

# ALLOY 2507 SUPER DUPLEX TUBING



PAC Stainless is the largest stocking distributor of Super Duplex 2507 tubing in North America. Alloy 2507 Super Duplex is a high-alloy duplex stainless steel with a PRE (Pitting Resistance Equivalent) value of minimum 42.5.

The grade is characterized by very good chloride corrosion resistance, combined with very high mechanical strength. It is particularly suited for use in aggressive environments such as warm chlorinated seawater and acidic, chloride containing media. It is widely used in offshore oil and gas exploration/production and in heat exchangers in petrochemical/chemical processing. The grade is also suitable for hydraulic and instrumentation applications in tropical marine environments.

## PRODUCT SPECIFICATIONS

ASTM A-789

### SIZE RANGE

Outside Diameter (OD)	Wall Thickness
.250"-1.000"	.035"-.134"

Cold Finished and Bright Annealed Tube

### CHEMICAL REQUIREMENTS

SUPER DUPLEX 2507 (UNS S32750)  
COMPOSITION %

Element	Requirement	Limit
C	Carbon	0.030 max
Mn	Manganese	1.20 max
P	Phosphorous	0.035 max
S	Sulfur	0.020 max
Si	Silicon	0.80 max
Ni	Nickel	6.0-8.0
Cr	Chromium	24.0-26.0
Mo	Molybdenum	3.0-5.0
N	Nitrogen	0.24-0.32
Cu	Copper	0.50 max

### DIMENSIONAL TOLERANCES

OD	OD Tolerance	Wall Tolerance
≤ .500"	± .005"	± 15%
0.500"-1.500" excl	± .005"	± 10%

### MECHANICAL PROPERTIES

Yield Strength	80 ksi min
Tensile Strength	116 ksi min
Elongation (min 2")	15%
Hardness (Rockwell C Scale)	32 HRC max

OD	Wall	ID	Lbs./Ft.	Bursting PSI	Working PSI
<b>1/4"</b> <b>(.250")</b>	.035	.180	.0803	29,232	7,308
	.049	.152	.1051	40,925	10,231
	.065	.120	.1283	54,288	13,572
<b>3/8"</b> <b>(.375")</b>	.035	.305	.1270	19,488	4,872
	.049	.277	.1704	27,283	
	.065	.245	.2150	36,192	9,048
	.083	.209	.2586	46,214	11,554
<b>1/2"</b> <b>(.500")</b>	.035	.430	.1736	14,616	3,654
	.049	.402	.2358	20,462	5,116
	.065	.370	.3017	27,144	6,786
	.083	.334	.3693	34,661	8,665
	.095	.310	.4105	39,672	9,918
<b>5/8"</b> <b>(.625")</b>	.065	.495	.3884	21,715	5,429
	.083	.459	.4800	27,729	6,932
	.095	.435	.5372	37,416	9,354
	.120	.385	.6465	40,090	10,023
<b>3/4"</b> <b>(.750")</b>	.065	.620	.4750	18,096	4,524
	.083	.584	.5906	23,107	5,777
	.095	.560	.6639	26,448	6,612
	.109	.532	.7454	30,346	7,587
	.120	.510	.8066	33,408	8,352
	.134	.482	.8807	37,300	9,325
<b>1"</b> <b>(1.000")</b>	.065	.870	.6484	13,572	3,393
	.083	.834	.8120	17,330	4,333
	.109	.782	1.036	22,759	5,690
	.120	.760	1.127	25,056	6,264

All pressure ratings are approximate and for illustration purposes only. Values are not guaranteed or warranted.

