



## Material - ASME SB-151 C71520

**Standard Specification for Copper-Nickel-Zinc Alloy and Copper-Nickel Rod and Bar**

**Group - Non-Ferrous Copper Alloy**

**Sub Group - ASME SB-151 Copper-Nickel-Zinc Alloy and Copper-Nickel Rod and Bar**

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

**Grade Belongs to the Industry - Rod and Bar**

| Chemical Composition |           |                 | Heat Treatment                        |           |
|----------------------|-----------|-----------------|---------------------------------------|-----------|
| Carbon               | C %       | 0.050 max.      | Normalizing or Annealing or Tempering |           |
| Iron                 | Fe %      | 0.400 - 1.000   |                                       |           |
| Manganese            | Mn %      | 1.000 max.      |                                       |           |
| Ni + Co              | Ni% + Co% | 29.000 - 33.000 |                                       |           |
| 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 - 550 |
| -                    | -         | -               | Yield Strength in Mpa                 | 105 - 415 |
| -                    | -         | -               | Elongation in %                       | 7 - 30    |
| -                    | -         | -               | Reduction of Area in %                | -         |
| -                    | -         | -               | Hardness in BHN                       | -         |
| -                    | -         | -               | Impact in Joule                       | -         |

| 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-171 C71520         | ASME     | USA     | Plate and Sheet              |
| SB-283 C71520         | ASME     | USA     | Forging                      |

**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)**

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