

# Material: SAE Monel K500

## Standard Specification for Nickel - Copper Alloy, Corrosion-Resistant, Bars and forgings

**Group:** Non-Ferrous Nickel Alloys

**Sub Group:** SAE Monel K500 Nickel - Copper Alloy, Corrosion-Resistant, Bars and forgings

**Application:** Intended for Valve, Pump, General Engineering, Automotive and other Industries

**Grade Belongs to the Industry:** Bar and Forging

Chemical Composition		
Carbon	C %	0.250 max.
Silicon	Si %	1.000 max.
Manganese	Mn %	1.500 max.
Copper	Cu %	27.000- 33.000
Iron	Fe %	2.000 max.
Sulphur	S %	0.010 max.
Aluminium	Al %	2.000 - 4.000
Phosphorus	P %	0.020 max.
Lead	Pb %	0.006 max.
Tin	Sn %	0.006 max.
Zinc	Zn %	0.020 max.
Nickel	Ni %	Balance
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Cast or Annealing or Age Hardening

Mechanical Properties	
Tensile Strength in Mpa	620 - 1380
Yield Strength in Mpa	276 - 1207
Elongation in %	2 - 45
Reduction of Area in %	25 - 75
Hardness in HRC	75 min.
Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
N05500	UNS	USA	Bar and Forging
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-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
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Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)



+91-99090 45075



[info@icastllp.com](mailto:info@icastllp.com)



ICAST ALLOYS LLP, Plot 2527, Road H1, Kranti Gate, GIDC Metoda, Lodhika, Rajkot-360021, Gujarat, India