

BRIGHT MILD STEEL STANDARD SIZES

SIZE X SIZE	SIZE X SIZE	SIZE X SIZE	SIZE X SIZE	SIZE X SIZE	SIZE X SIZE
6 x 2	15 x 4	20 x 16	30 x 20	40 x 16	50 x 40
6 x 3	15 x 5	20 x 18	30 x 25	40 x 18	50 x 50
6 x 4	15 x 6	20 x 20	30 x 30	40 x 20	55 x 3
6 x 5	15 x 8	22 x 3	32 x 4	40 x 25	55 x 4
6 x 6	15 x 10	22 x 4	32 x 5	40 x 30	55 x 5
8 x 2	15 x 12	22 x 5	32 x 6	40 x 35	55 x 6
8 x 3	15 x 15	22 x 6	32 x 8	40 x 40	55 x 8
8 x 4	16 x 2	22 x 8	32 x 10	45 x 3	55 x 10
8 x 5	16 x 3	22 x 10	32 x 12	45 x 4	55 x 12
8 x 6	16 x 4	22 x 12	32 x 15	45 x 5	55 x 15
8 x 8	16 x 5	22 x 15	32 x 16	45 x 6	55 x 18
10 x 2	16 x 6	22 x 16	32 x 18	45 x 8	55 x 20
10 x 3	16 x 8	22 x 18	32 x 20	45 x 10	55 x 25
10 x 4	16 x 10	22 x 20	32 x 25	45 x 12	55 x 30
10 x 5	16 x 12	25 x 3	32 x 30	45 x 15	55 x 35
10 x 6	16 x 15	25 x 4	35 x 3	45 x 16	55 x 40
10 x 8	16 x 16	25 x 5	35 x 4	45 x 18	60 x 3
10 x 10	18 x 2	25 x 6	35 x 5	45 x 20	60 x 4
12 x 2	18 x 3	25 x 8	35 x 6	45 x 25	60 x 5
12 x 3	18 x 4	25 x 10	35 x 8	45 x 30	60 x 6
12 x 4	18 x 5	25 x 12	35 x 10	45 x 35	60 x 8
12 x 5	18 x 6	25 x 15	35 x 12	45 x 40	60 x 10
12 x 6	18 x 8	25 x 16	35 x 15	45 x 45	60 x 12
12 x 7	18 x 10	25 x 18	35 x 16	50 x 3	60 x 15
12 x 8	18 x 12	25 x 20	35 x 18	50 x 4	60 x 16
12 x 10	18 x 15	25 x 25	35 x 20	50 x 5	60 x 18
12 x 12	18 x 16	28 x 28	35 x 25	50 x 6	60 x 20
14 x 2	18 x 18	30 x 3	35 x 30	50 x 8	60 x 25
14 x 3	20 x 2	30 x 4	35 x 35	50 x 10	60 x 30
14 x 4	20 x 3	30 x 5	40 x 3	50 x 12	60 x 35
14 x 5	20 x 4	30 x 6	40 x 4	50 x 15	60 x 40
14 x 6	20 x 5	30 x 8	40 x 5	50 x 16	60 x 50
14 x 8	20 x 6	30 x 10	40 x 6	50 x 18	60 x 60
14 x 10	20 x 8	30 x 12	40 x 8	50 x 20	65 x 3
14 x 12	20 x 10	30 x 15	40 x 10	50 x 25	65 x 4
15 x 2	20 x 12	30 x 16	40 x 12	50 x 30	65 x 5
15 x 3	20 x 15	30 x 18	40 x 15	50 x 35	65 x 6



