Gibbs
WIRE & STEEL COMPANY, INC.

Technical Data Sheet

TYPE 316 STAINLESS STEEL WIRE

Similar in composition to Type 302, Type 316 stainless steel wire has a slightly higher nickel content and 2-2.50% molybdenum giving this alloy better corrosion resistance. Type 316's tensile strength is 10-15% lower than that of Type 302, and the alloy is slightly less magnetic in the spring temper than Type 302. With its superior cold working properties, it can be used for severe cold forming operations and exhibits short time tensile and creep strength properties at elevated temperatures.

Gibbs Type 316 stainless steel wire is coated for coiling and is available in the range 0.015 - .625" conforming to ASTM A313. All sizes are suitably coated for automatic coiling.

Chemical Composition Per ASTM-A-313							
Carbon	.07% max		Sulfur	.030% max		Nickel	10.50 – 13.50%
Maganese	2.00% max		Silicon	1.00% max		Molybdenum	2.00 – 2.50 %
Phosphorus	.045% max		Chromium	16.50 – 18.00%		Nitrogen	.10% max

Tensile Strength Table (ASTM-A-313)

Dia. Inch	Tensile Min PSI	Tensile Max PSI	Dia. Inch	Tensile Min PSI	Tensile Max PSI
Up to .010 incl.	245,000	275,000	.092 - .105 incl.	200,000	230,000
.010 - .011 incl.	240,000	270,000	.105 - .120 incl.	195,000	225,000
.012 - .013 incl.	240,000	270,000	.120 - .148 incl.	185,000	215,000
.013 - .014 incl.	240,000	270,000	.148 - .166 incl	180,000	210,000
.014 - .015 incl.	240,000	270,000	.166 - .177 incl.	170,000	200,000
.015 - .024 incl.	235,000	265,000	.177 - ..207 incl.	160,000	190,000
.024 - .041 incl.	235,000	265,000	.207 - ..225 incl.	155,000	185,000
.041 - .047 incl.	230,000	260,000	.225 - ..250 incl.	150,000	180,000
047 – 054 incl.	225,000	255,000	.250 - ..312 incl.	140,000	170,000
.054 - .062 incl.	220,000	250,000	.312 - ..375 incl.	135,000	165,000
.062 - .072 incl.	215,000	245,000	.375 - ..500 incl.	130,000	160,000
.072 - .080 incl.	210,000	240,000	.500 – over	125,000	155,000
.080 - .092 incl.	205,000	235,000			

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.

Gibbs Wire & Steel Company Inc.
Metals Drive, Southington, CT 06489 (860) 621-0121

No. 1002 01/14