

ROUND BARS



Information

Round Bars are long, cylindrical metal bars that have many industrial and commercial applications. Round bars have the widest range of grades and sizes available. Round Bars are available in many metal types including Hot-Rolled Steel, Cold-Rolled Steel, Aluminium, Stainless Steel and more.

Applications

Precision components, industrial machines, household information equipment, construction, civil engineering, semiconductors, nuclear power and chemical plants.

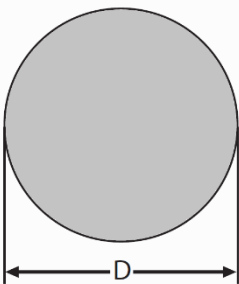
Features

- Corrosion resistant
- Heat-resistant
- Good cold and hot working properties
- High yield strength and toughness
- Good comprehensive performances and wide application



ROUND BARS

Material Specification: EN 10025 S275JR
ASTM A36
BS4360 Gr43A
JIS G3101 SS400
S20C
S45C



(Metric units)

Standard Sectional Dimension	Unit Weight	Sectional Area
D	M	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
15	1.39	1.767
16	1.58	2.01
18	2	2.54
19	2.23	2.84
20	2.47	3.14
21	2.72	3.46
22	2.98	3.8
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
36	7.99	10.18
38	8.9	11.34
40	9.87	12.57
44	11.9	15.2
45	12.5	15.9
50	15.4	19.6
55	18.7	23.8
60	22.2	28.3
65	26	33.2
70	30.2	38.5

Standard Sectional Dimension	Unit Weight	Sectional Area
D	M	A
mm	Kg/m	cm ²
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	86.6
110	74.6	95
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
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

DEFORMED BARS

Information

Deformed bars, also known as rebars (short for reinforcing bars), are steel bars or mesh of steel wires used in reinforced concrete and reinforced masonry structures to strengthen and hold the concrete in tension. The surface of deformed bar is often patterned to achieve good bonding between concrete and rebar.

Applications

Residential, commercial and infrastructure applications from concrete slabs to prefabricated beams, columns, cages and precast products.

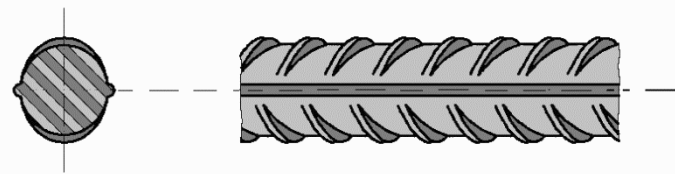


Features

- Good ductility and malleability
- High yield strength and toughness
- High bonding strength
- Earthquake resistant
- Corrosion resistant
- High thermal resistance
- Economical and safe in use
- No loss in strength at welded joints

DEFORMED BARS

Material Specification: BS 4449 (B500B)



(Metric units)

Standard Sectional Dimension	Unit Weight	Sectional Area
	M	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	1.042	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	9.87	12.6
50	15.4	19.6

SQUARE BARS

Information

Square bars are a multipurpose steel section with four equilateral sides. Steel square bars are produced by heating a square section of steel, passing it through rollers and then reheating the material to shape it into a square.

Applications

Manufacturing, food processing, chemical processing, brewing, heat treatment, construction, architecture, pharmaceutical equipment, ornamental iron work and furniture.

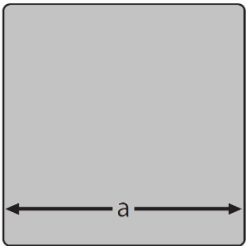
Features

- Corrosion resistant
- Heat-resistant
- High tensile strength and easy to form
- Good cold and hot working properties
- Good toughness and durability



SQUARE BARS

Material Specification: EN 10025 S275JR
BS4360 Gr43A
JIS G3101 SS400



(Metric units)