Sizes currently stocked



Availability on request

BRIGHT MILD STEEL STANDARD SIZES

SIZE X SIZE	SIZE X SIZE	SIZE X SIZE	SIZE X SIZE	SIZE X SIZE	SIZE X SIZE
65 x 8	75 x 35	100 x 6	120 x 35	150 x 20	220 x 15
65 x 10	75 x 40	100 x 8	120 x 40	150 x 25	220 x 20
65 x 12	75 x 50	100 x 10	120 x 50	150 x 30	220 x 25
65 x 15	80 x 3	100 x 12	120 x 60	150 x 40	220 x 30
65 x 16	80 x 4	100 x 15	125 x 8	150 x 50	250 x 8
65 x 20	80 x 5	100 x 16	125 x 10	150 x 60	250 x 10
65 x 25	80 x 6	100 x 18	125 x 12	160 x 8	250 x 12
65 x 30	80 x 8	100 x 20	125 x 15	160 x 10	250 x 15
65 x 35	80 x 10	100 x 25	125 x 20	160 x 12	250 x 20
65 x 40	80 x 12	100 x 30	125 x 25	160 x 15	250 x 25
65 x 50	80 x 15	100 x 35	125 x 30	160 x 20	250 x 30
70 x 3	80 x 16	100 x 40	130 x 8	160 x 25	250 x 40
70 x 4	80 x 18	100 x 50	130 x 10	160 x 30	250 x 50
70 x 5	80 x 20	100 x 60	130 x 12	160 x 40	250 x 60
70 x 6	80 x 25	110 x 5	130 x 15	160 x 50	300 x 8
70 x 8	80 x 30	110 x 6	130 x 20	160 x 60	300 x 10
70 x 10	80 x 35	110 x 8	130 x 25	180 x 8	300 x 12
70 x 12	80 x 40	110 x 10	130 x 30	180 x 10	300 x 15
70 x 15	80 x 50	110 x 12	130 x 40	180 x 12	300 x 20
70 x 16	80 x 60	110 x 15	130 x 50	180 x 15	300 x 25
70 x 20	90 x 4	110 x 20	130 x 60	180 x 20	300 x 30
70 x 25	90 x 5	110 x 25	140 x 8	180 x 25	300 x 40
70 x 30	90 x 6	110 x 30	140 x 10	180 x 30	300 x 50
70 x 35	90 x 8	110 x 35	140 x 12	180 x 40	300 x 60
70 x 40	90 x 10	110 x 40	140 x 15	180 x 50	350 x 10
70 x 50	90 x 12	110 x 50	140 x 20	180 x 60	350 x 12
70 x 60	90 x 15	110 x 60	140 x 25	200 x 8	350 x 15
75 x 5	90 x 16	120 x 5	140 x 30	200 x 10	350 x 20
75 x 6	90 x 20	120 x 6	140 x 40	200 x 12	350 x 30
75 x 8	90 x 25	120 x 8	140 x 50	200 x 15	400 x 10
75 x 10	90 x 30	120 x 10	140 x 60	200 x 20	400 x 12
75 x 12	90 x 35	120 x 12	150 x 8	200 x 25	400 x 15
75 x 15	90 x 40	120 x 15	150 x 10	200 x 30	400 x 20
75 x 18	90 x 50	120 x 16	150 x 12	200 x 40	400 x 30
75 x 20	90 x 60	120 x 20	150 x 15	200 x 50	400 x 40
75 x 25	100 x 4	120 x 25	150 x 16	200 x 60	
75 x 30	100 x 5	120 x 30	150 x 18	220 x 12	



Sizes currently stocked



Availability on request

C45K KEYSTEEL

BS 970	SAE (A1S1)	WERKSTOFF NO
080 A46	1045	1.1191

CHEMICAL COMPOSITION

CARBON : 0,42 - 0,50
SILICON : 0,17 - 0,37
MANGANESE : 0,50 - 0,80
SULPHUR : 0,035 MAX
PHOSPHORUS : 0,035 MAX

STANDARD STOCK SIZES

SIZE	SIZE	SIZE	SIZE
4 x 4	12 x 10	22 x 22	32 x 18
5 x 5	14 x 14	22 x 14	36 x 36
6 x 6	14 x 9	25 x 25	36 x 20
8 x 8	16 x 16	25 x 14	38 x 38
8 x 7	16 x 10	28 x 28	40 x 40
10 x 10	18 x 18	28 x 16	40 x 22
10 x 8	18 x 11	30 x 30	40 x 25
12 x 12	20 x 20	32 x 32	45 x 45
12 x 8	20 x 12	32 x 16	50 x 50

TYPICAL USES:

MANUFACTURE OF VARIOUS KEYS.

