



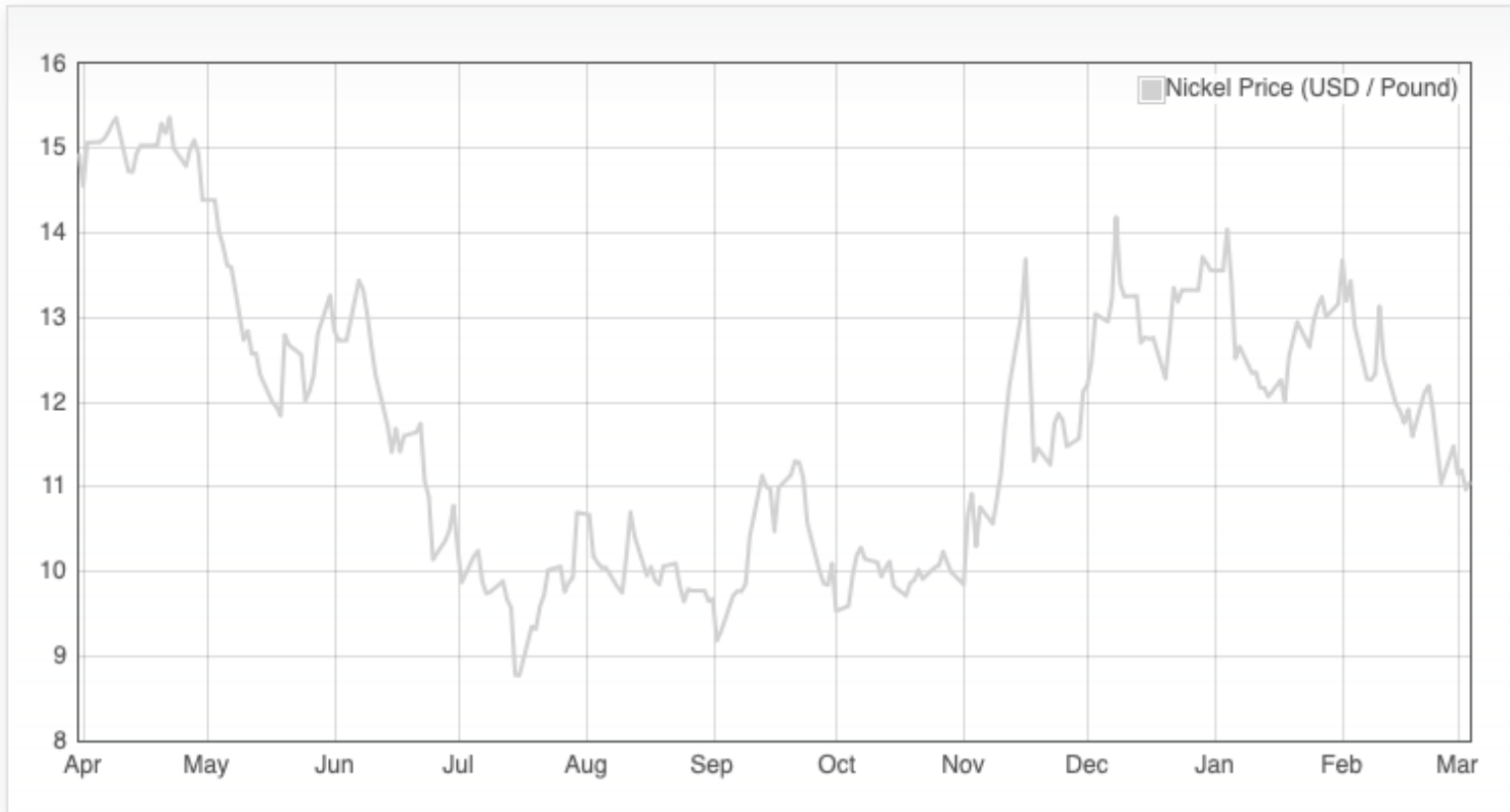
**PENN STAINLESS PRODUCTS, INC.**

**STAINLESS PRICING UPDATE  
MARCH 1, 2023**



# NICKEL

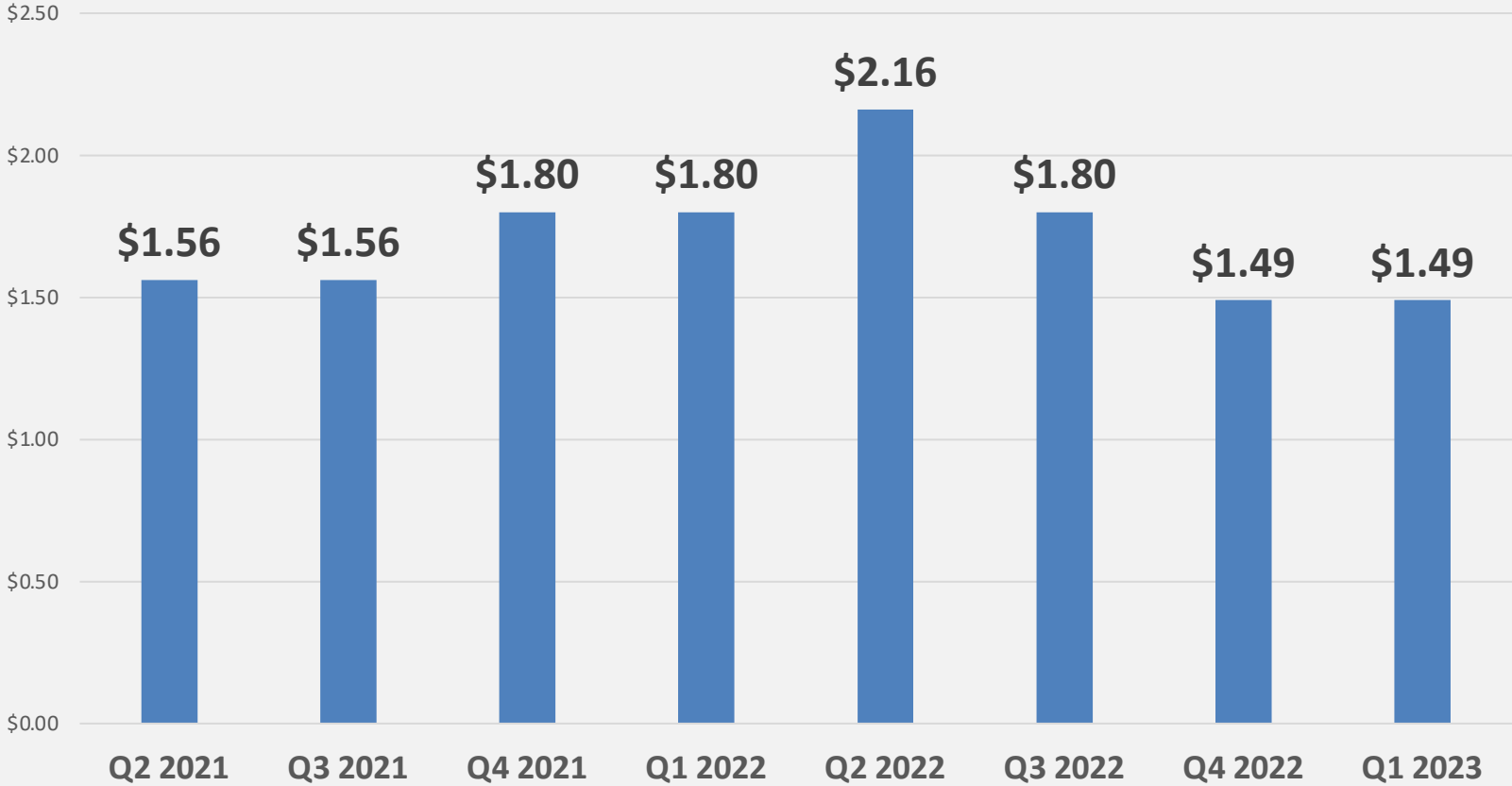
## Nickel Prices for the Last Year



Date	USD/lb.
2/1/22	\$10.23
3/1/22	\$11.59
4/1/22	\$15.07
5/1/22	\$14.54
6/1/22	\$12.73
7/1/22	\$9.87
8/1/22	\$8.95
9/1/22	\$9.18
10/3/22	\$9.59
11/1/22	\$10.67
12/2/22	\$12.47
1/2/23	\$13.56
2/1/23	\$13.20
3/1/23	\$11.19

# CHROME

Chrome \$/lb



European Ferrochrome Benchmark	Surcharge Month Applied
Q1	February, March and April
Q2	May, June and July
Q3	August, September and October
Q4	November, December and January



