



Tata Steel International (Australasia) Ltd

Long Products - Bar

Stainless Steel



TATA STEEL

SECTION B

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STAINLESS STEEL ROUND BAR

Manufactured to ASTM A276

Metric

DIAMETER	THEORETICAL WEIGHT	FREE MACHINING		
		303	304	316
mm	kg/m			
3	0.062		•**	
4	0.099		•**	
5	0.150		•	•
6	0.240	•	•	•
8	0.420	•	•	•
10	0.620	•	•	•
12	0.880	•	•	•
16	1.580	•	•	•
18	2.020			•
20	2.470	•	•	•
22	3.040		•	•
25	3.850	•	•	•
30	5.550	•	•	•
35	7.550		•	•
40	9.870		•	•
45	12.500		•	•
50	15.410		•	•
60	22.200		•	•
65	26.000		•	•
70	30.100		•	•
75	35.000		•	•
80	40.860		•	•
90	50.000		•	•
95	53.000		•	•
100	63.000		•	•
110	77.675		•	•
120	89.350		•	•
130	101.850		•	•
150	140.750		•	•
160	150.950		•	•
180	199.900			•
200	244.000			•

Imperial

DIAMETER	THEORETICAL WEIGHT	FREE MACHINING		
		303	304	316
Inch	kg/m			
1/8"	0.062	•	•**	•**
3/16"	0.140	•	•**	
1/4"	0.250	•	•	•
5/16"	0.390	•	•	•
3/8"	0.562	•	•	•
7/16"	0.764		•	
1/2"	0.998	•	•	•
9/16"	1.265			
5/8"	1.562		•	•
3/4"	2.246	•	•	•
7/8"	3.065		•	•
1"	3.988	•	•	•
1 1/16"	4.500			
1 1/8"	5.029	•		•
1 1/4"	6.209	•	•	•
1 3/8"	7.469			
1 1/2"	8.939	•	•	•
1 5/8"	10.491			
1 3/4"	12.168			•
2"	15.892		•	•
2 1/4"	20.115			•
2 3/8"	22.422			
2 1/2"	24.833		•	•
2 3/4"	30.048	•		•
3"	35.758	•		•

**Non-free machining Bar only

TABLE OF TOLERANCES

ISO H-J-K

H – Minus tolerance

Example – #45 h9 = + 0 – 0.062*

J – Plus/Minus tolerances

Example – #45 j9 = + 0.031 – 0.031

K – Plus tolerance

Example – #45 k9 = + 0.062 – 0

Standard stock tolerance H9/H10

Dependent on diameter

DIAMETERS mm	H – TOLERANCES (mm)						
	7	8	9	10	11	12	13
> 1 to 3 inclusive	0.009	0.014	0.025	0.040	0.060	0.090	0.140
> 3 to 6 inclusive	0.012	0.018	0.030	0.048	0.075	0.120	0.180
> 6 to 10 inclusive	0.015	0.022	0.036	0.058	0.090	0.150	0.220
> 10 to 18 inclusive	0.018	0.027	0.043	0.070	0.110	0.180	0.270
>18 to 30 inclusive	0.021	0.033	0.052	0.084	0.130	0.210	0.330
> 30 to 50 inclusive	0.025	0.039	0.062*	0.100	0.160	0.250	0.390
> 50 to 80 inclusive	–	0.046	0.074	0.120	0.190	0.300	0.460
> 80 to 120 inclusive	–	–	0.087	0.140	0.220	0.350	0.540
> 120 to 180 inclusive	–	–	0.100	0.160	0.250	0.400	0.630
> 180 to 250 inclusive	–	–	0.115	0.185	0.290	0.460	0.720
> 250 to 315	–	–	–	–	0.320	0.520	0.810
> 315 to 400	–	–	–	–	0.360	0.570	0.890
> 400 to 500	–	–	–	–	0.400	0.630	0.970
>500	–	–	–	–	0.440	0.700	1.100

2205 CENTRELESS GROUND SHAFT

GRADE 2205

2205 is a ferritic-austenitic stainless steel which combines many of the beneficial properties of both ferritic and austenitic steels. As a result of high chromium and molybdenum contents, the steel has very good pitting and uniform corrosion resistance. The duplex microstructure gives high resistance to stress corrosion cracking as well as high mechanical strength. The weldability of 2205 is good.

