



BARS

Flat



Section Size		Unit Weight	Section Area
Thickness	Width	M	A
mm	mm	kg/m	cm ²
3	12	0.283	0.360
3	16	0.377	0.480
3	19	0.447	0.570
3	25	0.589	0.750
3	32	0.754	0.960
3	38	0.895	1.14
3	50	1.18	1.50
3	65	1.53	1.95
3	75	1.77	2.25
3	100	2.36	3.00
4.5	25	0.883	1.13
4.5	32	1.13	1.44
4.5	35	1.24	1.58
4.5	38	1.34	1.71
4.5	44	1.55	1.98
4.5	50	1.77	2.25
4.5	65	2.30	2.93
4.5	75	2.65	3.38
4.5	100	3.53	4.50
6	25	1.18	1.50
6	32	1.51	1.92
6	35	1.65	2.10
6	38	1.79	2.28
6	40	1.88	2.40
6	44	2.07	2.64
6	50	2.36	3.00
6	65	3.06	3.90
6	75	3.53	4.50
6	90	4.24	5.40
6	100	4.71	6.00
6	125	5.89	7.50
6	150	7.07	9.00
6	175	8.24	10.5
6	200	9.42	12.0
8	25	1.57	2.00
8	32	2.01	2.56
8	38	2.39	3.04
8	44	2.76	3.52
8	50	3.14	4.00
8	65	4.08	5.20
8	75	4.71	6.00
8	90	5.65	7.20
8	100	6.28	8.00

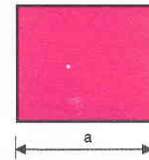
Section Size		Unit Weight	Section Area
Thickness	Width	M	A
mm	mm	kg/m	cm ²
8	125	7.85	10.0
8	150	9.42	12.0
8	200	12.56	16.0
9	19	1.34	1.71
9	25	1.77	2.25
9	32	2.26	2.88
9	38	2.68	3.42
9	44	3.11	3.96
9	50	3.53	4.50
9	65	4.59	5.85
9	75	5.30	6.75
9	90	6.36	8.10
9	100	7.07	9.00
9	125	8.83	11.3
9	150	10.60	13.5
9	180	12.72	16.2
9	200	14.13	18.0
9	250	17.66	22.5
9	300	21.20	27.0
12	25	2.36	3.00
12	32	3.01	3.84
12	38	3.58	4.56
12	40	3.77	4.80
12	44	4.14	5.28
12	50	4.71	6.00
12	65	6.12	7.80
12	75	7.07	9.00
12	90	8.48	10.8
12	100	9.42	12.0
12	125	11.78	15.0
12	150	14.13	18.0
12	180	16.96	21.6
12	200	18.84	24.0
12	250	23.55	30.0
12	300	28.26	36.0
16	25	3.14	4.00
16	32	4.02	5.12
16	38	4.77	6.08
16	50	6.28	8.00
16	65	8.16	10.4
16	75	9.42	12.0
16	90	11.30	14.4
16	100	12.56	16.0

Section Size		Unit Weight	Section Area
Thickness	Width	M	A
mm	mm	kg/m	cm ²
10	50	3.94	5.0
10	65	5.1	6.5
10	75	5.88	7.5
10	90	7.07	9.0
10	100	7.85	10.0
10	125	9.82	12.5
10	150	11.8	15.0
10	180	14.17	18.0
10	200	15.7	20.0
10	250	19.63	25.0
10	300	23.54	30.0



Section Size		Unit Weight	Section Area
Thickness	Width	M	A
mm	mm	kg/m	cm ²
16	125	15.70	20.0
16	150	18.84	24.0
16	200	25.12	32.0
19	38	5.67	7.2
19	50	7.46	9.5
19	65	9.69	12.4
19	75	11.19	14.3
19	90	13.42	17.1
19	100	14.92	19.0
19	125	18.64	23.8
19	150	22.37	28.5
19	200	29.83	38.0
19	250	37.29	47.5
19	300	44.75	57.0
25	50	9.81	12.5
25	65	12.76	16.3
25	75	14.72	18.8
25	90	17.66	22.5

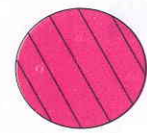
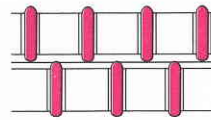
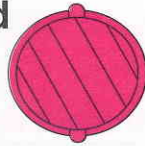
Section Size		Unit Weight	Section Area
Thickness	Width	M	A
mm	mm	kg/m	cm ²
25	100	19.63	25.0
25	125	24.53	31.3
25	150	29.44	37.5
32	100	25.12	32.0
32	125	31.40	40.0
32	150	37.68	48.0
32	180	45.22	57.6
32	200	50.24	64.0
32	230	57.78	73.6
32	250	62.80	80.0
32	280	70.34	89.6
32	300	75.36	96.0
36	100	28.26	36.0
36	125	35.33	45.0
36	150	42.39	54.0
36	180	50.87	64.8
36	200	56.52	72.0



