

AÇOS TREFITA

AÇOS TREFITA manufactures and sells COLD-DRAWN, PEELED/POLISHED, STRAIGHTENED, ROLLED AND FORGED STEEL.

The company has over 20 years' experience with constant investment in new technologies, machinery and late-generation equipment, together with ongoing production processes improvement.

AÇOS TREFITA is ISO 9001 certified, guaranteeing quality and reliability to customers across Brazil and Latin America as a leading supplier to the MECHANICAL, MACHINERY, ENERGY, and AUTOMOTIVE industries, among others.

CAPACITY

Our varied and comprehensive inventory guarantees distribution to all of Brazil.

With headquarters in São Paulo, with facilities covering more than 22 thousand square meters, AÇOS TREFITA took a strategic presence in the state of Minas Gerais in 2006. There, in a region known as a pillar of the Brazilian mechanical industry, the company maintains a 7-thousand-square meter facility.

AÇOS TREFITA's three units collect the biggest and most varied stock of carbon and alloy material in Brazil. The company offers prompt service and bespoke delivery, with technical precision and the best prices.

CREDIBILITY

Safe and reliable products developed with due consideration given to the Planet's natural resources.

AÇOS TREFITA's range of products includes, among others, round, square and hexagonal bars for mechanical construction. Its meticulous traceability system tracks all raw-material provenance and quality standards, with strict lot control from materials receipt through to delivery to the end customer. Ultrasound tests and lab analyses throughout the process guarantee product quality.

OUR MATERIALS

Rolled, Cold Drawn, Forged, Peeled and Polished, Straightened, Pre-Machined and Cast Iron.



VISION MISSION

2020 – We are committed to becoming the domestic market leaders.

We exist to offer the best steel-supply solutions with speed and quality.

VALUES

RELATIONSHIPS

We honor our tradition and family spirit; we recognize loyalty, trust and dedication. We are humble and admire humility.

QUALITY

Our product must be the benchmark for quality. We uphold this choice by embracing continued improvement, building our employees' technical skills and our suppliers' excellence.

SAFETY AND WELL-BEING

Safety is non-negotiable for us. We develop self-reporting and take care of one another. We strive to make everyone feel appreciated, accomplished and happy.

A FOCUS ON CUSTOMERS

We listen carefully to our customers and will face any challenge to serve their needs.

BUSINESS SUSTAINABILITY QUALITY POLICY

We take responsibility for our Planet, and engage in waste and risk management. We uphold human dignity, respect workers' rights and reach out to the community. We draw enthusiasm from our own prosperity and our customers' and suppliers' as well.

"AÇOS TREFITA LTDA's total quality is based on partnerships with customers and suppliers, on meeting every applicable requirement, and on the satisfaction of customers and other stakeholders through ongoing improvement of its quality-management system, processes, products, and human resources."

CUTTING CAPACITY UP TO Ø 1,800 MM

KING HARDNESS METER AND GRADED LOUPE
HBW METERING 3000 KGF LOAD
METERING CAPACITY UP TO Ø 320.00 MM

ULTRASOUND EQUIPMENT
EINSTEIN III - MODSONIC
METERING UNIT UP TO 5,000 MM

BENCH HARDNESS METER
METERING UNITS (HRB, HRC, HBW)

OPTICAL SPECTROMETER
CHEMICAL COMPOSITION DETERMINATION

UNIT 1 – HEADQUARTERS

Cold-Drawn: carbon, alloys, resulfurized and lead-alloy steel
- Round: 6.35-127.0 mm
- Square: 12.70-50.80 mm
- Hexagonal: 9.35-50.80 mm
- Straightened: 6.35-50.80 mm
- Peeled and polished: 20.00-150.00 mm

Rua Cabo Antônio Alves 235
CEP 02185 010 - São Paulo SP
Phone No. (55) (11) 2632 0277 | (11) 2955 0277
comercial1@trefita.com.br

UNIT 2 – SALES HUB

Round Rolled Steel up to 330.00 MM
Forged Steel up to 60"

Rua Coronel Guilherme Rocha 400
CEP 02167 030 - São Paulo SP
Phone No. (55) (11) 2795 2555
comercial2@trefita.com.br

