

## Material - ASTM B66 C93600

### Standard Specification for Gear Bronze Alloy Casting

Group - Non-Ferrous Copper Alloy

Sub Group - ASTM B66 Gear Bronze Alloy 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 + Co              | Ni% + Co% | 1.000 max.      |                         |          |
| Phosphorus           | P %       | 0.150 max.      |                         |          |
| Lead                 | Pb %      | 11.000 - 13.000 |                         |          |
| Sulphur              | S %       | 0.080 max.      |                         |          |
| Antimony             | Sb %      | 0.550 max.      |                         |          |
| Silicon              | Si %      | 0.005 max.      |                         |          |
| Tin                  | Sn %      | 6.000 - 8.000   | Mechanical Properties   |          |
| Zinc                 | Zn %      | 1.000 max.      | Tensile Strength in Mpa | 221 min. |
| Copper               | Cu %      | 79.000 - 83.000 | Yield Strength in Mpa   | 110 min. |
| -                    | -         | -               | Elongation in %         | 15 min.  |
| -                    | -         | -               | Reduction of Area in %  | -        |
| -                    | -         | -               | Hardness in BHN         | -        |
| -                    | -         | -               | Impact in Joule         | -        |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| C93600                | UNS      | USA     | Rod, Bar, Tube and Shapes    |
| B30 C93600            | ASTM     | USA     | Ingot and Casting            |
| B271 C93600           | ASTM     | USA     | Casting                      |
| B505 C93600           | ASTM     | USA     | Casting                      |
| CACIn406              | KS       | Korea   | Ingot and Casting            |
| SB-271 C93600         | ASME     | 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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