



## Injection Moulded Material Properties and Application Data

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<b>Material:</b>	Nickel-Iron	
<b>Grade:</b>	<b>7% Ni-Fe</b>	
<b>Nominal composition; %:</b>	Ni	7.0 max.
	Si	0.2 max.
	C	0.01 max. as sintered
	Fe	Balance

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<b>Typical properties</b>	<b>as sintered</b>	<b>case hardened</b>
Density (g/cm <sup>3</sup> )	7.70-7.80	
Hardness, HV1	approx. 150	Core approx. 150
Surface Hardness, HV1		up to 700
Case depth (mm)		0.05-0.30
Elastic Modulus (GPa)	203	
Elongation (%)	26	2
Tensile Strength (MPa, N/mm <sup>2</sup> )	415-450	965-1035
Yield Strength (MPa, N/mm <sup>2</sup> )	275-310	760-830
As Sintered Surface Finish	R <sub>a</sub> < 1.6	R <sub>a</sub> < 1.6

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### Uses, remarks:

Mechanical components for gun parts, business machines, computer and appliance applications etc. Stronger and tougher alloy than 2% Ni-Fe at some sacrifice to wear resistance.