

## Material - ASTM A747 Grade CB7Cu-1 (H1150 DBL)

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       | <b>Mechanical Properties</b>                      |          |
| -                    | -    | -             |                                                   |          |
| -                    | -    | -             |                                                   |          |
| -                    | -    | -             |                                                   |          |
| -                    | -    | -             |                                                   |          |
| -                    | -    | -             |                                                   |          |
|                      |      |               | Tensile Strength in Mpa                           | -        |
|                      |      |               | Yield Strength in Mpa                             | -        |
|                      |      |               | Elongation in %                                   | -        |
|                      |      |               | Reduction of Area in %                            | -        |
|                      |      |               | Hardness in BHN                                   | 310 max. |
|                      |      |               | Impact in Joule                                   | -        |

| 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                      |

For any further inquiries, please do not hesitate to contact us. You may visit our website at [AMTECH TECHNOCAST PVT. LTD.](http://AMTECH TECHNOCAST PVT. LTD.), call us at [+91 9879817994](tel:+919879817994), or email us at [manish@amtechtechnocast.com](mailto:manish@amtechtechnocast.com)

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