGLES

DIMENSIONS (mm)	DIMENSIONS (mm)						NOMINAL CROSS SECTION (cm²)	NOMINAL WEIGHT (kg/m)	NOMINAL SURFACE AREA (m²/m)
	a (mm)	PERMISSIBLE DEVIATION FOR (a) (mm)	s* (mm)	PERMISSIBLE DEVIATION FOR (s) (mm)	r1 (mm)	r2 (mm)			
20x20x3	20	±1.00	3	±0.50	3.5	2.0	1.12	0.88	0.077
25x25x3	25		3		3.5	2.0	1.42	1.12	0.097
30x30x3 30x30x4	30		3 4		5.0	2.5	1.74 2.27	1.36 1.78	0.116
35x35x3 35x35x4	35		3 4		5.0	2.5	2.04 2.67	1.60 2.10	0.136
40x40x3 40x40x4 40x40x5	40		3 4 5		6.0	3.0	2.35 3.08 3.79	1.84 2.42 2.97	0.155
45x45x4 45x45x5	45		4 5		7.0	3.5	3.49 4.30	2.74 3.38	0.174
50x50x4 50x50x5 50x50x6	50		4 5 6		7.0	3.5	3.89 4.80 5.69	3.06 3.77 4.47	0.194
60x60x5 60x60x6	60	±1.50	5 6	±0.75	8.0	4.0	5.82 6.91	4.57 5.42	0.233
65x65x6 65x65x7	65		6 7		9.0	4.5	7.40 8.70	5.90 6.80	0.252
70x70x6 70x70x7	70		6 7		9.0	4.5	8.13 9.40	6.38 7.38	0.272
75x75x6 75x75x7 75x75x8	75		6 7 8		10.0	5.0	8.70 10.10 11.50	6.90 7.94 9.03	0.291
80x80x7 80x80x8 80x80x10	80		7 8 10		10.0	5.0	10.80 12.30 15.10	8.49 9.66 11.90	0.311
90x90x7 90x90x9	90		7 9		11.0	5.5	12.20 15.50	9.61 12.20	0.351
100x100x7 100x100x8 100x100x10 100x100x12	100		7 8 10 12		12.0	6.0	13.60 15.50 19.20 22.70	10.80 12.20 15.10 17.80	0.390

* Special thickness can be available upon request