



## Material - ASME SB-283 C71520

## Standard Specification for Copper and Copper-Alloy Die Forgings

**Group - Non-Ferrous Copper Alloy** 

Sub Group - ASME SB-283 Copper and Copper-Alloy Die Forgings

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

**Grade Belongs to the Industry - Forging** 

| Chemical Composition |           |                 | Heat Treatment                        |                  |
|----------------------|-----------|-----------------|---------------------------------------|------------------|
| Carbon               | C %       | 0.050 max.      |                                       |                  |
| Iron                 | Fe %      | 0.400 - 1.000   |                                       |                  |
| Manganese            | Mn %      | 1.000 max.      | Normalizing or Annealing or Tempering |                  |
| Ni + Co              | Ni% + Co% | 29.000 - 33.000 |                                       | ing or Tempering |
| Phosphorus           | P %       | 0.020 max.      |                                       |                  |
| Lead                 | Pb %      | 0.020 max.      |                                       |                  |
| Sulphur              | S %       | 0.020 max.      |                                       |                  |
| Zinc                 | Zn %      | 0.500 max.      |                                       | _                |
| Cu + Ag              | Cu% + Ag% | 65.000 min.     | Mechanical Properties                 |                  |
| -                    | -         |                 | Tensile Strength in Mpa               | 310 - 345        |
| -                    | -         | -               | Yield Strength in Mpa                 | 124 - 138        |
| -                    | -         | -               | Elongation in %                       | 30 min.          |
| -                    | -         | -               | Reduction of Area in %                | -                |
| -                    | -         | -               | Hardness in BHN                       | -                |
| -                    | -         | -               | Impac <mark>t in Joule</mark>         | -                |

| Cross Reference Table |          |         |                              |  |
|-----------------------|----------|---------|------------------------------|--|
| Material              | Standard | Country | Grade Belong to the Industry |  |
| B124 C71520           | ASTM     | USA     | Rod, Bar and Shapes          |  |
| B151 C71520           | ASTM     | USA     | Rod and Bar                  |  |
| B171 C71520           | ASTM     | USA     | Plate and Sheet              |  |
| B283 C71520           | ASTM     | USA     | Forging                      |  |
| B466 C71520           | ASTM     | USA     | Pipe and Tube                |  |
| SB-151 C71520         | ASME     | USA     | Rod and Bar                  |  |
| SB-171 C71520         | ASME     | USA     | Plate and Sheet              |  |

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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