Size a	Designation Mass Per Metre		Area Of Section	Second Moment Of Inertia	Radius Of Gyration	Elastic Modulus	Plastic Modulus
	mm	kg/m lb/ft					
9	0.64	0.43	81.0	547	2.60	121	182
10	0.79	0.53	100	833	2.89	167	250
12	1.13	0.76	144	1728	3.46	288	432
13	1.33	0.89	169	2380	3.75	366	549
16	2.01	1.35	256	5461	4.62	683	1024
18	2.54	1.71	324	8748	5.20	972	1458
19	2.83	1.90	361	10860	5.48	1143	1715
22	3.80	2.55	484	19520	6.35	1775	2662
25	4.91	3.30	625	32550	7.22	2604	3906
28	6.15	4.14	784	51220	8.08	3659	5488
30	7.07	4.75	900	67500	8.66	4500	6750
32	8.04	5.40	1024	87380	9.24	5461	8192
36	10.17	6.84	1296	140000	10.4	7776	11660
38	11.34	7.62	1444	173800	11.0	9145	13720
40	12.56	8.44	1600	213300	11.5	10670	16000
44	15.20	10.21	1936	312300	12.7	14200	21300
45	15.90	10.68	2025	341700	13.0	15190	22780
50	19.63	13.19	2500	520800	14.4	20830	31250
55	23.75	15.96	3025	762600	15.9	27730	41590
60	28.26	18.99	3600	1080000	17.3	36000	54000
65	33.17	22.29	4225	1488000	18.8	45770	68660
75	44.16	29.67	5625	2637000	21.7	70310	105500
80	50.24	33.76	6400	3413000	23.1	85330	128000
85	56.72	38.11	7225	4350000	24.5	102400	153500
90	63.59	42.73	8100	5468000	26.0	121500	182300
95	70.85	47.61	9025	6788000	27.4	142900	214300
100	78.50	52.75	10000	8333000	28.9	166700	250000



Deformed and Round



Deformed		
Section Size	Unit Weight M	Section Area A
mm	kg/m	cm ²
6	0.222	0.283
8	0.395	0.503
10	0.617	0.785
12	0.888	1.13
13	1.04	1.33
16	1.58	2.01
18	2.00	2.54
19	2.23	2.84
20	2.47	3.14
22	2.98	3.80
25	3.85	4.91
28	4.83	6.16
30	5.55	7.07
32	6.31	8.04
38	8.90	11.3
40	9.86	12.6
50	15.4	19.6

Round		
Section Size	Unit Weight M	Section Area A
mm	kg/m	cm ²
55	18.7	23.8
60	22.2	28.3
65	26.0	33.2
70	30.2	38.5
75	34.7	44.2
80	39.5	50.3
85	44.5	56.7
90	49.9	63.6
95	55.6	70.9
100	61.7	78.5
105	68.0	86.6
110	74.6	95.0
115	81.5	103.9
120	88.8	113.1
125	96.3	122.7
130	104.2	132.7
135	112.4	143.1
140	120.8	153.9
145	129.6	165.1
150	138.7	176.7
160	157.8	201.1
170	178.2	227.0
180	199.8	254.5
190	222.6	283.5
200	246.6	314.2
210	271.9	346.4
220	298.4	380.1
230	326.1	415.5
240	355.1	452
250	385	491
260	417	531
270	449	573
280	483	616
290	519	661
300	555	707
320	631	804

Round		
Section Size	Unit Weight M	Section Area A
mm	kg/m	cm ²
6	0.222	0.283
8	0.395	0.503
9	0.499	0.636
10	0.617	0.785
12	0.888	1.13
13	1.04	1.33
14	1.21	1.54
16	1.58	2.01
18	2.00	2.54
19	2.23	2.84
20	2.47	3.14
21	2.72	3.46
22	2.98	3.80
24	3.55	4.52
25	3.85	4.91
26	4.17	5.31
28	4.83	6.16
29	5.19	6.61
30	5.55	7.07
31	5.92	7.55
32	6.31	8.04
35	7.55	9.62
38	8.90	11.3
40	9.86	12.6
42	10.88	13.9
44	11.9	15.2
45	12.5	15.9
50	15.4	19.6