



INVENTORY OVERVIEW

PLATE & DIAMOND PLATE

3/16" through 6" thick – 36"-120" wide stock plates – Mill Finish & #4 Polish

Grades Available: 302 • 303 • 304 • 304/L • 304H • 304 #4 Polish • 309S • 310S • 316L • 317L • 317LMN
321/H • 347/H Duplex 2205 • 254SMO • 17-4PH • 405 • 410 • 416 • 420 • 440C

SHEET PRODUCTS

28 through 7 Gauge – 36"-72" Wide – 2B Finish • #4 Finish • #8 Finish Perforated • Expanded Metal

Grades Available: 302 • 304 • 304/L • 304 #4 Polish • 304 #8 Mirror • 309S • 310S • 316L • 316L #4 Polish
321 • 347 • Duplex 2205 • 409 • 410 • 430 • 430BA • 17-4PH • 17-7PH • 3011/4 Hard • 3011/2 Hard • 301 Full Hard

BAR: ROUND • SQUARE • HEX • ROLLED FLAT • S/E FLAT BAR • HALF ROUNDS

Size Range: Round 3/32" thru 20" – 12'-20' R/L – Accuracy & Bearing Quality

Grades Available: 302 • 303 • 304/L • 309S • 310S • 316/L • 321 • 347 • Duplex 2205 • 410 • 410HT • 416
416HT • 420 • 430 • 440c • 17-4Ph • 17-4H1150 • Duplex 2205 • Alloy 20

STRUCTURAL: ANGLES • UNEVEN LEG ANGLES • CHANNEL • TEES • BEAMS

Laser-fused & Hot-rolled Structural • Ornamentals in Recs, Squares and Rounds

Grades Available: 304 • 304/L • 316/L

TUBING: SEAMLESS & WELDED • HEAVY WALL HOLLOW BAR

Size Range: 1/16" OD through 14" OD • Light gauge up to 2" thick wall

Grades Available: 304/L • 304H • 309 • 310 • 316L • 321 • 347 • Duplex 2205 • Alloy 20 • Nickel Alloys

PIPE: WELDED & SEAMLESS

Size Range: 1/8" through 24" – Sch: 5 thru DXH

Grades Available: 304/L • 304H • 309 • 310 • 316/L • 317/L • 321/H • 347/H • Duplex 2205 • Nickel Alloys

PENNMET 2000 MACHINING BAR

Available in round, square and hex

Improved machinability • Consistent performance from lot to lot • Longer tool life • Improved surface finish • Excellent availability

MATERIAL PROCESSING

SPECIALTY PIPE AND TUBE

Supply of non-standard tube, pipe and structural items with reduced lead times. Size range 1/4" through 96" diameter, with wall thicknesses through 3"

Grades Available: 300 Series • Duplex Grades • 6-Moly • Nickel Alloys

PLATE PROCESSING

Waterjet cutting through 8-1/2" • Cutting envelope 10' x 20' (five waterjet stations) Laser plate cutting through 1-1/8" • Cutting envelope 13' x 60'

Shear cutting • Plate saw cutting • Plasma / HQ Plasma cutting • Machine cut rings & discs • Processed flat bar

BAR & LONG PRODUCT PROCESSING

Cutting through 26" diameter • Production cutting with precision tolerances through 4" diameter

Tubular products, structurals and bar products can be cut to the exact length.

24-HOUR EMERGENCY SERVICE - CALL 267-374-6463



LONG PRODUCT TOLERANCES

STAINLESS ROUND BAR PER ASTM A479

CF Tolerances				Plus	Minus
1/8"	to	5/16"	(exclusive)	0.001	0.001
5/16"	to	1/2"	(exclusive)	0.0015	0.0015
1/2"	to	1"	(exclusive)	0.002	0.002
1"	to	1-1/2"	(exclusive)	0.0025	0.0025
1-1/2"	to	4"	(inclusive)	0.003	0.003

HF Tolerances				Plus	Minus
Over 2"	to	2-1/2"	(inclusive)	1/32	0.000
Over 2-1/2"	to	3-1/2"	(inclusive)	3/64	0.000
Over 3-1/2"	to	4-1/2"	(inclusive)	1/16	0.000
4-1/4"	to	5-1/2"	(inclusive)	5/64	0.000
5-1/2"	to	6-1/2"	(inclusive)	1/8	0.000
6-1/2"	to	8"	(inclusive)	5/32	0.000
8"	to	12"	(inclusive)	3/16	0.000
12"	to	15"	(inclusive)	7/32	0.000
15"	to	24"	(inclusive)	1/4	0.000

STAINLESS HOT FINISHED FLATS ROLLED AS BAR PER ASTM A479

Width (inches)	Width Tolerance	Thickness Tolerance in Inches					
		1/8 - 1/2	over 1/2 - 1	over 1 - 2	over 2 - 4	over 4 - 6	over 6 - 8
to 1 (incl)	+0.015 -0.015	+0.008 -0.008	+0.010 -0.010	— —	— —	— —	— —
over 1 to 2	+0.031 -0.031	+0.012 -0.012	+0.015 -0.015	+0.031 -0.031	— —	— —	— —
over 2 to 4	+0.062 -0.031	+0.015 -0.015	+0.020 -0.020	+0.031 -0.031	+0.062 -0.031	— —	— —
over 4 to 6	+0.093 -0.062	+0.015 -0.015	+0.020 -0.020	+0.031 -0.031	+0.062 -0.031	+0.093 -0.062	— —
over 6 to 8	+0.125 -0.156	+0.016 -0.016	+0.025 -0.025	+0.031 -0.031	+0.062 -0.031	+0.093 -0.062	+0.125 -0.156
over 8 to 10	+0.156 -0.187	+0.020 -0.020	+0.031 -0.031	+0.031 -0.031	+0.062 -0.031	+0.093 -0.062	+0.125 -0.156

