

## Material - ASTM B151 C71520

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

**Group - Non-Ferrous Copper Alloy**

**Sub Group - ASTM B151 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.     | <b>Mechanical Properties</b><br>Tensile Strength in Mpa 310 - 550<br>Yield Strength in Mpa 105 - 415<br>Elongation in % 7 - 30<br>Reduction of Area in % -<br>Hardness in BHN -<br>Impact in Joule - |  |
| -                    | -         | -               |                                                                                                                                                                                                      |  |
| -                    | -         | -               |                                                                                                                                                                                                      |  |
| -                    | -         | -               |                                                                                                                                                                                                      |  |
| -                    | -         | -               |                                                                                                                                                                                                      |  |
| -                    | -         | -               |                                                                                                                                                                                                      |  |
| -                    | -         | -               |                                                                                                                                                                                                      |  |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| B124 C71520           | ASTM     | USA     | Rod, Bar and Shapes          |
| 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              |
| SB-283 C71520         | ASME     | USA     | 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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