230MO7 LEADED

9S Mn Pb 28

BS 970	SAE (AISI)	WERKSTOFF NO
230MO7 LEADED	12 L 14	1.0718

CHEMICAL COMPOSITION

CARBON	: 0,14 MAX
SILICON	: 0,05 MAX
MANGANESE	: 0,90 - 1,30
SULPHUR	: 0,24 - 0,32
PHOSPHORUS	: 0,10 MAX
LEAD	: 0,15 - 0,30

STANDARD STOCK SIZES

ROUND

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
6mm	0,222	16mm	1,578	28mm	4,824	50mm	15,413
7mm	0,302	17mm	1,782	30mm	5,549	55mm	18,650
8mm	0,395	18mm	1,998	32mm	6,313	60mm	22,195
9mm	0,499	19mm	2,226	35mm	7,553	65mm	26,049
10mm	0,617	20mm	2,466	36mm	7,990	70mm	30,210
11mm	0,746	22mm	2,984	38mm	8,903	75mm	34,680
12mm	0,888	24mm	3,551	40mm	9,865	80mm	39,458
1/2"	0,994	25mm	3,853	42mm	10,876		
14mm	1,175	1"	3,978	45mm	12,485		
15mm	1,387	26mm	4,168	48mm	14,205		

9S Mn Pb 36

BS 970	SAE (AISI)	WERKSTOFF NO
ENIA LEADED	12 L 14	1.0737

CHEMICAL COMPOSITION

CARBON	: 0,15 MAX
SILICON	: 0,05 MAX
MANGANESE	: 1,00 - 1,50
SULPHUR	: 0,32 - 0,40
PHOSPHORUS	: 0,10 MAX
LEAD	: 0,15 - 0,30

HEXAGONS

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
10mm	0,680	24mm	3,916	41mm	11,428
11mm	0,823	25mm	4,250	42mm	11,995
13mm	1,149	27mm	4,956	46mm	14,385
14mm	1,332	28mm	5,331	50mm	16,996
17mm	1,965	30mm	6,118	55mm	20,565
19mm	2,455	32mm	6,963		
20mm	2,719	36mm	8,811		
22mm	3,291	38mm	9,817		

SQUARES AND FLATS ALSO AVAILABLE ON ENQUIRY.

TYPICAL USES:

FOR HIGH SPEED PRODUCTION OF REPETITION WORK EG. MANUFACTURE OF BUSHES, PINS, BOLTS, NUTS, STUDS AND COUPLINGS, WHERE THE MAJOR REQUIREMENTS ARE RAPID MACHINING AND MAXIMUM TOOL LIFE. CUTTING SPEEDS AND FEEDS CAN BE INCREASED CONSIDERABLY DUE TO THE HIGHER LEAD CONTENT.

220MO7 (En 1A)

BS 970	SAE (AISI)	WERKSTOFF NO
220 M 07	1112	1.0711

CHEMICAL COMPOSITION

CARBON	: 0,07 - 0,15
SILICON	: 0,10 MAX
MANGANESE	: 0,80 - 1,20
SULPHUR	: 0,20 - 0,30
PHOSPHORUS	: 0,07 MAX

MECHANICAL PROPERTIES

PROPERTY	SIZE: (Diameter or Width across flats) mm			
	13,5mm or less	13,5mm to 38mm	38mm to 63,5mm	63,5mm to 100mm
Tensile Strength, MPa	490	430	385	355
Elongation percent, Min	10	14	14	14

STANDARD STOCK SIZES

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
6	0,222	13	1,042	24	3,551	35	7,553
7	0,302	14	1,175	25	3,853	36	7,990
8	0,395	15	1,387	26	4,168	38	8,903
9	0,499	16	1,578	27	4,495	40	9,865
10	0,617	18	1,998	28	4,824	45	12,485
11	0,746	20	2,466	30	5,549	50	15,413
12	0,888	22	2,984	32	6,313	55	18,650

SQUARES AND FLATS ALSO AVAILABLE ON ENQUIRY.

TYPICAL USES:

FOR HIGH SPEED PRODUCTION OF REPETITION WORK (E.G. MANUFACTURE OF BUSHES, PINS, BOLTS, NUTS, STUDS, AND COUPLINGS) WHERE THE MAJOR REQUIREMENTS ARE RAPID MACHINING AND MAXIMUM TOOL LIFE.

CUTTING SPEEDS ON BRIGHT DRAWN FREECUTTINGS STEEL BAR ARE CONSIDERABLY ABOVE THOSE OF ORDINARY MILD QUALITY STEEL, AND COMPONENTS ARE PRODUCED OF SIMILAR MECHANICAL PROPERTIES WITH A FAR SUPERIOR SURFACE FINISH.