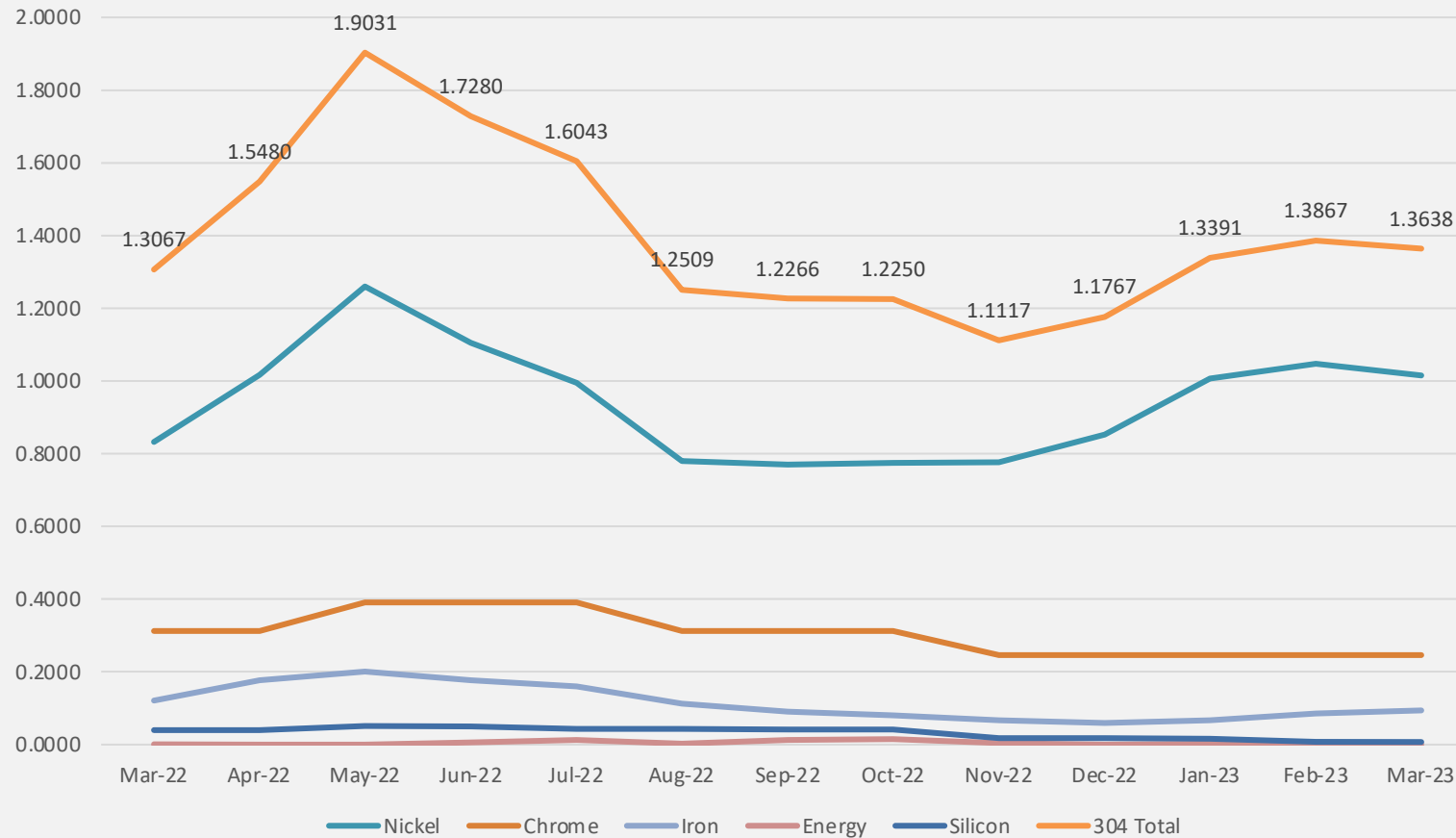
# MOLYBDENUM

## Molybdenum Prices for the Last Year



# RAW MATERIAL SURCHARGES (304/304L)

304/304L Surcharges



Grade	Current Surcharge
304	\$1.3638

Date Range	304 Surcharge Change
Jan '23 – Mar '23	+1.8%
Mar '22 – Mar '23	+4.4%

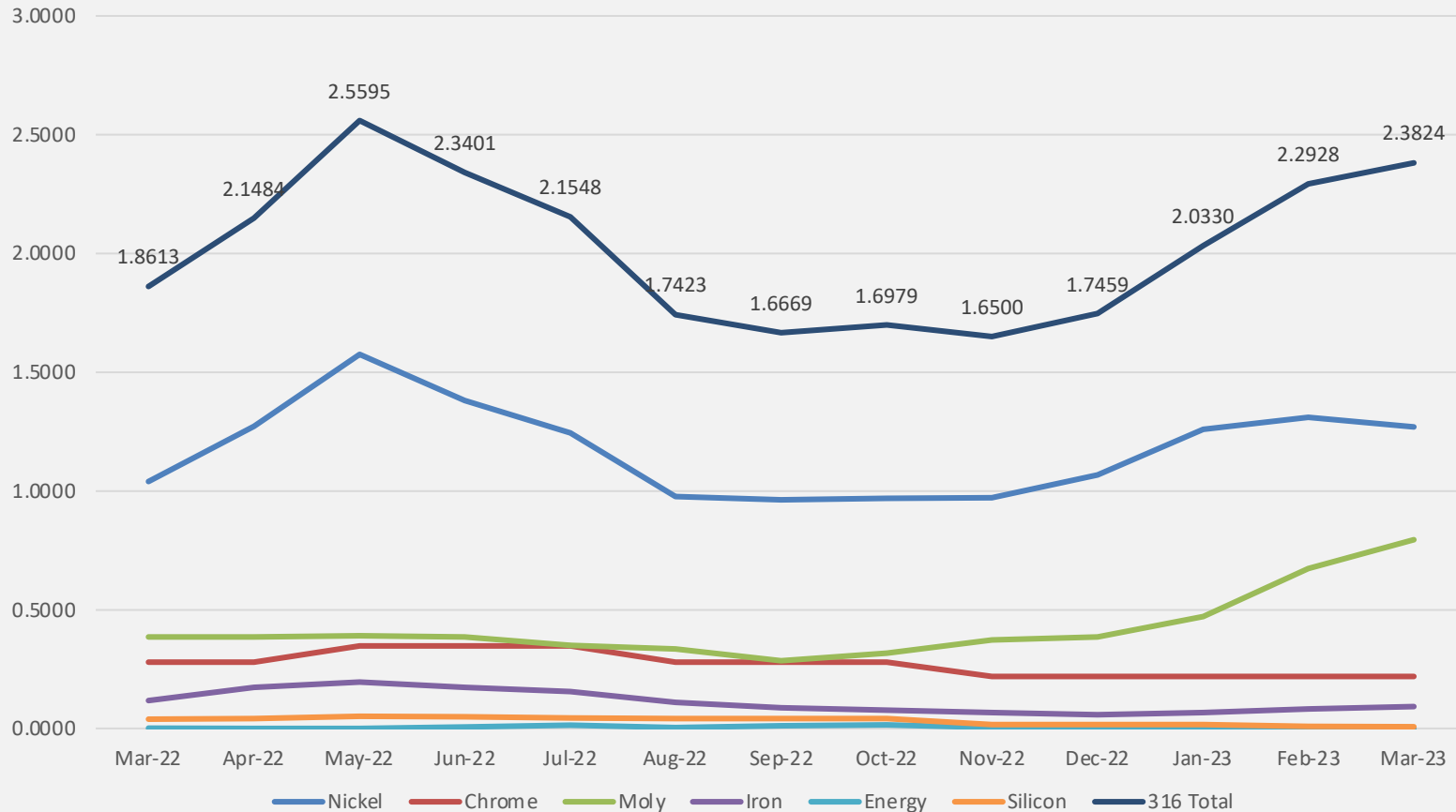
*Note – Surcharges are for flat-rolled product.*

**PENN STAINLESS PRODUCTS, INC.**



# RAW MATERIAL SURCHARGES (316/316L)

316/316L Surcharges



Grade	Current Surcharge
316	\$1.3824

Date Range	316 Surcharge Change
Jan '23 – Mar '23	+14.7%
Mar '22 – Mar '23	+28.0%

*Note – Surcharges are for flat-rolled product.*

# LINE CARD



## INVENTORY OVERVIEW

### PLATE & DIAMOND PLATE

3/16" through 6" thick – Mill Finish & #4 Polish – Diamond Plate 3/16" to 1/2"

Grades Available: 302 • 303 • 304 • 304/L • 304H • 304 #4 Polish • 309S • 310S • 316L • 317L  
321/H • 330 • 347/H • 430 • Duplex 220S • 2507 • 2545MO • 17-4PH • 40S • 410 • 416 • 420 • 440C • Alloy 20

