

Steel Bar

Std. Size (mm)		Cross-Sectional Area (mm ²)	Unit Weight (kg/m)	No. of Pcs. 12m Length Per Bundle	Weight Per Bundle (MT)	Deviation over and under The nominal Mass Per Meta Run%	
High Yield Deformed	Mild Steel Round						
D 8	8	50.3	0.395	210	0.995	-	
D 9	9	63.6	0.499	168	1.006		
D10	10	78.5	0.616	138	1.020		
D12	12	113.1	0.888	96	1.023	±6.5%	
D16	16	201.1	1.579	54	1.023		
D20	20	314.2	2.466	34	1.006		
D22	22	380.1	2.984	28	1.003		
D25	25	490.9	3.854	22	1.017		
D28	28	615.8	4.834	18	1.044		
D32	32	804.2	6.313	14	1.061		
D40	-	1.256.6	9.864	9	1.065		
							±4.5%

- High Yield Deformed Bar Standard Length: 12 metres straight
- Mild Steel Round Bar Standard Length: 12 metres straight or 12 metres once folded
- Special cut length can be produced from 6m to 15m on a certain min. quantity per size per order upon request.

Hot Rolled Steel Bars for The Reinforcement of Concrete

Specification	Grade	Chemical Composition						Size (mm)	Min Yield (N/mm ²)	Min Tensile (N/mm ²)	Min Strees Ratio	Min Elongation GL=5.65 SO (%)	Total EL of Max Load Min Agt (%)	Former Ø for 180° Bend Test (mm)	Former Ø for 45° Rebend Test (mm)	Former Ø for 90° Rebend Test (mm)
		C%Max	Si%Max	Mn%Max	P%Max	S%Max	Ce%Max									
MS146 :2000	High Yield Deformed Bar G460	0.25	-	-	0.050	0.050	0.51	All Size	460	-	1.05	12	-	3D	5D	-
	High Yield Deformed Bar G500	0.30	-	-	0.050	0.050	0.51	All Size	500	-	1.05	12	-	3D	5D	-
	Mild Yield Round Bar G250	0.25	-	-	0.060	0.060	0.42	All Size	250	-	1.05	22	-	2D	2D	-
BS 4449 : 1997	High Yield Deformed Bar G460	0.25	-	-	0.050	0.050	0.51	All Size	500	-	1.08	14	5	-	D<20=5D D>16=7D	-
	Mild Steel Round Bar G250	0.25	-	-	0.060	0.060	0.42	All Size	250	-	1.15	22	-	-	2D	-
SS2 PART 2 : 1999	High Yield Deformed Bar G500	0.22	0.60	1.70	0.050	0.050	0.50	All Size	500	550	1.05	14	2.5	20-250	-	32-400
SS2 PART 1 : 1999	Mild Steel Round Bar G300	-	-	-	0.060	0.060	Nil	6-20	300	330	1.10	16	-	12.50-63	-	-
AS/NZS 46571 : 2001	High Yield Deformed Bar G500N	0.22	-	-	0.050	0.050	0.44	12-36	500-650	-	1.08	-	5	D>20=4D	-	D>16=4D
	Mild Steel Round Bar G250N	0.22	-	-	0.050	0.050	0.43	12-36	250	-	1.08	-	5	D>20=4D	-	D>16=4D
	High Yield Deformed Bar G500E	0.22	-	-	0.050	0.050	0.49	6-40	500-800	-	1.15-1.40	-	10	D>20=4D	-	D>16=4D
	Mild Steel Round Bar G300E	0.22	-	-	0.050	0.050	0.43	6-25	300-380	-	1.15-1.50	-	15	D>20=4D	-	D>16=4D

Note :

CE	-	Carbon Equivalent	=	C	+	$\frac{Mn}{6}$	+	$\frac{Cr + Mo + V}{5}$	+	$\frac{Ni + Cu}{15}$
GL	-	Gauge Length								
SO	-	Original Cross Section Area of Test Piece								
D	-	Nimnal Size of Bar								
Ø	-	Diameter								
Torsid Bars	-	TORSID bars are produced from low carbon steel by a special heat treatment process during rolling giving the bar an exceptional combination of strength, toughness, ductility and weldability and has the exact properties of TEMP CORE bars. It complies with all the test requirement of BS 4449 : 1997, Ms 146 : 2000, SS2 PART 1 & 2 : 1999 AND AS/NZS 4671 : 2001 pertaining to yield stress, tensile strength, elongation, bending, rebending and weldability.								

Steel Bars

Cold Finished Carbon Steel Bars

■ Specification (JIS G 3108)

Classification	Notation	Chemical Composition (%)				
		C	Si	Mn	P	S
Class 2	SGD-2	0.10 - 0.15	0.40 max	0.30 - 0.60	0.045 max	0.045 max
Class 3	SGD-3	0.15 - 0.20	0.40 max	0.30 - 0.60	0.045 max	0.045 max

Cold Finished Carbon Steel Bars

■ Specification (JIS G 3108)

Notation	Chemical Composition (%)				
	C	Si	Mn	P	S
S10C	0.08 - 0.13	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S12C	0.10 - 0.15	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S15C	0.13 - 0.18	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S17C	0.15 - 0.20	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S20C	0.18 - 0.23	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S22C	0.20 - 0.25	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S25C	0.22 - 0.28	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S28C	0.25 - 0.31	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S30C	0.27 - 0.33	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S33C	0.30 - 0.36	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S35C	0.32 - 0.38	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S38C	0.35 - 0.41	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S40C	0.37 - 0.43	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S43C	0.37 - 0.43	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S48C	0.42 - 0.48	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S48C	0.45 - 0.51	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S50C	0.47 - 0.53	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S53C	0.50 - 0.56	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S55C	0.52 - 0.58	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max
S58C	0.55 - 0.61	0.15 - 0.35	0.30 - 0.60	0.030 max	0.035 max

Note: In addition we can manufacture products in conformity to other foreign standards such as AISI, SAB.

Steel Bars

Common to Steel Bars for General Structure, Cold Finished Carbon Steel Bars, Carbon Steel Bars for Machine Structural Use, and Steel Rod for Chains.

■ Dimensions and Weight

Rated diameter (mm)	Unit weight (kg/m)
42	10.9
44	11.9
46	13.0
48	14.2
50	15.4
56	18.7
60	22.2
65	26.0
70	30.2
75	34.7
80	39.5
85	44.5
90	49.9
95	55.6
100	61.7
105	68.0
110	74.6
120	88.8
130	104
140	121
150	139
160	158
170	178
180	200
190	223
200	247