



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - ASTM B30 C83800

### Standard Specification for Copper Alloys Ingot and Casting

Group - Non-Ferrous Copper Alloy

Sub Group - ASTM B30 Copper Alloys Ingot and Casting

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

Grade Belongs to the Industry - Ingot and Casting

| Chemical Composition |           |                 | Heat Treatment   |  |
|----------------------|-----------|-----------------|--|--|
| Aluminium            | Al %      | 0.005 max.      | As-Cast  |  |
| Iron                 | Fe %      | 0.250 max.      |  |  |
| Ni + Co              | Ni% + Co% | 0.800 max.      |  |  |
| Phosphorus           | P %       | 0.020 max.      |  |  |
| Lead                 | Pb %      | 5.800 - 6.800   |  |  |
| Sulphur              | S %       | 0.080 max.      |  |  |
| Antimony             | Sb %      | 0.250 max.      |  |  |
| Silicon              | Si %      | 0.005 max.      |  |  |
| Tin                  | Sn %      | 3.500 - 4.200   |  |  |
| Zinc                 | Zn %      | 5.500 - 8.000   |  |  |
| Copper               | Cu %      | 82.000 - 83.500 | <b>Mechanical Properties</b><br>Tensile Strength in Mpa      205 min.<br>Yield Strength in Mpa      90 - 95<br>Elongation in %      16 - 20<br>Reduction of Area in %      -<br>Hardness in BHN      -<br>Impact in Joule      - |  |
| -                    | -         | -               |  |  |
| -                    | -         | -               |  |  |
| -                    | -         | -               |  |  |
| -                    | -         | -               |  |  |
| -                    | -         | -               |  |  |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| C83800                | UNS      | USA     | Rod, Bar, Tube and Shapes    |
| C83800                | SAE      | USA     | Casting                      |
| B145-4B               | ASTM     | USA     | Casting                      |
| B505 C83800           | ASTM     | USA     | Casting                      |
| CA838                 | SAE      | USA     | Casting                      |
| B584 C83800           | ASTM     | USA     | Casting                      |
| SB-505 C83800         | ASME     | USA     | Casting                      |

**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)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

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