

Minimum Tensile Strength Nickel Alloy Spring Wire

Diameter Range Inches (mm)	Minimum Tensile Strength (psi)		
	Monel® 400	Inconel® 600	Monel® K500*
<0.028(0.71)	165,000	185,000	165,000
0.0281(.071) – 0.057(1.45)	160,000	185,000	165,000
0.0571(1.45) – 0.144(2.90)	150,000	175,000	155,000
0.1441(2.90) – 0.229(5.82)	140,000	170,000	155,000
0.2291(5.82) – 0.312(7.92)	140,000	165,000	135,000
.3121(7.92) – 0.375(9.53)	135,000	160,000	135,000
0.3751(9.53)-0.437(11.10)	130,000	155,000	125,000
0.4371(11.10)-0.500(12.70)	130,000	155,000	120,000
0.5001(12.70)-0.563(14.30)	120,000	140,000	120,000
		<u>X750</u>	
<0.250(<6.36)		190,000	
0.250(6.35) – 0.625(15.88)		160,000	
		<u>X750</u>	
	After Heat Treatment		
0.012(0.30) – 0.250(6.35)		220,000	
0.2501(6.35) – 0.418(10.62)		200,000	
0.4181(10.62) – 0.625(15.88)		180,000	

Minimum Tensile Strength Type 302/304 Spring Wire

Diameter Range Inches (mm)	Tensile Range (psi)
<.009 (0.23)	325,000
0.009 (0.23) – 0.012 (0.30)	316,000 – 325,000
0.013 (0.33) – 0.016 (0.41)	308,000 – 314,000
0.017 (0.43) – 0.022 (0.56)	296,000 – 306,000
0.023 (0.58) – 0.028 (0.71)	289,000 – 292,000
0.029 (0.74) – 0.036 (0.91)	280,000 – 285,000
0.037 (0.94) – 0.045 (1.14)	272,000 – 280,000
0.046 (1.17) – 0.063 (1.60)	258,000 – 267,000
0.064 (1.63) – 0.080 (2.03)	246,000 – 252,000
0.081 (2.39) – 0.094 (2.39)	238,000 – 242,000
0.095 (2.41) – 0.120 (3.05)	222,000 – 238,000
0.121 (3.07) – 0.148 (3.76)	210,000 – 222,000
0.149 (3.78) – 0.162 (4.11)	200,000 – 205,000
0.163 (4.14) – 0.187 (4.75)	194,000 – 198,000
0.188 (4.78) – 0.207 (5.26)	188,000 – 194,000
0.208 (5.28) – 0.225 (5.72)	184,000 – 188,000
0.226 (5.74) – 0.278 (7.06)	174,000 – 182,000
0.279 (7.09) – 0.362 (9.19)	150,000 – 161,000
.363 (9.22) – 0.500 (12.70)	135,000 – 145,000
>0.501 (12.72)	130,000

*K-500 – For cold drawn, annealed and age hardened: all sizes: 130,000

