

## Material - ASTM B271 Leadred Semi-Red Brass UNS C84800

### Standard Specification for Copper-Base Alloy Centrifugal Castings

Group - Non-Ferrous Copper Alloy

Sub Group - ASTM B271 Copper-Base Alloy Centrifugal Castings

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

Grade Belongs to the Industry - Rod, Bar, Tube and Shapes

| Chemical Composition |           |                 | Heat Treatment               |          |
|----------------------|-----------|-----------------|------------------------------|----------|
| Tin                  | Sn %      | 2.000 - 3.000   | As-Cast                      |          |
| Lead                 | Pb %      | 5.500 - 7.000   |                              |          |
| Zinc                 | Zn %      | 13.000 - 17.000 |                              |          |
| Iron                 | Fe %      | 0.400 max.      |                              |          |
| Ni + Co              | Ni% + Co% | 1.000 max.      |                              |          |
| Aluminium            | Al %      | 0.005 max.      |                              |          |
| Silicon              | Si %      | 0.005 max.      |                              |          |
| Antimony             | Sb %      | 0.250 max.      |                              |          |
| Sulphur              | S %       | 0.080 max.      |                              |          |
| Phosphorus           | P %       | 0.020 max.      |                              |          |
| Copper               | Cu %      | 75.000 - 77.000 | <b>Mechanical Properties</b> |          |
| -                    | -         | -               |                              |          |
| -                    | -         | -               |                              |          |
| -                    | -         | -               |                              |          |
| -                    | -         | -               |                              |          |
| -                    | -         | -               |                              |          |
|                      |           |                 | Tensile Strength in Mpa      | 193 min. |
|                      |           |                 | Yield Strength in Mpa        | 83 min.  |
|                      |           |                 | Elongation in %              | 16 min.  |
|                      |           |                 | Reduction of Area in %       | -        |
|                      |           |                 | Hardness in BHN              | -        |
|                      |           |                 | Impact in Joule              | -        |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| B271 C84800           | ASTM     | USA     | Casting                      |
| B30 C84800            | ASTM     | USA     | Ingot and Casting            |
| B505 C84800           | ASTM     | USA     | Casting                      |
| B584 C84800           | ASTM     | USA     | Casting                      |
| SB-505 C84800         | ASME     | USA     | Casting                      |
| SB-584 C84800         | ASME     | USA     | Casting                      |
| B145-5B               | ASTM     | USA     | Casting                      |

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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