



## Material - ASTM B271 Leaded Nickel Bronze UNS C97800

### Standard Specification for Copper-Base Alloy Centrifugal Castings

Group - Non-Ferrous Copper Alloy

Sub Group - ASTM B271 Copper-Base Alloy Centrifugal Castings

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

Grade Belongs to the Industry - Rod, Bar, Tube and Shapes

Chemical Composition			Heat Treatment	
Tin	Sn %	4.000 - 5.500	As-Cast	
Lead	Pb %	1.000 - 2.500		
Zinc	Zn %	1.000 - 4.000		
Iron	Fe %	1.500 max.		
Ni + Co	Ni% + Co%	24.000 - 27.000		
Aluminium	Al %	0.005 max.		
Silicon	Si %	0.150 max.		
Antimony	Sb %	0.200 max.		
Sulphur	S %	0.080 max.		
Phosphorus	P %	0.050 max.		
Other	Ot%	1.000 max.	Mechanical Properties	
Copper	Cu %	64.000 - 67.000	Tensile Strength in Mpa	345 min.
-	-	-	Yield Strength in Mpa	152 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B149-11B	ASTM	USA	Casting
B30 C97800	ASTM	USA	Ingot and Casting
B271 C97800	ASTM	USA	Casting
B505 C97800	ASTM	USA	Casting
B584 C97800	ASTM	USA	Casting
SB-505 C97800	ASME	USA	Casting
SB-584 C97800	ASME	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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