

TYPE 301 STAINLESS STEEL STRIP

Type 301 stainless strip, ASTM-A-666, is slightly lower in chromium and nickel content than Type 302. The lower nickel content causes Type 301 to work harden more rapidly and retain greater ductility than the same temper of Type 302. Gibbs stocks 301 Stainless Strip in gauges from .0022ö to .050ö precision slit to widths from .022 to 12ö. Type 301 is available in a variety of tempers.

Chemical Composition	%	Thickness Tolerances < 6ö AMS2242	Tolerance (inch)
Carbon	.15 max	over .050 - .069 incl	+ -5% of thickness
Manganese	2.00 max	over .035 - .050 incl	+ -5% of thickness
Silicon	1.00 max	over .029 - .035 incl	+ -5% of thickness
Phosphorus	.040 max	over .020 - .029 incl	+ -5% of thickness
Sulfur	.030 max	over .017 - .020 incl	+ -5% of thickness
Chromium	16.00 - 18.00%	over .013 - .017 incl	+ -5% of thickness
Nickel	6.00 - 8.00%	over .011 - .013 incl	+ -5% of thickness
Molybdenum	.750 max	over .010 - .011 incl	+ -5% of thickness
Copper	.750 max	under .010	+ -5% of thickness

Mechanical Properties

Condition	AMS Spec	Tensile Min PSI	Yield Min PSI	Elong % Min	Hardness
Annealed	5901	75,000	30,000	40%	B 92 max
¼ Hard	5517	125,000	75,000	25%	C 25 min
½ Hard	5518	150,000	110,000	15%	C 32 min
				>.015ö = 18%	
¾ Hard	5902	175,000	135,000	10%	C 37 min
				>.030ö = 12%	
Full Hard	5519	185,000	140,000	8%	C 41 min
				> .015ö = 9%	

Additional Information

Width Tolerance	+/- .003	
Camber Tolerance	.500ö in 8 feet max	
Edges available	#3 Slit edge	
	#5 Deburred edge	
	#1 Round edge	

The above charts are intended to provide general background information. You should also review the appropriate material specification. Please contact Gibbs if you have any questions.