



## Material - PN MI

### Standard Specification for Copper and Copper Alloy Rod for Free Machining Purpose

Group - Non Ferrous Copper Alloys

Sub Group - PN MI Copper and Copper Alloy Rod for Free Machining Purpose

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Rod

Chemical Composition			Heat Treatment	
Arsenic	As %	0.010 max.	As Raw or Solution Heat Treated	
Sulphur	S %	0.200 - 0.600		
Bismuth	Bi %	0.002 max.		
Iron	Fe %	0.050 max.		
Nickel	Ni %	0.200 max.		
Other	Ot %	0.300 max.		
Antimony	Sb %	0.005 max.		
Tin	Sn %	0.050 max.		
Copper	Cu %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	250 min.
-	-	-	Yield Strength in Mpa	150 - 240
-	-	-	Elongation in %	8 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	85 min.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
EN 12164 CuSP	DIN	Germany	Rod
2.1525	DIN	Germany	Rod
CuSi 3 Mn	DIN	Germany	Rod
SB-Cu	DIN	Germany	Rod
CuS	PN	Poland	Rod
CuSP	BS	British	Rod
CW114C	BS	British	Rod

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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