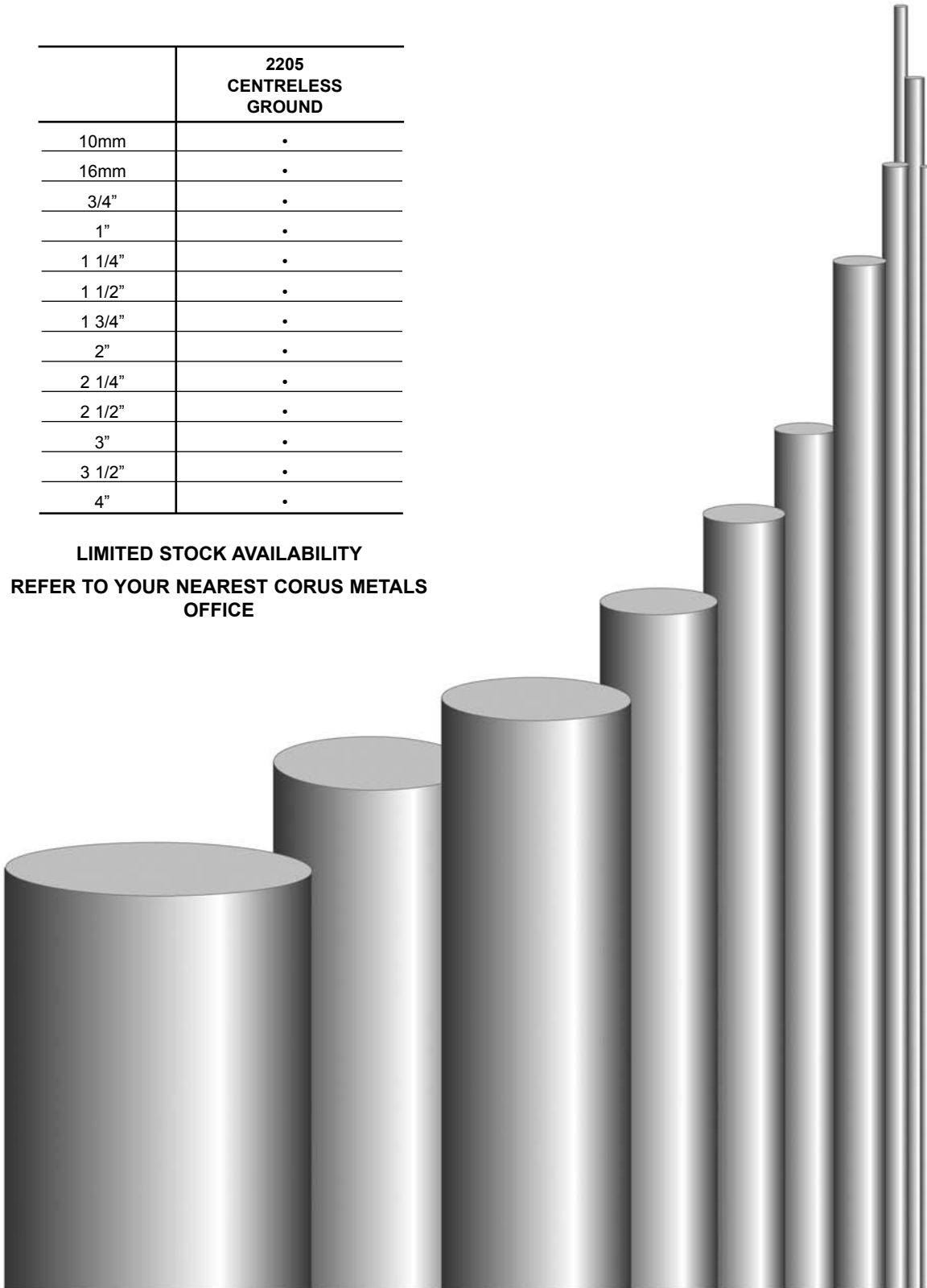
GRADE 2205

A duplex type steel combining very high mechanical strength with very good corrosion resistance, especially to stress corrosion cracking