070M20 (En3B) BRIGHT

BS 970	SAE (AISI)	WERKSTOFF NO
070 M 20	1020	1.0402

CHEMICAL COMPOSITION

CARBON	: 0,25 MAX
SILICON	: 0,35 MAX
MANGANESE	: 1,00 MAX
SULPHUR	: 0,06 MAX
PHOSPHORUS	: 0,06 MAX

MECHANICAL PROPERTIES

PROPERTY	NORMALIZED
Tensile Strength, MPa, Min	430
Elongation percent, Min	17

STANDARD STOCK SIZES

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
6mm	0,222	20 mm	2,466	38 mm	8,903	70 mm	30,210	125 mm	96,337
7 mm	0,302	21 mm	2,719	1.1/2"	8,950	75 mm	34,680	127 mm	99,441
8 mm	0,395	22 mm	2,984	40 mm	9,865	3"	35,799	130 mm	104,195
9 mm	0,499	7/8"	3,045	42 mm	10,876	80 mm	39,458	135 mm	112,364
10 mm	0,617	24 mm	3,551	1.3/4"	12,181	85 mm	44,545	140 mm	120,841
11 mm	0,746	25 mm	3,853	45 mm	12,485	3.1/2"	48,726	145 mm	129,627
12 mm	0,888	1"	3,978	48 mm	14,205	90 mm	49,939	150 mm	138,721
1/2"	0,994	26 mm	4,168	50 mm	15,413	95 mm	55,642	6"	143,195
14 mm	1,175	28 mm	4,824	2"	15,911	100 mm	61,654	155 mm	148,123
15 mm	1,387	1.1/8"	5,034	2.1/8"	17,962	4"	63,642	160 mm	157,833
5/8"	1,554	30 mm	5,549	55 mm	18,650	105 mm	67,973		
16 mm	1,578	1.1/4"	6,215	2.1/4"	20,137	110 mm	74,601		
17 mm	1,782	32 mm	6,313	60 mm	22,195	4.1/2"	80,547		
18 mm	1,998	35 mm	7,553	2.1/2"	24,861	115 mm	81,537		
19 mm	2,226	36 mm	7,990	65 mm	26,049	120 mm	88,781		

TYPICAL USES:

SHAFTS, BOLTS, NUTS, STUDS, COUPLINGS AND MACHINERY COMPONENTS WHERE A LOW TENSILE STRENGTH MATERIAL IS REQUIRED.

080M40 (En8) BRIGHT

BS 970	SAE (AISI)	WERKSTOFF NO
080 M 40	1043	1.0503

CHEMICAL COMPOSITION

CARBON	: 0,36 - 0,44
SILICON	: 0,05 - 0,35
MANGANESE	: 0,60 - 1,00
SULPHUR	: 0,06 MAX
PHOSPHORUS	: 0,06 MAX

MECHANICAL PROPERTIES

PROPERTY	
Limited Ruling Section Min	150
Tensile Strength, MPa, Min	540
Yield Stress, MPa, Min	277
Elongation percent, Min	17
Izod Impact Value, Joule, Min	-
Brinell Hardness Number	152/207

STANDARD STOCK SIZES

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
6mm	0,222	20 mm	2,466	38 mm	8,903	70 mm	30,210	125 mm	96,337
7 mm	0,302	21 mm	2,719	1.1/2"	8,950	75 mm	34,680	127 mm	99,441
8 mm	0,395	22 mm	2,984	40 mm	9,865	3"	35,799	130 mm	104,195
9 mm	0,499	7/8"	3,045	42 mm	10,876	80 mm	39,458	135 mm	112,364
10 mm	0,617	24 mm	3,551	1.3/4"	12,181	85 mm	44,545	140 mm	120,841
11 mm	0,746	25 mm	3,853	45 mm	12,485	3.1/2"	48,726	145 mm	129,627
12 mm	0,888	1"	3,978	48 mm	14,205	90 mm	49,939	150 mm	138,721
1/2"	0,994	26 mm	4,168	50 mm	15,413	95 mm	55,642	6"	143,195
14 mm	1,175	28 mm	4,824	2"	15,911	100 mm	61,654	155 mm	148,123
15 mm	1,387	1.1/8"	5,034	2.1/8"	17,962	4"	63,642	160 mm	157,833
5/8"	1,554	30 mm	5,549	55 mm	18,650	105 mm	67,973		
16 mm	1,578	1.1/4"	6,215	2.1/4"	20,137	110 mm	74,601		
17 mm	1,782	32 mm	6,313	60 mm	22,195	4.1/2"	80,547		
18 mm	1,998	35 mm	7,553	2.1/2"	24,861	115 mm	81,537		
19 mm	2,226	36 mm	7,990	65 mm	26,049	120 mm	88,781		