### 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 • #4 Polish  
321 • Duplex 220S • 409 • 410 • 430 • 430BA • 17-4PH • 17-7PH • 3011/4 Hard • 3011/2 Hard • 301 Full Hard • Alloy 20

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

Size Range: Round 3/32" thru 26" – 12'-20' R/L – Accuracy & Bearing Quality

Grades Available: 302 • 303 • 304/L • 310S • 316/L • 321 • 347 • Duplex 220S • 410 • 410HT • 416  
416HT • 416PSQ • 420 • 431 • 440C • 17-4PH • 17-4H1150 • Duplex 220S • Alloy 20

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

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

Grades Available: 304 • 304/L • 316/L

### TUBING: SEAMLESS & WELDED • SANITARY TUBE (304/316 only) • 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 • 316/L • 321 • 347 • Duplex 220S • 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 220S • 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 13' x 40' (six waterjet stations)

Laser plate cutting through 1-3/4" • Cutting envelope 8' x 20'

Shear cutting • Plate saw cutting • 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**



PENN STAINLESS PRODUCTS, INC.

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## LONG PRODUCT TOLERANCES STAINLESS ROUND BAR PER ASTM

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	25"	(inclusive)	1/4	0.000

## STAINLESS HOT FINISHED FLATS ROLLED AS BAR PER ASTM A479 / A484

Width (Inches)	Thickness 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 -0.062	+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 -0.062	+0.093 -0.156	+0.125 -0.156
over 8 to 10	+0.156 -0.167	+0.020 -0.020	+0.031 -0.031	+0.031 -0.031	+0.062 -0.062	+0.093 -0.156	+0.125 -0.156

## STAINLESS SEAMLESS & WELDED STANDARD PIPE PER ASTM A312 / A999 / A1016

Nominal Pipe Size Inches	Outside Diameter Tolerances			
	A312 Seamless	A312 Welded	Plus	Minus
1/8 IPS to 1-1/2 IPS incl.	.015	.031	.015	.031
>1-1/2 IPS to 4 IPS incl.	.031	.031	.031	.031
>4 IPS to 8 IPS incl.	.062	.031	.062	.031
>8 IPS to 18 IPS incl.	.093	.031	.093	.031
Wall Tolerances	By Wt.	By Wt.	12.5%	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, %	
		Plus	Minus	Plus	Minus
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, Cold-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.		
	≤ 40	40 < w ≤ 50	50 < w ≤ 64
Over 0.012 to 0.015, incl.	0.0015	0.0015	—
Over 0.016 to 0.020, incl.	0.0015	0.0015	—
Over 0.020 to 0.024, incl.	0.002	0.002	—
Over 0.025 to 0.032, incl.	0.002	0.002	—
Over 0.033 to 0.040, incl.	0.0025	0.0025	0.003
Over 0.041 to 0.047, incl.	0.003	0.003	0.003
Over 0.048 to 0.058, incl.	0.003	0.003	0.004
Over 0.060 to 0.079, incl.	0.004	0.004	0.0045
Over 0.089 to 0.118, incl.	0.005	0.005	0.006
Over 0.119 to 0.157, incl.	0.007	0.007	0.007
Over 0.158 to 0.197, incl.	0.007	0.007	0.0075
Over 0.198 to 0.236, incl.	0.007	0.008	0.009
Over 0.236 to 0.3125, incl.	0.007	0.009	0.010

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 <sup>1</sup> , in.	Permitted Variation, in., Over and Under, Except as Indicated Otherwise, for Specified Width (w) in.	
	w ≤ 10	w > 10
>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

<sup>1</sup>Thickness measurements are taken at least 3/8 in. from the edge of the sheet.

## PLATE THICKNESS PER ASTM A480

Tolerance below apply to the following alloys: 300 Series and 400 Series Stainless, 17-4, Duplex Grade. 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.			
1 < 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

<sup>1</sup> Thickness is measured along the longitudinal edges of the plate at least 3/8 in., but not more than 3 in., from the edge.

<sup>2</sup> For plates up to 10 in. incl. in thickness, the tolerance under the specified thickness is 0.010 in.

<sup>3</sup> Flatness of plate mill plate is measured in any 36" area while the plate rests on flat surface with concavity of the curvature upward. Full plates only. There is no ASTM tolerance on cut plate.

<sup>4</sup> Flatness of coil plate is measured on a flat surface with curvature upward and measuring the deviation from a horizontal flat surface.



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**THANK YOU.**