UNIT 3 - MINAS GERAIS

Rua Serra da Água Quente 150
Distrito Industrial Jatobá
CEP 30668 273 - Belo Horizonte MG
Phone No. (55) (31) 3555 5555
comercial3@trefita.com.br

www.trefita.com.br



ROUND COLD DRAWN UP TO 4" | PEELED AND POLISHED UP TO 150.00MM
SQUARE COLD DRAWN FROM 1/2" TO 2" | STRAIGHTENED UP TO 50.80MM



COMMERCIAL CATALOG

STEEL CHEMICAL COMPOSITION TABLES

CASE-HARDENING STEEL

Color Code	Steel	C	Mn	Si	Ni	Cr	Mo	Max P	Max S	Co	V	W	Cu	Al
	4320	0.17-0.22	0.45-0.65	0.15-0.35	1.65-2.00	0.40-0.60	0.20-0.30	0.03	0.04	-	-	-	-	-
	8620	0.18-0.23	0.70-0.90	0.15-0.36	0.40-0.70	0.40-0.60	0.15-0.25	0.03	0.04	-	-	-	-	-
	9315	0.13-0.18	0.45-0.65	0.20-0.35	3.00-3.50	1.00-1.40	0.08-0.15	0.025	0.025	0.30 máx	0.10 máx	0.10 máx	0.35 máx	-
	20MnCr5	0.17-0.22	1.00-1.40	0.40 máx	-	1.00-1.30	-	0.035	0.035	-	-	-	-	-
	17/18CrNiMo6-7	0.14-0.19	0.40-0.60	0.15-0.40	1.40-1.70	1.50-1.80	0.25-0.35	0.035	0.035	0.30 máx	0.15 máx	0.15 máx	0.30 máx	-

HEAT-TREATABLE STEEL

Color Code	Steel	C	Mn	Si	Ni	Cr	Mo	Max P	Max S	Co	V	W	Cu	Al
	4130	0.28-0.33	0.40-0.60	0.15-0.35	0.25 máx	0.80-1.10	0.15-0.25	0.025	0.025	0.30 máx	0.10 máx	0.10 máx	0.35 máx	0.020 máx
	4140	0.38-0.43	0.75-1.00	0.15-0.35	-	0.80-1.10	0.15-0.25	0.03	0.04	-	-	-	-	-
	4340	0.38-0.43	0.60-0.80	0.15-0.35	1.65-2.00	0.70-0.90	0.20-0.30	0.025	0.025	-	-	-	-	-
	8640	0.38-0.43	0.75-1.00	0.15-0.35	0.40-0.70	0.40-0.60	0.15-0.25	0.03	0.04	-	-	-	-	-
	ASTM A 193 Gr B16	0.36-0.47	0.45-0.70	0.15-0.35	-	0.80-1.15	0.50-0.65	0.035	0.040	-	0.25-0.35	-	-	0.015 máx

CARBON STEEL

Color Code	Steel	C	Mn	Max P	Max S
	1015	0.13-0.18	0.30-0.60	0.03	0.05
	1020	0.18-0.23	0.30-0.60	0.03	0.05
	1030	0.28-0.34	0.60-0.90	0.03	0.05
	1045	0.43-0.50	0.60-0.90	0.03	0.05
	1070	0.65-0.75	0.60-0.90	0.03	0.05

STEEL AND BARS WEIGHT BY LINEAR METER (KG)