TYPICAL USES:

DYNAMO AND MOTORSHAFTS, HEAT-TREATED BOLTS, CRANKSHAFTS, CONNECTING RODS, DRIVING RINGS AND FLANGES, RAILWAY COUPLINGS, AXLES, BRACKETS, HOUSINGS, MISCELLANEOUS GUN CARRIAGE AND SMALL ARMS PARTS NOT SUBJECTED TO HIGH STRESSES OR SEVERE WEAR.

(En1A) HEXAGONS (En8)

BS 970	SAE (AISI)	WERKSTOFF NO
220 M 07	1112	1.0711

BS 970	SAE (AISI)	WERKSTOFF NO
080 M 40	1043	1.0503

CHEMICAL COMPOSITION

CARBON : 0,07 - 0,15
 SILICON : 0,10 MAX
 MANGANESE : 0,80 - 1,20
 SULPHUR : 0,20 - 0,30
 PHOSPHORUS : 0,07 MAX

CHEMICAL COMPOSITION

CARBON : 0,36 - 0,44
 SILICON : 0,05 - 0,35
 MANGANESE : 0,60 - 1,00
 SULPHUR : 0,06 MAX
 PHOSPHORUS : 0,06 MAX

MECHANICAL PROPERTIES

En 1A		En 8
100	Limited Ruling Section Min	150
355	Tensile Strength, MPa, Min	540
	Yield Stress, MPa	278
14	Elongation percent, Min	20
	Izod Impact Value, Joule, Min	
103	Brinell Hardness Number	152/207

STANDARD STOCK SIZES

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
10	0,680	18	2,203	36	8,811
11	0,823	20	2,719	38	9,817
12	0,979	21	2,998	41	11,428
13	1,149	24	3,916	46	14,385
14	1,332	26	4,596	50	16,996
15	1,530	27	4,956	55	20,565
16	1,740	30	6,118		
17	1,965	33	7,403		

TYPICAL USES:

En 1A: FOR HIGH SPEED PRODUCTION OF REPETITION WORK (E.G. MANUFACTURE OF BUSHES, PINS, BOLTS, NUTS, STUDS AND COUPLINGS) WHERE THE MAJOR REQUIREMENTS ARE RAPID MACHINING AND MAXIMUM TOOL LIFE.

En 8: DYNAMO AND MOTORSHAFTS, HEAT-TREATED BOLTS, CRANKSHAFTS, CONNECTING RODS, DRIVING RINGS AND FLANGES, RAILWAY COUPLINGS, AXLES, BRACKETS, HOUSINGS, MISCELLANEOUS GUN CARRIAGE AND SMALL ARMS PARTS NOT SUBJECTED TO HIGH STRESSES OR SEVERE WEAR.

070M20 (En 3A) BLACK

BS 970	SAE (AISI)	WERKSTOFF NO
070 M 20	1020	1.0402

CHEMICAL COMPOSITION

CARBON	: 0,15 - 0,25
SILICON	: 0,05 - 0,35
MANGANESE	: 0,40 - 0,90
SULPHUR	: 0,06 MAX
PHOSPHORUS	: 0,06 MAX

MECHANICAL PROPERTIES

PROPERTY	NORMALIZED
Limited Ruling Section mm	152
Tensile Strength, MPa, Min	432
Elongation percent, Min	21

STANDARD STOCK SIZES IN THE AS ROLLED OR NORMALIZED CONDITION

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
20	2,466	65	26,049	115	81,537	200	246,614
25	3,853	70	30,210	120	88,781	210	271,893
30	5,549	75	34,680	130	104,195	220	298,403
35	7,553	80	39,458	140	120,841	230	326,148
40	9,865	85	44,545	150	138,721	240	355,125
45	12,485	90	49,939	160	157,833	250	385,336
50	15,413	95	55,642	170	178,179		
55	18,650	100	61,654	180	199,757		
60	22,195	108	71,846	190	222,570		

TYPICAL USES:

SHAFTS, BOLTS, NUTS, STUDS, COUPLINGS AND MACHINERY COMPONENTS WHERE A LOW TENSILE STRENGTH MATERIAL IS REQUIRED.

