

MIM 17-4PH as Sintered

Material Properties	MPIF Standard 35		Kinetics
	Minimum	Typical	Typical
Ultimate Strength (KSI)	115	130	128
Yield Strength (KSI)	94	106	100
Elongation (% in 1")	4.0	6.0	9
Reduction in Area (%)	-	-	38
Surface Finish (Ra)	-	-	30
Macro Hardness (R15N)	-	-	73
Sintered Density (g/cm ³)	-	7.5	7.7



Material Description

Precipitation-hardening stainless steel. Offers a good balance between corrosion resistance and strength. Magnetic. Hardenable to various strength levels and hardness by varying the aging heat treat temperature. Typically provides better corrosion resistance than the 400 series stainless steels, and better strength than the 300 stainless steels. Often used for aircraft, dental, marine, medical, surgical industries, and applications where high levels of strength, hardness and good corrosion resistance is required.

Material Composition

Fe	Ni	Cr	C (Max)	Cu	Nb + Ta	Mn (Max)	Si (Max)
Balance	3-5	15.5-17.5	0.07	3-5	0.15-0.45	1.0	1.0