

DIMENSIONAL TOLERANCES FOR STAINLESS STEEL BARS

FLAT BAR (to ASTM A276 / A484M)

Width (mm)	3.2mm to 13mm	< 13mm to 25mm	< 25mm to 50mm	Width Tolerance
< 25mm	+ 0.008 - 0.008	+ 0.010 - 0.010		+ 0.015 - 0.015
25mm to 50mm	+ 0.012 - 0.012	+ 0.015 - 0.015	+ 0.031 - 0.031	+ 0.031 - 0.031
< 50mm to 100mm	+ 0.015 - 0.015	+ 0.020 - 0.020	+ 0.031 - 0.031	+ 0.062 - 0.031
< 100mm to 150mm	+ 0.016 - 0.016	+ 0.020 - 0.020	+ 0.031 - 0.031	+ 0.093 - 0.062

HRAP ANGLE BAR (to ASTM A276 / A484M)

Length of Leg	Leg Tolerance	Thickness Tolerance
20mm - 50mm	+ 1.0 / - 1.0	+ 0.5 / - 0.5
55mm - 100mm	+ 1.5 / - 1.5	+0.75 / - 0.75
110mm - 150mm	+ 2.0 / - 2.0	+ 1.0 / - 1.0

ROUND BAR COLD DRAWN

Tolerance (+ 0 / - t)

Dia (mm)	H8	H9	H10	H11
5 < 6	0.018	0.030	0.048	0.075
6 < 10	0.022	0.036	0.058	0.090
10 < 18	0.027	0.043	0.070	0.110
18 < 30	0.033	0.052	0.084	0.130
30 < 50	0.039	0.062	0.100	0.160
50 < 80	0.046	0.074	0.120	0.190
80 < 115			0.140	0.220
115 < 120				0.220
120 < 180				0.250
180 < 250				0.290
250 < 315				0.320

AVERAGE WEIGHTS FOR STAINLESS STEEL BARS					
ROUND					SQUARE
Metric		Imperial			Metric
Dia	kg/mtr	mm	Dia	kg/mtr	kg/mtr
3	0.06	3.125	1/8 "	0.06	
4	0.10				
5	0.15	4.76	3/16 "	0.14	0.20
6	0.22	6.35	1/4 "	0.24	0.28
8	0.40	7.98	5/16 "	0.38	0.50
10	0.62	9.50	3/8 "	0.55	0.79
12	0.89	12.70	1/2 "	0.99	1.13
14	1.21				
16	1.58	15.85	5/8 "	1.55	2.01
18	2.00				
20	2.47	19.01	3/4 "	2.23	3.14
22	2.98	22.20	7/8 "	3.04	3.80
24	3.55				
25	3.88	25.40	1 "	3.97	4.91
30	5.55	31.80	1.1/4 "	6.21	7.07
35	7.55				
40	9.87	38.10	1.1/2 "	8.95	12.60
45	12.50	44.50	1.3/4 "	12.20	
50	15.40	50.80	2 "	15.90	19.60
55	18.70				
60	22.20				
65	26.10	63.5	2.1/2 "	24.85	
70	30.20				
75	34.70	76.1	3 "	35.80	
80	39.50				
90	49.90				
100	61.00	101.6	4 "	63.64	
120	88.84				
150	139.00	152.0	6 "		
200	247.00	203.0	8 "		
250	384.00	254.0	10 "		
300	555.00	305.0	12 "		

AVERAGE WEIGHTS FOR SS BARS			
FLAT BAR			
Metric		Metric	
size	kg/mtr	size	kg / mtr
3mm x 12	0.24	10mm x 12	1.98
3mm x 20	0.47	10mm x 20	2.38
3mm x 25	0.60	10mm x 25	3.17
3mm x 30	0.72	10mm x 30	3.96
3mm x 40	0.96	10mm x 40	5.15
3mm x 50	1.20	10mm x 50	7.73
3mm x 75	1.80	10mm x 75	10.30
3mm x 100	2.40	10mm x 100	15.45
5mm x 20	0.79	12mm x 20	2.38
5mm x 25	0.99	12mm x 25	2.85
5mm x 30	1.19	12mm x 30	3.81
5mm x 40	1.58	12mm x 40	4.76
5mm x 50	1.98	12mm x 50	6.19
5mm x 75	2.98	12mm x 75	7.14
5mm x 100	3.17	12mm x 100	9.52
6mm x 20	0.95	12mm x 125	14.28
6mm x 25	1.19	16mm x 25	5.07
6mm x 30	1.43	16mm x 30	6.34
6mm x 40	1.91	16mm x 40	9.51
6mm x 50	2.38	16mm x 50	12.68
6mm x 65	3.10	16mm x 65	7.92
6mm x 75	3.57	20mm x 75	11.88
6mm x 100	4.76	20mm x 100	15.84
6mm x 150	7.14	20mm x 150	9.90
9mm x 25	1.78	20mm x 175	14.85
9mm x 30	2.14	25mm x 30	19.80
9mm x 40	2.85	25mm x 40	
9mm x 50	3.56	25mm x 50	
9mm x 65	4.64		
9mm x 75	6.96		
9mm x 100	9.27		
9mm x 150	13.91		

AVE . WEIGHTS	
ANGLE	
Metric	
size	kg / mtr
3mm x 20	0.89
3mm x 25	1.13
3mm x 30	1.36
3mm x 40	1.85
3mm x 50	2.26
4mm x 30	1.77
4mm x 50	2.95
5mm x 25	1.86
5mm x 30	2.24
5mm x 40	2.98
5mm x 50	3.71
6mm x 25	2.23
6mm x 30	2.68
6mm x 40	3.57
6mm x 50	4.46
6mm x 65	5.85
6mm x 75	6.88
6mm x 10	8.92
9mm x 75	10.00
10mm x 1	15.00