



## Material - ASTM B271 C95520

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

Group - Non-Ferrous Copper Alloy

Sub Group - ASTM B271 Copper-Base Alloy Centrifugal Casting

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment															
Aluminium	Al %	10.500 - 11.500	As-Cast or Solution Annealing or Annealing															
Cobalt	Co %	0.200 max.																
Chromium	Cr %	0.050 max.																
Iron	Fe %	4.000 - 5.500																
Manganese	Mn %	1.500 max.																
Ni + Co	Ni% + Co%	4.200 - 6.000																
Lead	Pb %	0.030 max.																
Silicon	Si %	0.150 max.																
Tin	Sn %	0.250 max.																
Zinc	Zn %	0.300 max.																
Copper	Cu %	74.500 min.	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>862 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>655 min.</td> </tr> <tr> <td>Elongation in %</td> <td>3 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in HB</td> <td>262 min.</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	862 min.	Yield Strength in Mpa	655 min.	Elongation in %	3 min.	Reduction of Area in %	-	Hardness in HB	262 min.	Impact in Joule	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
C95520	UNS	USA	Rod, Bar, Tube and Shapes
B30 C95520	ASTM	USA	Ingot and Casting
B505 C95520	ASTM	USA	Casting
SB-148 C95520	ASME	USA	Casting
78Cu-11Al-5.1Ni-4.8Fe	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)**

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.