# COPPER AS-1567 -110 C11000
# (HI CON COPPER)
### WROUGHT PRODUCT-EXTRUDED ROD & BAR

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## ABOUT
Has the highest thermal and electrical conductivity, it is the most common copper used for electrical applications. This Copper has an extremely wide range of applications based on its conductivity, corrosion resistance, workability C110 is used for applications where conductivity is important.

## EQUIVALENT TO

| | |
|---|---|
| Britain | BS-2873 – C101 |
| USA | ASTM -B-C11000 |
| Japan | JIS HS-3250-C1100 |
| Germany | |

## APPLICATIONS
- Electrical Busbar and rods
- Electrical components

| Nominal Composition | |
|---|---|
| Copper % | 99.9 |
| Phosphorus % | ----- |
| Oxygen % | 0.025 |
| Sulphur % | ----- |
| Silver % | ----- |
| Tellurium % | ------ |

| Typical Mechanical Properties | Size | Temper: Drawn | | |
|---|---|---|---|---|
| | | Up to 13 mm | 13 to 50 mm | Over 50 mm |
| Tensile | MPa | 310 | 280 | 250 |
| 0.2% Proof Stress | MPa | 265 | 200 | 135 |
| Elongation % ( 5.65 ) | | 25 | 33 | 40 |
| Hardness | HV | 110 | 95 | 80 |
| Shear Strength | MPa | 185 | 155 | 130 |

| Physical Properties | | |
|---|---|---|
| Melting Point °C | | 1083 |
| Density kg/m3 | | 8940 |
| Electrical Conductivity | % IACS | 98-101 |
| Modulus of Elasticity | MPa | 117000 |

| Corrosion Resistance | |
|---|---|
| Rural Atmosphere | Excellent |
| Industrial Atmosphere | Excellent |
| Marine Atmosphere | Excellent |
| Sea Water | Good |
| Drinking Water | Excellent |

| Fabrication Data | |
|---|---|
| Machinability ( brass = 100% ) | 20% |
| Riveting & Peening | Excellent |
| Thread Rolling | Excellent |
| Cold Heading | Excellent |
| Bending ( cold ) | Excellent |
| Hot Forging | Good |
| Hot Forging Temp °C | 875 |
| Annealing °C | 470 |
| Stress Relieving °C | 175 |

| Joining | |
|---|---|
| Oxy- Acetylene welding | Not Recommended |
| Coated Metal Arc Welding | Not Recommended |
| Carbon Arc Welding | Fair |
| Gas Sheilded Arc Welding (Tig & Mig) | Fair |
| Soft Soldering | Excellent |
| Silver Soldering | Good |