C	Cr	Ni	Mo	OTHERS
0.02	22	5.5	3.0	N

	2205 CENTRELESS GROUND
10mm	•
16mm	•
3/4"	•
1"	•
1 1/4"	•
1 1/2"	•
1 3/4"	•
2"	•
2 1/4"	•
2 1/2"	•
3"	•
3 1/2"	•
4"	•

**LIMITED STOCK AVAILABILITY
REFER TO YOUR NEAREST CORUS METALS
OFFICE**



SQUARE/HEXAGON BAR

STAINLESS STEEL SQUARE BAR

Manufactured to ASTM-A276/484

METRIC SIZE (mm)	THEORETICAL WEIGHT Kg/Mtr	304	316*
6.00	0.288	•	•
8.00	0.512	•	•
10.00	0.800	•	•
12.00	1.152	•	•
16.00	2.048	•	
20.00	2.952	•	
25.00	5.000	•	
32.00	8.040	•	
38.10	11.300	•	
40.00	12.640	•	
50.80	19.600	•	
1/4"		•	

*Available on request

SQUARE BAR CAN BE POLISHED TO A No. 4 (SATIN) FINISH

LENGTHS: 4.00 METRES APPROXIMATELY

OTHER GRADES/SIZES AVAILABLE ON INDENT

STAINLESS STEEL HEXAGON BAR

Manufactured to ASTM-A476

METRIC SIZE (mm)	THEORETICAL WEIGHT Kg/Mtr	304*	316*
6.35	0.246	•	
8.00	0.439	•	
10.00	0.684	•	
12.70	1.103		•
14.00	1.387		•
16.00	1.751		•
19.05	2.483		•
22.00	3.311		•
25.40	4.414		•
28.00	5.362		•
34.92	8.351		•
38.10	9.931	•	
42.00	12.100		•
44.50	13.770	•	
50.80	17.666		•

*Available on request

LENGTHS: 3.00 METRES APPROXIMATELY

OTHER GRADES/SIZES AVAILABLE ON REQUEST/INDENT

FLAT BAR

STAINLESS STEEL

Manufactured to ASTM-A276/484

METRIC SIZE (mm)	THEORETICAL WEIGHT Kg/Mtr	304		316	
		SRE	HRAP	SRE	HRAP
3.00 x 12	0.282	•		•	
3.00 x 20	0.470	•			
3.00 x 25	0.588	•		•	
3.00 x 30	0.753	•			
3.00 x 40	0.894	•	•	•	
3.00 x 50	1.176	•	•	•	•
3.00 x 75	1.764	•			
3.00 x 100	2.352	•			
5.00 x 20	0.784		•	•	•
5.00 x 25	0.980		•	•	•
5.00 x 30	1.190		•		
5.00 x 40	1.490		•	•	•
5.00 x 50	1.960	•	•	•	•
5.00 x 65	2.470	•	•		
5.00 x 75	2.940		•		
5.00 x 100	3.921		•		
6.00 x 20	0.941	•	•		
6.00 x 25	1.176		•	•	•
6.00 x 30	1.430		•	•	•
6.00 x 40	1.788	•	•	•	•
6.00 x 50	2.352		•	•	•
6.00 x 65	2.964		•		•
6.00 x 75	3.528		•	•	•
6.00 x 100	4.705		•	•	•
6.00 x 150	7.057		•		
6.00 x 200	9.480	•	•		
6.00 x 250	11.850	•	•		
6.00 x 300	14.220	•	•		
8.00 x 25	1.568		•		•
8.00 x 40	2.508		•		•
8.00 x 50	3.136		•		•
8.00 x 75	4.704		•		•
8.00 x 100	6.272		•		•