in	mm	●	■	●
1/8	3.18	0.062	0.079	0.068
3/16	4.76	0.14	0.18	0.15
1/4	6.35	0.25	0.32	0.27
5/16	7.94	0.39	0.49	0.43
3/8	9.53	0.56	0.71	0.62
7/16	11.11	0.76	0.97	0.84
1/2	12.70	0.99	1.22	1.10
9/16	14.29	1.26	1.60	1.39
5/8	15.87	1.55	1.98	1.71
11/16	17.46	1.88	2.39	2.07
3/4	19.05	2.24	2.85	2.46
13/16	20.64	2.62	3.34	2.89
7/8	22.22	3.04	3.87	3.35
15/16	23.81	3.49	4.45	3.85
1	25.40	3.97	5.06	4.38
1 1/16	26.99	4.49	5.71	4.95
1 1/8	28.57	5.03	6.40	5.55
1 3/16	30.16	5.60	7.14	6.18
1 1/4	31.75	6.21	7.91	6.85
1 5/16	33.34	6.85	8.72	7.55
1 3/8	34.92	7.51	9.57	8.29
1 7/16	36.51	8.21	10.46	9.06
1 1/2	38.10	8.94	11.39	9.86
1 9/16	39.69	9.70	12.35	10.70
1 5/8	41.27	10.49	13.36	11.57
1 11/16	42.86	11.32	14.41	12.48
1 3/4	44.45	12.17	15.50	13.42
1 13/16	46.04	13.06	16.62	14.40
1 7/8	47.62	13.97	17.79	15.41
1 15/16	49.21	14.92	18.99	16.45
2	50.80	15.90	20.24	17.53
2 1/16	52.39	16.91	21.52	18.64
2 1/8	53.97	17.95	22.85	19.79
2 3/16	55.56	19.02	24.21	20.97
2 1/4	57.15	20.12	25.62	22.19
2 5/16	58.74	21.25	27.06	23.44
2 3/8	60.32	22.42	28.54	24.72
2 7/16	61.91	23.61	30.06	26.03
2 1/2	63.50	24.84	31.62	27.38
2 9/16	65.09	26.10	33.22	28.78
2 5/8	66.67	27.38	34.87	30.19
2 11/16	68.26	28.70	36.55	31.67
2 3/4	69.85	30.05	38.27	33.14
2 13/16	71.44	31.44	40.02	34.22
2 7/8	73.02	32.85	41.82	36.22
2 15/16	74.61	34.29	43.66	37.81
3	76.20	35.77	45.54	39.43
3 1/8	79.38	38.81	49.51	42.79
3 1/4	82.55	41.88	53.44	46.34
3 3/8	85.73	45.27	57.63	49.98
3 1/2	88.90	48.68	61.98	53.74
3 5/8	92.08	52.22	66.49	57.66
3 3/4	95.25	55.88	71.15	61.69
3 7/8	98.43	60.67	75.98	65.88
4	101.60	63.58	80.96	70.11
4 1/8	104.78	67.62	86.10	74.63
4 1/4	107.95	71.78	91.39	79.21
4 3/8	111.13	76.06	96.85	83.95
4 1/2	114.30	80.47	102.46	88.81
4 5/8	117.48	85.01	108.23	93.82
4 3/4	120.65	89.66	114.16	98.85
4 7/8	123.83	94.44	120.25	104.24
5	127.00	99.80	126.50	109.64
5 1/4	133.35	109.50	139.50	120.88
5 1/2	139.70	120.20	153.10	132.67
5 3/4	146.05	131.40	167.20	145.00
6	152.40	143.10	182.50	157.89
6 1/4	158.75	155.20	197.80	171.32
6 1/2	165.10	167.90	213.50	185.30
6 3/4	171.45	181.10	231.00	199.83
7	177.80	194.70	248.10	214.90
7 1/4	184.15	209.70	266.20	230.53
7 1/2	190.50	223.80	285.00	246.70
7314	196.85	238.90	304.00	263.42
8	203.20	254.60	324.00	280.69
8 1/4	209.55	270.70	345.00	298.50
8 1/2	215.90	287.40	365.90	316.87
8 3/4	222.25	304.60	388.50	335.78
9	228.60	322.10	410.20	355.24
9 1/4	234.95	340.30	433.50	375.25
9 1/2	241.30	359.00	457.10	395.81
9 3/4	247.65	378.10	481.40	416.92

