

MIM F1537 (ASTM F1537) HIP and Heat Treat

Material Properties	ASTM F1537		Kinetics
	Hot-Worked	Annealed	Typical
Ultimate Strength (KSI)	145	130	160
Yield Strength (KSI)	101	75	85
Elongation (% in 1")	12	20	27
Reduction in Area (%)	-	-	23
Surface Finish (Ra)	-	-	40
Impact Energy (ft-lbf) ¹	-	-	80
Macro Hardness (RC)	-	-	32
Sintered Density (g/cm ³)	-	-	8.27 (HIP)

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



Material Description

Most commonly used within the medical market on applications requiring these characteristics:

- Bio-compatibility
- Corrosion resistance
- High strength
- Nonmagnetic
- Wear resistance

Material Composition

Co	Ni (Max)	Cr	Mo	C	Mn (Max)	Si (Max)	N (Max)	Fe (Max)
Balance	1	26-30	5-7	0.1-0.35	1	1	0.25	0.75

• Kinetics • 10085 SW Commerce Circle • Wilsonville OR 97070 • P 503-404-1200 • F 503-404-1208 • kinetics@fmi.com • www.kinetics.com •

Updated on 1/17/2008

This information is subject to change with internal research and development