METRIC SIZE (mm)	THEORETICAL WEIGHT Kg/Mtr	304		316	
		SRE	HRAP	SRE	HRAP
10.00 x 25	1.960		•		•
10.00 x 30	2.352		•		
10.00 x 40	2.980		•		•
10.00 x 50	3.921		•		•
10.00 x 65	4.940		•		•
10.00 x 75	5.881		•		•
10.00 x 100	7.841		•		•
10.00 x 150	11.762	•	•		
10.00 x 200	15.682		•		
10.00 x 250	19.604		•		
10.00 x 300	23.524		•		
12.00 x 25	2.352		•		
12.00 x 40	3.575		•		
12.00 x 50	4.705		•		•
12.00 x 65	5.928		•		
12.00 x 75	7.057		•		
12.00 x 100	9.409		•		•
12.00 x 150	14.114		•		
12.00 x 200	18.816		•		
16.00 x 50	6.400		•		
16.00 x 75	9.600		•		
16.00 x 100	12.800		•		
16.00 x 150	19.200		•		
20.00 x 50	7.900		•		•
20.00 x 100	15.700		•		

**APPROXIMATE LENGTHS:
FLAT BAR – 4 METRES**

**FLAT BAR POLISHING SERVICE AVAILABLE
PLEASE CONTACT YOUR NEAREST CORUS
OFFICE REGARDING NON-STANDARD SIZES**

ANGLE

STAINLESS STEEL

Manufactured to ASTM-A276

METRIC SIZE (mm)	THEORETICAL WEIGHT Kg/Mtr	304	316
3.00 x 20 x 20	0.888	•	
3.00 x 25 x 25	1.128	•	•
3.00 x 30 x 30	1.300	•	•
3.00 x 40 x 40	1.800	•	•
3.00 x 50 x 50	2.380	•	•
4.00 x 50 x 50	3.040	•	
5.00 x 25 x 25	1.800	•	•
5.00 x 30 x 30	2.200	•	•
5.00 x 40 x 40	3.000	•	•
5.00 x 50 x 50	3.800	•	•
5.00 x 75 x 75	5.844	•	
6.00 x 25 x 25	2.122	•	
6.00 x 30 x 30	2.592	•	
6.00 x 40 x 40	3.552	•	•
6.00 x 50 x 50	4.512	•	•
6.00 x 65 x 65	5.952	•	•
6.00 x 75 x 75	6.912	•	•
6.00 x 100 x 100	11.752	•	•
9.00 x 65 x 65	8.712	•	
9.00 x 75 x 75	10.152	•	•
10.00 x 100 x 100	15.200	•	•

**APPROXIMATE LENGTHS:
ANGLE – 6 METRES**

**PLEASE CONTACT YOUR NEAREST CORUS
METALS OFFICE REGARDING NON-STANDARD
SIZES**



Tata Steel International (Australasia) Ltd

Head Office	7 Bruce Roderick Drive East Tamaki Phone 09 271 1780	PO Box 58880, Botany, Manukau 2163 Fax 09 271 1970 Email: headoffice@tatasteelnz.com
Auckland	7 Bruce Roderick Drive East Tamaki Phone 09 271 1781	PO Box 58880, Botany, Manukau 2163 Fax 09 271 1799 Email: auckland@tatasteelnz.com
Mt Maunganui	18 MacDonald Street Phone 07 574 0095	PO Box 4158, Mt Maunganui South 3149 Fax 07 574 0096 Email: tauranga@tatasteelnz.com
Hamilton	27 Ellis Street, Frankton Phone 07 847 8456	PO Box 1133, Waikato Mail Centre 3240 Fax 07 847 0354 Email: hamilton@tatasteelnz.com
Hastings	807 Warren Street Phone 06 876 3360	PO Box 14043, Mayfair, Hastings 4159 Fax 06 876 3411 Email: hastings@tatasteelnz.com
New Plymouth	Cnr Connett Road & Mustang Drive, Bell Block Phone 06 759 9382	PO Box 3094, Fitzroy New Plymouth 4341 Fax 06 755 7575 Email: newplymouth@tatasteelnz.com
Wellington	141 Hutt Park Road Phone 04 568 5014	PO Box 38065, Lower Hutt 5045 Fax 04 568 6367 Email: wellington@tatasteelnz.com
Nelson	4C Akersten Street Phone 03 548 0603	PO Box 413, Nelson 7040 Fax 03 548 0588 Email: nelson@tatasteelnz.com
Christchurch	200 Maces Road, Bromley Phone 03 381 1994	P O Box 570, Christchurch Mail Centre 8140 Fax 03 381 0606 Email: christchurch@tatasteelnz.com

Toll free: 0800 4 26787

Website: www.tatasteelnz.com

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