

# Kinetics

A Climax Engineered Materials Company

## MATERIALS & PROPERTIES

### MIM K3 Heat Treat

Material Properties	Kinetics	
	Minimum	Typical
Ultimate Strength (KSI)	230	250
Yield Strength (KSI)	210	230
Elongation (% in 1")	2	3
Reduction in Area (%)	3	6
Surface Finish (Ra)	-	40
Impact Energy (ft-lbf) <sup>1</sup>	-	30
Macro Hardness (R15N)	-	87
Sintered Density (g/cm <sup>3</sup> )	-	7.71

<sup>1</sup>Test method uses 1/2 sized un-notched charpy bar.



### Material Description

K3 is a custom Mo-Fe alloy that provides improved fatigue properties over many other steel alloys while still maintaining good strength components, industrial or structural components and other applications where compressive/tensile wear and fatigue loading is experienced.

### Material Composition

Fe	Mo	C
Balance	1-2	0.3-0.5