

TYPE 302 STAINLESS STEEL STRIP

Type 302, ASTM-A-666, a general purpose stainless alloy, is 18% chromium and 8% nickel. It possesses excellent resistance to heat and corrosion. Type 302 cannot be hardened by heat treatment and is slightly magnetic after cold working. It welds easily. Gibbs stocks Type 302 Stainless in gauges from .003 to .030 precision slit to widths from .022" to 12"

Chemical Composition	%	Thickness Tolerances < 6" AMS2242	Tolerance (inch)
Carbon	0.15 max	over .050 - .062 incl	+/- .0030
Manganese	2.00 max	over .035 - .050 incl	+/- .0025
Silicon	1.00 max	over .029 - .035 incl	+/- .0020
Phosphorus	.040 max	over .020 - .029 incl	+/- .0020
Sulfur	.030 max	over .017 - .020 incl	+/- .0015
Chromium	17.00 - 19.00	over .013 - .017 incl	+/- .0015
Nickel	8.00 - 10.00	over .011 - .013 incl	+/- .0015
Molybdenum	.750 max	over .010 - .011 incl	+/- .0015
Copper	.750 max	under .010	+/- 10%

Mechanical Properties

Condition	AMS Specification	Tensile Min PSI	Yield Min PSI	Elong % Min	Hardness (Reference Only)
Annealed	5516	75,000	36,000	See below	RB 92 max
¼ Hard	5903	125,000	75,000	10 / 12*	RC 25 min
½ Hard	5904	150,000	110,000	9 / 10**	RC 32 min
¾ Hard	5905	175,000	135,000	5 / 6**	RC 37 min
Full Hard	5906	185,000	140,000	2	RC 41 min

*over .030 inch in thickness

**over .015 inch in thickness

Min elongation properties for annealed condition

.002 - .003 incl 30%

over .003 - .004 35%

over .004 - .062 40%

Additional Information

Width Tolerance	+/- .003	
Camber Tolerance	Up to and including 1.500" wide	.500" in 8 feet
	Over 1.500" wide	.250" in 8 feet
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.