Standard Sectional Dimension	Unit Weight	Sectional Area	Second Moment Of Inertia	Radius Of Gyration	Elastic Modulus	Plastic Modulus
a	M	A				
mm	Kg/m	mm ²	mm ⁴	mm	mm ³	mm ³
9	0.64	81.0	547	2.60	121	182
10	0.79	100	833	2.89	167	250
12	1.13	144	1728	3.46	288	432
13	1.33	169	2380	3.75	366	549
16	2.01	256	5461	4.62	683	1024
18	2.54	324	8748	5.20	972	1458
19	2.83	361	10860	5.48	1143	1715
20	3.14	400	--	--	--	--
22	3.80	484	19520	6.35	1775	2662
25	4.91	625	32550	7.22	2604	3906
28	6.15	784	51220	8.08	3659	5488
30	7.07	900	67500	8.66	4500	6750
32	8.04	1024	87380	9.24	5461	8192
36	10.17	1296	140000	10.4	7776	11660
38	11.34	1444	173800	11.0	9145	13720
40	12.56	1600	213300	11.5	10670	16000
44	15.20	1936	312300	12.7	14200	21300
45	15.90	2025	341700	13.0	15190	22780
50	19.63	2500	520800	14.4	20830	31250
55	23.75	3025	762600	15.9	27730	41590
60	28.26	3600	1080000	17.3	36000	54000
65	33.17	4225	1488000	18.8	45770	68660
75	44.16	5625	2637000	21.7	70310	105500
80	50.24	6400	3413000	23.1	85330	128000
85	56.72	7225	4350000	24.5	102400	153500
90	63.59	8100	5468000	26.0	121500	182300
95	70.85	9025	6788000	27.4	142900	214300
100	78.50	10000	8333000	28.9	166700	250000

T BARS



Information

T bar, also known as T beam or Tee section, is a structural beam with a “T” shaped cross section. T bar is generally made of plain carbon steel. Manufacturing methods of “T” sections are hot rolling, extrusion and plate welding.

Applications

General fabrication, food processing and packaging, gas, metallurgy, biology, construction, chemical plants, petroleum, boilers, nuclear, energy and medical equipment, fertilizer, chemical plants and architecture.

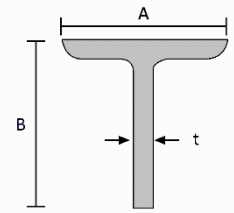
Features

- High tensile strength
- Long lasting usage with dimensional accuracy
- Outstanding performance
- Strong and versatile
- Can be welded with ease



T BARS

Material Specification: JIS G3101 SS400



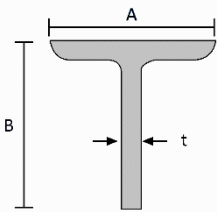
(Metric units)

Standard Sectional Dimension	Thickness	Weight
A x B	t	M
mm	mm	Kg/m
25 x 25	3	1.13
30 x 30	4	1.77
40 x 40	4	2.368
	5	2.96
50 x 50	5	3.79
	6	4.44
50 x 100	6	8.50
62.5 x 125	7	11.80
75 x 75	5	7.00
75 x 100	6	10.30
75 x 150	7	15.60
87.5 x 90	5	9.00
87.5 x 175	8	20.20
100 x 100	5	9.10
	6	10.50
	6	10.70
100 x 150	6	15.00
100 x 200	8	24.90
	12	28.10
	10	32.80
125 x 125	5	12.80
	6	14.50
125 x 175	7	21.80
125 x 250	11	32.20
	8	33.20
	9	35.90
	14	41.10
150 x 150	6	16.00
	7	18.40
150 x 200	8	28.40
	9	32.70

Standard Sectional Dimension	Thickness	Weight
A x B	t	M
mm	mm	Kg/m
150 x 300	12	42.30
	9	43.50
	10	46.50
	15	52.90
175 x 175	11	52.90
	6	20.70
175 x 250	7	24.70
	8	34.60
175 x 350	9	39.10
	13	53.10
	10	57.30
	16	65.40
	12	67.50
	19	77.90
200 x 200	14	79.30
	7	28.30
200 x 300	8	32.70
	9	47.10
200 x 400	10	52.30
	15	70.00
	11	73.30
	18	84.10
	13	85.80
	21	98.40
	20	142.00
	30	207.00
225 x 200	45	302.00
	8	33.10
225 x 300	9	37.50
	10	53.00
	11	60.40

T BARS

Material Specification: JIS G3101 SS400



(Metric units)

Standard Sectional Dimension	Thickness	Weight
A x B	t	M
mm	mm	Kg/m
250 x 200	9	39.70
	10	44.10
	11	51.50
250 x 300	11	57.10
300 x 200	10	47.30
	11	51.70
	12	59.80
	13	67.00
300 x 300	12	68.50
	14	87.30
350 x 300	13	83.00
400 x 300	14	95.60
450 x 300	15	105.00
	16	120.00
	18	141.00
	19	152.00