



## Material - ASTM B176 UNS C87800

### Standard Specification for Copper Alloy Die Castings

Group - Non-Ferrous Copper Alloy

Sub Group - ASTM B176 Copper Alloy Die Castings

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Tin	Sn %	0.250 max.	As-Cast	
Lead	Pb %	0.150 max.		
Zinc	Zn %	12.000 - 16.000		
Iron	Fe %	0.150 max.		
Ni + Cu	Ni% + Cu%	0.200 max.		
Aluminium	Al %	0.150 max.		
Silicon	Si %	3.800 - 4.200		
Antimony	Sb %	0.050 max.		
Sulphur	S %	0.050 max.		
Phosphorus	P %	0.010 max.		
Copper	Cu %	80.000 min.	<b>Mechanical Properties</b> Tensile Strength in Mpa      589 min. Yield Strength in Mpa      345 min. Elongation in %      25 min. Reduction of Area in %      - Hardness in HRB      85 - 90 Impact in Joule      95 min. @ RT	
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-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B176 C87800	ASTM	USA	Casting
B30 C87800	ASTM	USA	Ingot and Casting
CA878	SAE	USA	Casting
C87800	SAE	USA	Casting
-	-	-	-
-	-	-	-
-	-	-	-

**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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