

## Material: ASTM B505 Nickel-Tin Bronze UNS C94700

### Standard Specification for Copper Alloy Continuous Casting

**Group:** Non-Ferrous Copper Alloy

**Sub Group:** ASTM B505 / 505M Copper Alloys for Continuous Casting

**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 %	4.500 - 6.000	As-Cast or Solution Annealing															
Lead	Pb %	0.100 max.																
Zinc	Zn %	1.000 - 2.500																
Ni + Cu	Ni% + Cu%	4.500 - 6.000																
Iron	Fe %	0.250 max.																
Antimony	Sb %	0.150 max.																
Sulphur	S %	0.050 max.																
Phosphorus	P %	0.050 max.																
Aluminium	Al %	0.005 max.																
Manganese	Mn %	0.200 max.																
Silicon	Si %	0.005 max.																
Copper	Cu %	85.000 - 90.000																
-	-	-			<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>310 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>138 min.</td> </tr> <tr> <td>Elongation in %</td> <td>25 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>-</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	310 min.	Yield Strength in Mpa	138 min.	Elongation in %	25 min.	Reduction of Area in %	-	Hardness in BHN	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B292-A	ASTM	USA	Casting
B30 C94700	ASTM	USA	Ingot and Casting
B505 C94700	ASTM	USA	Casting
B584 C94700	ASTM	USA	Casting
SB-505 C94700	ASME	USA	Casting
C94700	SAE	USA	Casting
CA947	SAE	USA	Casting

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