



## Material - ASTM B271 C90500

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

Group - Non-Ferrous Copper Alloy

Sub Group - ASTM B271 Copper-Base Alloy Centrifugal Casting

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

Grade Belongs to the Industry - Casting

| Chemical Composition |           |                 | Heat Treatment  |  |
|----------------------|-----------|-----------------|---|--|
| Aluminium            | Al %      | 0.005 max.      | As-Cast   |  |
| Iron                 | Fe %      | 0.200 max.      |   |  |
| Ni + Cu              | Ni% + Cu% | 1.000 max.      |   |  |
| Phosphorus           | P %       | 0.050 max.      |   |  |
| Lead                 | Pb %      | 0.300 max.      |   |  |
| Sulphur              | S %       | 0.050 max.      |   |  |
| Antimony             | Sb %      | 0.200 max.      |   |  |
| Silicon              | Si %      | 0.005 max.      |   |  |
| Tin                  | Sn %      | 9.000 - 11.000  |   |  |
| Zinc                 | Zn %      | 1.000 - 3.000   |   |  |
| Copper               | Cu %      | 86.000 - 89.000 | <b>Mechanical Properties</b><br>Tensile Strength in Mpa      276 min.<br>Yield Strength in Mpa      124 min.<br>Elongation in %      20 min.<br>Reduction of Area in %      -<br>Hardness in BHN      -<br>Impact in Joule      - |  |
| -                    | -         | -               |   |  |
| -                    | -         | -               |   |  |
| -                    | -         | -               |   |  |
| -                    | -         | -               |   |  |
| -                    | -         | -               |   |  |
| -                    | -         | -               |   |  |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| C90500                | UNS      | USA     | Rod, Bar, Tube and Shapes    |
| B30 C90500            | ASTM     | USA     | Ingot and Casting            |
| SB-505 C90500         | ASME     | USA     | Casting                      |
| SB-584 C90500         | ASME     | USA     | Casting                      |
| CA905                 | SAE      | USA     | Casting                      |
| SAE62                 | SAE      | USA     | Casting                      |
| 4845                  | SAE      | 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)**

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