



## Material - DIN EN 12164 CuSn4Pb4Zn4 (CW456K)

### Standard Specification for Copper-Tin Alloy Rod

Group - Non Ferrous Copper Alloys

Sub Group - DIN EN 12164 CuSn4Pb4Zn4 Copper-Tin Alloy Rod

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

Grade Belongs to the Industry - Rod

Chemical Composition			Heat Treatment	
Iron	Fe %	0.100 max.	As Raw or Solution Heat Treated	
Nickel	Ni %	0.200 max.		
Phosphorus	P %	0.010 - 0.400		
Lead	Pb %	3.500 - 4.500		
Tin	Sn %	3.500 - 4.500		
Tellurium	Te %	0.200 max.		
Zinc	Zn %	3.500 - 4.500		
Other	Ot %	0.200 max.		
Copper	Cu %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	450 min.
-	-	-	Yield Strength in Mpa	350 min.
-	-	-	Elongation in %	6 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HV	150 min.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
C 5441 B	JIS	Japan	Rod, Bar and Wire
CuSn4Pb4Zn4	NBN	Belgium	Rod
CW456K	NBN	Belgium	Rod
CuSn4Pb4Zn4	AFNOR NF	France	Rod
CW456K	AFNOR NF	France	Rod
CuSn4Pb4Zn4	NS	Norway	Rod
CW456K	NS	Norway	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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