STAINLESS SEAMLESS & WELDED STANDARD PIPE PER ASTM A312

Nominal Pipe Size Inches	Outside Diameter Tolerances			
	A312 Seamless		A312 Welded	
	Plus	Minus	Plus	Minus
1/8 IPS to 11/2 IPS incl.	.015	.031	.015	.031
2 IPS to 4 IPS incl.	.031	.031	.031	.031
5 IPS to 8 IPS incl.	.062	.031	.062	.031
10 IPS to 12 IPS incl.	.093	.031	.093	.031
Wall Tolerances	By Wt.	12.5%	By Wt.	12.5%
Weight Tolerances	10.0%	3.5%	10.0%	3.5%

STAINLESS SEAMLESS & WELDED STANDARD TUBING PER ASTM A269

Group	Size, Outside Diameter, in.	Permissible Variations in Outside Diameter, in.	Permissible Variations in Wall Thickness, %
1	Up to 1/2	±0.005	±15
2	1/2 to 1-1/2, excl	±0.005	±10
3	1-1/2 to 3-1/2, excl	±0.010	±10
4	3-1/2 to 5-1/2, excl	±0.015	±10
5	5-1/2 to 8, excl	±0.030	±10
6	8 to 12, excl	±0.040	±10
7	12 to 14, excl	±0.050	±10

FLAT ROLLED TOLERANCES

COLD ROLLED SHEET / COIL PER ASTM A480

Permitted Variations in Thickness for Cold-Rolled, Narrow, Coil-Processed Product as Coils and Cut Lengths

Specified Thickness, in.	Thickness Tolerances, for the Thickness and Widths Given, Over and Under, in.		
	Width (w), in.		
	3/16 to 6, incl w ≤ 6	Over 6 to 12, incl 6 < w ≤ 12	Over 12 to 24, excl 12 < w ≤ 24
	Thickness Tolerances		
Over 0.012 to 0.015, incl	0.001	0.0015	0.0015
Over 0.015 to 0.020, incl	0.001	0.0015	0.0015
Over 0.020 to 0.029, incl	0.0015	0.0015	0.002
Over 0.029 to 0.035, incl	0.0015	0.002	0.002
Over 0.035 to 0.050, incl	0.0025	0.003	0.003
Over 0.050 to 0.069, incl	0.003	0.003	0.003
Over 0.069 to 0.100, incl	0.003	0.003	0.004
Over 0.100 to 0.125, incl	0.004	0.004	0.005
Over 0.125 to 0.161, incl	0.005	0.005	0.005
Over 0.161 to under 3/16	0.005	0.005	0.006

Note 1 — Thickness measurements are taken at least 3/8 in. in from the edge of the product, except on widths less than 1 in. the measurements should be taken at least 1/8 in. from the product edge.

Note 2 — The tolerances in this table include crown tolerances

HOT ROLLED SHEET / COIL PER ASTM A480

Specified Thickness*, in.	Permitted Variation, in., Over and Under, Except as Indicated Otherwise, for Specified Width (w) in.	
	w ≤ 60	w > 60
>0.1875 to 0.250	-0.010, +0.020	-0.010, +0.020
>0.250 to 0.3125	-0.010, +0.022	-0.010, +0.022
>0.3125	-0.010, +0.030	-0.010, +0.030

*Thickness measurements are taken at least 3/8 in. from the edge of the sheet.

PLATE THICKNESS & FLATNESS PER ASTM A480

Tolerance below apply to the following alloys: 300 Series and 400 Series Stainless, 17-4, Duplex Grades. Tolerances listed were taken from ASTM A480 (Reference Only) Permitted Variation in Thickness of Hot-Rolled Mill Plate (Quarto Plate)*, **

Specified Thickness (t), in.	Width (w), in.			
	w ≤ 84	84 < w ≤ 120	120 < w ≤ 144	w > 144
	Tolerance Over Specified Thickness, in.			
t < 3/16	0.055	0.070	—	—
3/16 ≤ t < 3/8	0.045	0.050	0.085	—
3/8 ≤ t < 3/4	0.055	0.060	0.085	0.090
3/4 ≤ t < 1	0.060	0.065	0.085	0.100
1 ≤ t < 2	0.070	0.075	0.095	0.115
2 ≤ t < 3	0.125	0.150	0.175	0.200
3 ≤ t < 4	0.150	0.160	0.200	0.225
4 ≤ t < 6	0.180	0.200	0.335	0.355
6 ≤ t < 8	0.235	0.255	0.355	0.435
8 ≤ t < 10	0.315	0.335	0.435	0.550

* Thickness is measured along the longitudinal edges of the plate at least 3/8 in., but not more than 3 in., from the edge.

** For plates up to 10 in. excl. in thickness, the tolerance under the specified thickness is 0.010 in.