

STAINLESS

PROCESSING, INC.



Serving the Petroleum, Waste Water, Chemical, Food and Environmental Industries.
Vast Nuclear Experience • Completely Audited to IOCFR21 & IOCFR50

STAINLESS STEEL PLATE PRODUCTS

MACHINE CUT

The high quality of our machined rings, discs and plate flanges consistently separates STAINLESS PROCESSING from the competition. Our ability to drill, tap, and machine-all-over up to 120" OD will cover most of your needs. With our CNC vertical machining centers, we have again expanded the range of products available to you. We can now provide you with tube-sheets and highly machined parts to fill an even greater portion of your requirements.

PLATE FLANGES

Plate flanges are an economical alternative to low pressure hubbed flanges. STAINLESS PROCESSING'S plate flanges are made from fully certified A240, SA240 plate rather than less durable cast or forged substitutes. Call STAINLESS PROCESSING for plate flanges delivered on size and on time with ASAP service available. Our Plate Flange Reference Guide is available upon request.

CONVENTIONAL PLASMA CUT

For years we at STAINLESS PROCESSING have provided our customers with the finest plasma cut plate products available anywhere in the world. We remain dedicated to continuing that tradition, offering less taper, smoother cut surfaces, and tighter tolerances than any of our competitors. Multiple systems provide the power to cut plates up to 6" thick with smooth, square, accurate cuts. Our plasma cutting systems include proprietary CNC programming extending our capabilities beyond the manufacturers original limitations. Depending on final applications, parts can be used "as is" or with minimal finish machining.

HIGH DEFINITION PLASMA CUT

STAINLESS PROCESSING has invested in the finest high-definition plasma unit available. By combining the latest in CNC, torch, gantry, and table technology, at last your prints and AUTO CAD drawings can be truly duplicated as stainless steel parts. Versatility - Up to 3/4 in. thick, the system cuts to high definition tolerances of +/- 1/32. Plasma cutting for architectural applications is now an option. Reduction of distortion and discoloration coupled with smoothness and squareness of cut has made this possible.

STAINLESS PROCESSING INVENTORY

INVENTORY

Our vast stainless steel inventory includes many grades from 11 gauge sheet to 6" plate. Meeting specialized certification requirements such as DFARS, EN1024-95 3.1.B / EN10204-2004 3.1, melted and manufactured in U.S.A. pose no problems. All plate certified to ASTM, ASME, and AMS specifications. Fully audited for 10CFR 50 nuclear traceability. Let our knowledgeable, experienced sales and production teams turn our inventory into your plate product requirements.

304/304L

316/316L

410 up to 2-1/2" thick

Aluminum 6061 T6

309S

310S

317L

321

2205

LDX 2101

254 SMO

OTHER GRADES UPON REQUEST

UNS SPEC'S

UNS SPEC'S

304 / 304L	S30400 / S30403
316 / 316L	S31600 / S31603
410	S41000
ALUM. .6061 T6	X
2205	S32205 / S31803
LDX 2101	S32101
254 SMO	S31254
321	S32100
317L	S31703
310S	S31008
309S	S30908

SPI ON LINE Please visit us on the web at www.stainlessprocessing.com.

- Products & services available
- Sales Inquiries
- Receive quotations via email
- Find your local SPI Representative
- Shipping information
- Stainless Steel Specifications & Tolerances
- Plate Flange Dimension Sheets
- General email: sales@spiusa.com



STANDARD HOT ROLLED PLATE SPECIFICATIONS

This table lists the general industry standard specifications for Hot Rolled Annealed and Pickled (HRAP) Stainless plate per ASTM A480.

Gauge		lb / sq. ft.	lb / sq. in.
3/16	0.1875	8.579	0.05958
7/32	0.2187	9.870	0.06854
1/4	0.2500	11.162	0.07750
5/16	0.3125	13.746	0.09546
3/8	0.3750	16.496	0.11456
7/16	0.4375	19.080	0.13250
1/2	0.5000	21.633	0.15044
9/16	0.5625	24.247	0.16838
5/8	0.6250	26.831	0.18633
11/16	0.6875	29.415	0.20427
3/4	0.7500	32.123	0.22308
13/16	0.8125	34.707	0.24102
7/8	0.8750	37.291	0.25897
15/16	0.9375	39.875	0.27691
1	1.0000	42.665	0.29628
1-1/8	1.1250	47.833	0.33217
1-1/4	1.2500	53.001	0.36806
1-3/8	1.3750	58.169	0.40395
1-1/2	1.5000	63.337	0.43984
1-3/4	1.7500	73.672	0.51161
2	2.0000	84.008	0.58339
2-1/8	2.1250	89.610	0.62229
2-1/4	2.2500	94.777	0.65817
2-1/2	2.5000	105.113	0.72995
2-3/4	2.7500	115.449	0.80173
3	3.0000	126.301	0.87709
3-1/2	3.5000	146.972	1.02064
4	4.0000	168.264	1.16850

Permitted Variations in Flatness of Plate Mill Plate

Specified Thickness, t (inch)	Flatness Tolerance for Grades with Min Yield Strength ≤ 35 ksi	Flatness Tolerance for Grades with Min Yield Strength ≥ 35 ksi
$3/16 \leq t < 1/4$	7/16 inch	21/32 inch
$1/4 \leq t < 3/8$	3/8	9/16 inch
$3/8 \leq t < 1$	5/16	15/32 inch
$t \leq 1$	1/4	3/8 inch

Tolerances apply to any 36 inches in any direction in the plane of the plate when plate rests on a flat surface with the concavity up. If the longer dimension is < 36 inches, the tolerance is not greater than 1/4 inch. (Reference ASTM A480 Table 2.20)

Standard Thickness Tolerances for Stainless Steel Plate

(all dimensions are in inches)

Thickness	≤ 84	> 84 to ≤ 120 Wide
0.187 to ≤ 0.375	+ 0.045	+ 0.050
	- 0.010	- 0.010
0.375 to ≤ 0.750	+ 0.055	+ 0.060
	- 0.010	- 0.010
0.750 to ≤ 1.000	+ 0.060	+ 0.065
	- 0.010	- 0.010
1.000 to ≤ 2.000	+ 0.070	+ 0.075
	- 0.010	- 0.010
2.000 to ≤ 3.000	+ 0.125	+ 0.150
	- 0.010	- 0.010
3.000 to ≤ 4.000	+ 0.150	+ 0.160
	- 0.010	- 0.010
4.000 to ≤ 6.000	+ 0.180	+ 0.200
	- 0.010	- 0.010
6.000 to ≤ 8.000	+ 0.235	+ 0.255
	- 0.010	- 0.010

(Reference ASTM A480 Table 2.17) Thickness is measured along the longitudinal edges of the plate at least 3/8", but not more than 3", from the edge.



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Plants: Coatesville, PA • Pottstown, PA

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