



## Material - CSN CuZn37Mn3Al2PbSi

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

Group - Non Ferrous Copper Alloys

Sub Group - CSN CuZn37Mn3Al2PbSi 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	
Aluminium	Al %	1.300 - 2.300	As Raw or Solution Heat Treated	
Iron	Fe %	1.000 max.		
Manganese	Mn %	1.500 - 3.000		
Nickel	Ni %	1.000 max.		
Lead	Pb %	0.200 - 0.800		
Silicon	Si %	0.300 - 1.300		
Tin	Sn %	0.400 max.		
Other	Ot %	0.300 max.		
Copper	Cu %	57.000 - 59.000	Mechanical Properties	
Zinc	Zn %	Balance	Tensile Strength in Mpa	540 min.
-	-	-	Yield Strength in Mpa	200 min.
-	-	-	Elongation in %	5 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HV	140 - 200
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
CuZn37Mn3Al2PbSi	DIN	Germany	Rod
CuZn37Mn3Al2PbSi	AFNOR NF	France	Rod
CW713R	AFNOR NF	France	Rod
CuZn37Mn3Al2PbSi	MSZ	Hungary	Rod
CW713R	MSZ	Hungary	Rod
CW713R	CSN	Czech Republic	Rod
CW713R	DIN	Germany	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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