080M40 (En 8) BLACK

BS 970	SAE (AISI)	WERKSTOFF NO
080 M 40	1043	1.0503

CHEMICAL COMPOSITION

CARBON	: 0,36 - 0,44
SILICON	: 0,05 - 0,35
MANGANESE	: 0,60 - 1,00
SULPHUR	: 0,06 MAX
PHOSPHORUS	: 0,06 MAX

MECHANICAL PROPERTIES

PROPERTY	CONDITION		
	Normalized	Hardened & Tempered	
		Q	R
Limited Ruling Section mm	254	65	22
Tensile Strength, MPa	510/540	620/770	690/850
Yield Stress, MPa, Min	245	385	465
Elongation percent, Min	17	22	20
Izod Impact Value, Joule, Min	20	33,4	33,4
Brinell Hardness Number	152/207	179/229	210/255

STANDARD STOCK SIZES IN THE AS ROLLED OR NORMALIZED CONDITION

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
20	2,466	65	26,049	115	81,537	200	246,614
25	3,853	70	30,210	120	88,781	210	271,893
30	5,549	75	34,680	130	104,195	220	298,403
35	7,553	80	39,458	140	120,841	230	326,148
40	9,865	85	44,545	150	138,721	240	355,125
45	12,485	90	49,939	160	157,833	250	385,336
50	15,413	95	55,642	170	178,179	ALL SIZES	
55	18,650	100	61,654	180	199,757		
60	22,195	108	71,846	190	222,570		

TYPICAL USES:

DYNAMO AND MOTORSHAFTS, HEAT-TREATED BOLTS, CRANKSHAFTS, CONNECTING RODS, DRIVING RINGS AND FLANGES, RAILWAY COUPLINGS, AXLES, BRACKETS, HOUSINGS, MISCELLANEOUS GUN CARRIAGE AND SMALL ARMS PARTS NOT SUBJECTED TO HIGH STRESSES OR SEVERE WEAR.

080M40 (En8) BLACK HEXAGONS

BS 970	SAE (AISI)	WERKSTOFF NO
080 M 40	1043	1.0503

CHEMICAL COMPOSITION

CARBON	: 0,36 - 0,44
SILICON	: 0,05 - 0,35
MANGANESE	: 0,60 - 1,00
SULPHUR	: 0,06 MAX
PHOSPHORUS	: 0,06 MAX

MECHANICAL PROPERTIES

PROPERTY	NORMALIZED
Limited Ruling Section mm	150
Tensile Strength, MPa, Min	510/540
Yield Stress, MPa, Min	245
Elongation percent, Min	17
Izod Impact Value, Joule, Min	-
Brinell Hardness Numbers	152/207

STANDARD, STOCK SIZES IN THE AS FORGED CONDITION

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
60	25,10	85	50,37	120	100,39
65	29,45	90	56,47	130	117,82
70	34,16	95	62,92		
75	39,21	100	69,71		
80	44,62	115	92,20		

TYPICAL USES:

BOLTS, NUTS AND STUDS WHERE A HIGHER TENSILE STRENGTH MATERIAL IS REQUIRED.

070M55 (En 9)

BS 970	SAE (AISI)	WERKSTOFF NO
070 M 55	1055	1.1209

CHEMICAL COMPOSITION

CARBON	: 0,50 - 0,60
SILICON	: 0,05 - 0,35
MANGANESE	: 0,50 - 0,80
SULPHUR	: 0,06 MAX
PHOSPHORUS	: 0,06 MAX

MECHANICAL PROPERTIES

PROPERTY	NORMALIZED
Limited Ruling Section mm	254
Tensile Strength, MPa	600/700
Yield Stress, MPa, Min	310
Elongation percent, Min	13
Brinell Hardness Number	201/255

STANDARD STOCK SIZES IN THE AS ROLLED OR NORMALIZED CONDITION

SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m	SIZE	Kg/m
20	2,466	65	26,049	115	81,537	200	246,614
25	3,853	70	30,210	120	88,781	210	271,893
30	5,549	75	34,680	130	104,195	220	298,403
35	7,553	80	39,458	140	120,841	230	326,148
40	9,865	85	44,545	150	138,721	240	355,125
45	12,485	90	49,939	160	157,833	250	385,336
50	15,413	95	55,642	170	178,179		
55	18,650	100	61,654	180	199,757		
60	22,195	108	71,846	190	222,570		

TYPICAL USES:

SPROCKETS AND SPRINGS, CYLINDERS, CAMS, CRANKSHAFTS, KEYS, SMALL ARMS PARTS SUCH AS RIFLE BARRELS, SMALL GEARS, MACHINE TOOLS, BALLS FOR BALL MILLS, BALLRACES, MACHINED PARTS REQUIRING MODERATE WEAR RESISTANCE.

