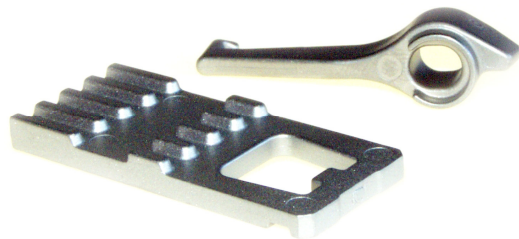


MIM 4605 as Sintered

Material Properties	MPIF Standard 35		Kinetics	
	Minimum	Typical	Minimum	Typical
Ultimate Strength (KSI)	55	64	55	84
Yield Strength (KSI)	25	30	25	47
Elongation (% in 1")	11.0	15.0	11	14
Reduction in Area (%)	-	-	-	20
Surface Finish (Ra)	-	-	-	40
Impact Energy (ft-lbf) ¹	-	-	-	40
Macro Hardness (HRB)	-	62	-	87
Sintered Density (g/cm ³)	-	7.5	-	7.6

¹Test method uses ½ sized un-notched charpy bar.



Material Description

Low alloy steel containing carbon, nickel, molybdenum. A multi-purpose, economical material that offers various strength, hardness, and wear resistance properties depending on whether it is heat treated and which heat treat process is used. Can be plated or coated for corrosion resistance. Used by a very wide range of industries including automotive, consumer product, firearms, power hand tools, structural and applications where good strength, hardness and wear resistance required.

The as-sintered condition offers better elongation, but with lower hardness and strength.

Material Composition

Fe	Ni	Mo	C	Si (Max)
Balance	1.5-2.5	0.2-0.5	0.4-0.6	1.0