



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM B176 UNS C85800

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 %	1.500 max.	As-Cast	
Lead	Pb %	1.500 max.		
Zinc	Zn %	31.000 - 41.000		
Iron	Fe %	0.500 max.		
Ni + Cu	Ni% + Cu%	0.500 max.		
Aluminium	Al %	0.550 max.		
Manganese	Mn %	0.250 max.		
Silicon	Si %	0.250 max.		
Antimony	Sb %	0.050 max.		
Sulphur	S %	0.050 max.		
Phosphorus	P %	0.010 max.	Mechanical Properties	
Copper	Cu %	57.000 min.	Tensile Strength in Mpa	379 min.
-	-	-	Yield Strength in Mpa	207 min.
-	-	-	Elongation in %	15 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HRB	55 - 60
-	-	-	Impact in Joule	54 min. @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B176 C85800	ASTM	USA	Casting
B30 C85800	ASTM	USA	Casting
CA858	SAE	USA	Casting
C85800	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

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

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