

Kinetics

A Climax Engineered Materials Company

MATERIALS & PROPERTIES

MIM K1 as Sintered

Material Properties	Kinetics
	Typical
Ultimate Strength (KSI)	74
Yield Strength (KSI)	-
Elongation (% in 1")	1.5
Reduction in Area (%)	1.5
Surface Finish (Ra)	48
Macro Hardness (R15N)	70
Sintered Density (g/cm ³)	7.52



Material Description

K1 is a custom alloy that provides very high wear resistance, resists severe abrasions, hardens rapidly, and has low friction in metal to metal applications. Possible applications include agricultural implements, high security lock components and wear surface applications in assemblies. This material is also non-magnetic and can be used in assemblies when magnetic materials could cause interference with other electrical components.

Material Composition

Fe	Mn	C
Balance	12-14	0.9-1.3