

METRIC BAR DESIG. NO.	Nominal Dimensions Round Section		MASS kg/m	ENGLISH BAR DESIG. NO.	Nominal Dimensions Round Section		WEIGHT lb/ft
	DIA. mm	X-SECT. AREA mm ²			DIA. inches	X-SECT. AREA sq. in.	
10	9.5	71	0.560	3	0.375	0.11	0.376
13	12.7	129	0.994	4	0.500	0.20	0.668
16	15.9	199	1.552	5	0.625	0.31	1.043
19	19.1	284	2.235	6	0.750	0.44	1.502
22	22.2	387	3.042	7	0.875	0.60	2.044
25	25.4	510	3.973	8	1.000	0.79	2.670
29	28.7	645	5.060	9	1.128	1.00	3.400
32	32.3	819	6.404	10	1.270	1.27	4.303
36	35.8	1006	7.907	11	1.410	1.56	5.313
43	43.0	1452	11.380	14	1.693	2.25	7.650
57	57.3	2581	20.240	18	2.257	4.00	13.600

Metric bar designation numbers approximate the number of millimeters of the nominal diameter of the bar.

STEEL TYPE	BAR SIZE RANGE	GRADE	MINIMUM YIELD MPa	MINIMUM TENSILE MPa
BILLET ASTM A615M	#10 - #19	300	300	500
	#10 - #57	420	420	620
	#19 - #57	520	520	690
RAIL ASTM A616M	#10 - #36	350	350	550
	#10 - #36	420	420	620
AXLE ASTM A617M	#10 - #36	300	300	500
	#10 - #36	420	420	620
LOW ALLOY ASTM A706M	#10 - #57	420	420	550

NOTE: Bars are of three minimum yield levels:
300 MPa (40,000 psi), designated as Grade 40
420 MPa (60,000 psi), designated as Grade 60
520 MPa (75,000 psi), designated as Grade 75