HOLLOW BAR SIZE AND WEIGHT CHART

ST 52

OD	ID	Wall thickness mm	± Weight Kg/M	OD	ID	Wall thickness mm	± Weight Kg/M	OD	ID	Wall thickness mm	± Weight Kg/M
32	16	8	4,74	125	90	17,5	46,4	273	223	25	154
32	20	6	3,85	125	100	12,5	34,7	273	228	22,5	140
36	16	10	6,41	132	71	30,5	76,3	292	228	32	206
36	20	8	5,52	132	90	21	57,5	292	242	25	165
36	25	5,5	4,14	132	106	13	38,2	292	252	20	135
40	20	10	7,40	140	80	30	81,4	298	198	50	307
40	25	7,5	6,01	140	100	20	59,2	298	208	45	282
40	28	6	5,03	140	112	14	43,5	298	218	40	255
45	20	12,5	10,1	150	80	35	99,3	298	226	36	234
45	28	8,5	7,65	150	106	22	69,4	298	234	32	210
45	32	6,5	6,17	150	125	12,5	42,4	298	238	30	199
50	25	12,5	11,6	160	90	35	107,9	318	228	50	331
50	32	9	9,10	160	112	24	80,5	318	228	45	303
50	36	7	7,42	160	132	14	50,4	318	238	40	275
56	28	14	14,5	170	100	35	115,8	318	254	32	226
56	36	10	11,3	170	118	26	92,3	318	268	25	182
56	40	8	9,47	170	140	15	57,3	318	275	20	147
63	32	15,5	18,2	180	100	40	138,2	318	293	12,5	94
63	40	11,5	14,6	180	125	27,5	103,4	324	224	50	338
63	50	6,5	9,06	180	150	15	61,0	324	234	45	310
71	36	17,5	23,1	190	106	42	153,6	324	244	40	280
71	45	13	18,6	190	132	29	115,1	324	260	32	231
71	56	7,5	11,7	190	160	15	64,7	324	274	25	185
75	40	17,5	24,8	200	112	44	169,5	324	284	20	150
75	50	12,5	19,3	200	140	30	125,8	355	255	50	376
75	60	7,5	12,5	200	160	20	88,8	355	265	45	343
80	40	20	29,6	212	125	43,5	181,0	355	275	40	310
80	50	15	24,0	212	150	31	138,0	355	291	32	254
80	63	8,5	15,0	212	170	21	98,9	355	305	25	203
85	45	20	32,1	224	132	46	202,0	355	315	20	165
85	55	15	25,9	224	160	32	151,5	355	330	12,5	105
85	67	9	16,9	224	180	22	109,6	406	306	50	439
90	50	20	34,5	236	140	48	223,0	406	316	45	401
90	63	13,5	25,5	236	170	33	165,1	406	326	40	361
90	71	9,5	18,9	236	190	23	120,8	406	342	32	295
95	50	22,5	40,2	250	150	50	247,0	406	356	25	234
95	67	14	28,0	250	180	35	185,5	406	362	22,5	207
95	75	10	21,0	250	200	25	138,7	406	366	20	189
100	56	22	42,3	254	154	50	252	419	319	50	455
100	71	14,5	30,6	254	184	35	189	419	329	45	415
100	80	10	22,2	254	204	25	142	419	339	40	374
106	56	25	49,9	267	167	50	268	419	355	32	305
106	71	17,5	38,2	267	187	40	224	419	369	25	245
106	80	13	29,8	267	217	25	150	419	379	20	197
112	63	24,5	52,9	267	228	19,5	120				
112	80	16	37,9	273	167	53	288				
112	90	11	27,4	273	173	50	276				
118	63	27,5	61,4	273	183	45	253				
118	80	19	46,4	273	193	40	231				
118	90	14	35,9	273	201	36	211				
125	71	27	65,3	273	217	28	170				

**ALL
SIZES**