

## Material: ASTM A747 Grade CB7Cu-1 (H1025)

### Standard Specification for Steel Castings, Stainless, Precipitation Hardening

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** ASTM A747 / A747M Steel Castings, Stainless, Precipitation Hardening

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade

**Belongs to the Industry:** Casting

Chemical Composition			Heat Treatment															
Carbon	C %	0.070 max.	Normalising or Annealing or Hardening + Tempering															
Silicon	Si %	1.000 max.																
Manganese	Mn %	0.700 max.																
Phosphorus	P %	0.035 max.																
Sulphur	S %	0.030 max.																
Chromium	Cr %	15.500 17.700																
Nickel	Ni %	3.600 - 4.600																
Copper	Cu %	2.500 - 3.200																
Niobium	Nb %	0.150 - 0.350																
Nitrogen	N %	0.050 max.																
Iron	Fe %	Balance	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>1035 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>965 min.</td> </tr> <tr> <td>Elongation in %</td> <td>9 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>311 min.</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	1035 min.	Yield Strength in Mpa	965 min.	Elongation in %	9 min.	Reduction of Area in %	-	Hardness in BHN	311 min.	Impact in Joule	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J92180	UNS	USA	Casting
SA-747 CB7Cu-1	ASME	USA	Casting
17-4PH	SAE	USA	Steel
Z 7 CNU 17-04	AFNOR NF	France	Steel
5622	AMS	USA	Bar, Wire, Tube and Forging
X 5 CrNiCuNb 16-4	DIN	Germany	Steel
X 5 CrNiCuNb 16-4	EN	European Union	Forging

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