in	mm	●	■	●
10	254.00	397.80	506.50	
10 1/4	260.35	417.90	532.00	
10 1/2	266.70	438.50	558.40	
10 3/4	273.05	459.70	585.30	
11	279.40	481.20	612.80	
11 1/4	285.75	503.40	641.00	
11 1/2	292.10	526.00	669.80	
11 3/4	298.45	549.10	699.20	
12	304.80	572.70	729.30	
12 1/4	311.15	596.00	759.70	
12 1/2	317.50	620.90	790.60	
12 3/4	323.85	646.00	823.00	
13	330.20	672.60	855.80	
13 1/4	336.55	697.30	888.80	
13 1/2	342.90	724.30	922.20	
13 3/4	349.25	751.20	957.20	
14	355.61	779.70	992.60	
14 1/4	361.96	806.50	1028.10	
14 1/2	368.31	835.50	1063.80	
14 3/4	374.66	864.70	1101.50	
15	381.01	894.90	1139.50	
15 1/4	387.36	923.80	1177.50	
15 1/2	393.70	954.70	1215.60	
15 3/4	400.06	986.00	1256.00	
16	406.40	1017.30	1295.30	
16 1/4	412.75	1048.80	1337.00	
16 1/2	419.10	1081.00	1378.80	
16 3/4	425.45	1115.10	1420.50	
17	431.80	1148.50	1462.30	
17 1/4	438.15	1182.10	1506.60	
17 1/2	444.50	1216.90	1551.00	
17 3/4	450.85	1252.20	1595.30	
18	457.20	1287.60	1639.40	
18 1/2	463.55	1326.60	1690.70	
18 1/4	469.90	1363.30	1737.70	
18 3/4	476.25	1400.70	1784.50	
19	482.60	1434.60	1826.30	
19 1/4	488.95	1472.30	1876.30	
19 1/2	495.30	1511.00	1925.80	
19 3/4	501.65	1550.40	1975.10	
20	508.00	1589.50	2023.90	
20 1/4	514.35	1629.30	2076.30	
20 1/2	520.70	1669.90	2128.30	
20 3/4	527.05	1711.40	2180.10	
21	533.40	1753.00	2233.40	
21 1/4	539.75	1794.20	2286.50	
21 1/2	546.10	1836.80	2341.00	
21 3/4	552.45	1880.10	2395.30	
22	558.80	1924.00	2451.20	
22 1/4	565.15	1967.00	2506.70	
22 1/2	571.50	2011.80	2563.90	
22 3/4	577.85	2057.20	2620.70	
23	584.20	2103.00	2679.00	
23 1/4	590.55	2147.80	2732.20	
23 1/2	596.90	2194.70	2796.80	
23 3/4	603.25	2242.00	2856.20	
24	609.60	2289.80	2917.10	
24 1/4	615.95	2336.70	2977.70	
24 1/2	622.30	2385.40	3039.90	
24 3/4	628.65	2434.70	3101.80	
25	635.00	2484.60	3165.30	
25 1/4	641.35	2533.30	3228.40	
25 1/2	647.70	2584.10	3293.10	
25 3/4	654.05	2635.40	3357.50	
26	660.40	2687.40	3423.50	
26 1/4	666.75	2738.00	3489.20	
26 1/2	673.10	2791.00	3556.50	
26 3/4	679.45	2844.20	3623.40	
27	685.80	2898.20	3692.00	
27 1/4	692.15	2950.60	3760.10	
27 1/2	698.50	3005.60	3830.00	
27 3/4	704.85	3060.90	3899.40	
28	711.20	3116.80	3970.50	
28 1/4	717.55	3171.30	4041.20	
28 1/2	723.90	3228.20	4113.60	
28 3/4	730.25	3285.50	4185.50	
29	736.60	3343.30	4259.20	
29 1/4	742.95	3399.80	4332.40	
29 1/2	749.30	3458.70	4407.40	
29 3/4	755.65	3518.10	4481.80	
30	762.00	3578.00	4558.00	

FINISHED BARS TOLERANCE AS PER NBR 8647

Nominal dimensions (Dn)	Tolerance					
	h7	h8	h9	h10	h11	h12
3 < Dn ≤ 6	0.012	0.018	0.030	0.048	0.075	0.120
6 < Dn ≤ 10	0.015	0.022	0.036	0.058	0.090	0.150
10 < Dn ≤ 18	0.018	0.027	0.043	0.070	0.110	0.180
18 < Dn ≤ 30	0.021	0.033	0.052	0.084	0.130	0.210</