



Material - ASTM B176 C87800

Standard Specification for Copper Alloy Die Castings

Group - Non-Ferrous Copper Alloy

Sub Group - ASTM B176 Copper Alloy Die Casting

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Aluminium	Al %	0.150 max.	As-Cast	
Arsenic	As %	0.050 max.		
Iron	Fe %	0.150 max.		
Magnesium	Mg %	0.010 max.		
Manganese	Mn %	0.150 max.		
Ni + Co	Ni% + Co%	0.200 max.		
Phosphorus	P %	0.010 max.		
Lead	Pb %	0.090 max.		
Sulphur	S %	0.050 max.		
Antimony	Sb %	0.050 max.		
Silicon	Si %	3.800 - 4.200	Mechanical Properties	
Tin	Sn %	0.250 max.	Tensile Strength in Mpa	586 min.
Zinc	Zn %	12.000 - 16.000	Yield Strength in Mpa	345 min.
Copper	Cu %	80 min.	Elongation in %	25 min.
-	-	-	Reduction of Area in %	-
			Hardness in HRB	85 - 90
			Impact in Joule	95 min. @RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
C87800	UNS	USA	Rod, Bar, Tube and Shapes
B30 C87800	ASTM	USA	Ingot and Casting
CA878	SAE	USA	Casting
C87800	SAE	USA	Casting
C87800	UNS	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

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