

Precipitation Hardening Stainless Spring Wire (17-7PH)

Diameter, in. [mm]	Cold Drawn Condition C, Nominal ksi [MPa]	Condition CH-900B , ksi [MPa]	
		Min.	Max.
0.010 [0.25] to 0.015 [0.38], incl	295[2035]	335[2310]	365[2515]
Over 0.015 [0.38] to 0.020 [0.51], incl	290[2000]	330[2275]	360[2480]
Over 0.020 [0.51] to 0.029 [0.74], incl	285[1965]	325[2240]	355[2450]
Over 0.029 [0.74] to 0.041 [1.04], incl	275[1895]	320[2205]	350[2415]
Over 0.041 [1.04] to 0.051 [1.30], incl	270[1860]	310[2135]	340[2345]
Over 0.051 [1.30] to 0.061 [1.55], incl	265[1825]	305[2100]	335[2310]
Over 0.061 [1.55] to 0.071 [1.80], incl	257[1770]	297[2050]	327[2255]
Over 0.071 [1.80] to 0.086 [2.18], incl	255[1760]	292[2015]	322[2220]
Over 0.086 [2.18] to 0.090 [2.29], incl	245[1690]	282[1945]	312[2150]
Over 0.090 [2.29] to 0.100 [2.54], incl	242[1670]	279[1925]	309[2130]
Over 0.100 [2.54] to 0.106 [2.69], incl	238[1640]	274[1890]	304[2095]
Over 0.106 [2.69] to 0.130 [3.30], incl	236[1625]	272[1875]	302[2080]
Over 0.130 [3.30] to 0.138 [3.50], incl	230[1585]	260[1795]	290[2000]
Over 0.138 [3.50] to 0.146 [3.71], incl	228[1570]	258[1780]	288[1985]
Over 0.146 [3.71] to 0.162 [4.11], incl	226[1560]	256[1765]	286[1970]
Over 0.162 [4.11] to 0.180 [4.57], incl	224[1545]	254[1750]	284[1960]
Over 0.180 [4.57] to 0.207 [5.26], incl	222[1530]	252[1740]	282[1945]

- (1) When wire is specified in straightened and cut lengths, the minimum tensile strength shall be 90 % of the values listed in the table.
- (2) Aged at 900°F [482°C] for 1 h and air cooled.

Chemical composition(ASTM A313)

UNS	Type	C	Mn	P	S	Si	Cr	Ni	Mo	N	Others
S17700	631	0.09	1.0	0.040	0.030	1.00	16~18	6.5~7.8	-	-	Al0.75-1.5

Diameter tolerance

Specified Diameter, in. [mm]	Diameter Tolerances, in. [mm]
Under 0.3125 to 0.0440 [8.00 to 1.00], incl	±0.001 [0.03]
Under 0.0440 to 0.0330 [1.00 to 0.80], incl	±0.0008 [0.02]
Under 0.0330 to 0.0240 [0.80 to 0.60], incl	±0.0005 [0.015]
Under 0.0240 to 0.0120 [0.60 to 0.30], incl	±0.0004 [0.010]
Under 0.0120 to 0.0080 [0.30 to 0.20], incl	±0.0003 [0.008]
Under 0.0080 to 0.0048 [0.20 to 0.12], incl	±0.0002 [0.005]