AIMING TO BE THE CATALYST

Global Copper Pvt. Ltd. is a part of RR Global which is one of the leading conglomerates in the electrical and copper industry. Observing the need of fast changing industrial environment comparing to the technological advancement in copper tube manufacturing in the neighboring countries like China, Malaysia & Vietnam having a great impact on domestic industry thus, we work with an aim of being the catalyst in this positive change. Powered by highly skilled professionals having a remarkable experience in copper sector, we manufacture from a highly advanced, fully automatic manufacturing unit equipped with a production capacity of 4000mt/annum.

SINGLE SOURCE FOR CONSISTENT QUALITY AND RELIABLE SUPPLY

We at GCPL implement Cast & Roll – the most advanced and state-of-the-art technology to produce Level Wound Copper coil (LWC) and to fulfill the amplifying requirement for such products we also manufacture Pancake Copper Coil (PCC) and straight copper pipes. All our products are manufactured from Cu-ETP (Electrolytic Tough Pitch Copper) cathode of 99.99% purity.

CAST & ROLL – SUPERIOR TECHNOLOGY, SMARTER DEVELOPMENT

The Cast & Roll (C&R) technology consists of two main processes – Melting and Casting. Subsequent tube rolling. After casting the exterior surface of the shell is machined to remove scales and effects of oxidation as well as no lubricants are utilized for the rolling process. The Nitrogen gas envirnment in the cold working process involved in manufacturing Copper Tubes protects the material even at high temperatures. Thus, the tube is bright from inside and outside which improves drawability and enhances the outcome of C&R process.

We employ superlative equipments such as Planetary Rolling machines, Cascade Drawers and Spin Block Drawers which are fully-automatic, eliminating the possibilities of any human error.

Features

- ETP Grade Copper Cathode used as a raw material.
- Soft annealed, clean inside and out (Carbon free).
- On-Line Eddy Current tested.
- Conforms to ASTM B68, B75, B280, B287 1-2, E243.
- CFC Free – R134A, R600 & R410A and RoHS complaint.
- Controlled contamination levels.
**SPECIFICATION CHART**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Standard Specification</th>
<th>Alloy No.</th>
<th>%Chemical Composition</th>
<th>Mechanical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Copper (Cu)%</td>
<td>(P) %</td>
</tr>
<tr>
<td>ASTM</td>
<td>UNS C12200</td>
<td>99.9</td>
<td>0.015 to 0.04</td>
<td>H58</td>
</tr>
<tr>
<td></td>
<td>B68 C12200</td>
<td>99.9</td>
<td>0.015 to 0.04</td>
<td>O60</td>
</tr>
<tr>
<td></td>
<td>B88 C12200</td>
<td>99.9</td>
<td>0.015 to 0.04</td>
<td>O60</td>
</tr>
<tr>
<td></td>
<td>B280 C12200</td>
<td>99.9</td>
<td>0.015 to 0.04</td>
<td>O60</td>
</tr>
<tr>
<td></td>
<td>JIS H3300</td>
<td>C1220</td>
<td>99.9</td>
<td>H</td>
</tr>
<tr>
<td>BS EN</td>
<td>EN 1057</td>
<td>CW024A Cu-DHP</td>
<td>99.9</td>
<td>0.015 to 0.04</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>DETAIL</th>
<th>METRIC UNITS</th>
<th>ENGLISH UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATERIAL</td>
<td>Cu-DHP</td>
<td>Cu-DHP</td>
</tr>
<tr>
<td>DENSITY (AT 20°C)</td>
<td>8.9 g/cm³</td>
<td>0.321 lb/in³</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>1083°C</td>
<td>1981°F</td>
</tr>
</tbody>
</table>

**PRODUCTION PROCESS OF COPPER TUBE**

1. Cathode
2. Melting & Casting
3. Rolling
4. Combined Drawing
5. Spinner Block

6. LWC, PCC & Eddy Current Tester
7. Annealing
8. Finished Products
LEVEL WOUND COIL

Level Wound Coil is a coil of copper tubes in which turns are positioned into layers on a spool parallel to the axis of spool such that successive turns in a given layer are next to one another.

**TEMPER**
- SOFT ANNEALED  
  (ASTM B68 - 060)
- LIGHT ANNEALED  
  (ASTM B68 - 050)

**SIZES AVAILABLE**
- Range: OD: 4.76 mm to 15.88 mm
- Thickness: 0.31 mm to 1.5 mm

**INTERNATIONAL STANDARD:**
- ASTM B68
  (Product Availability Specified As Per Astm B743)
- ASTM B75, ASTM B837, JIS H3300,
  BS EN 12735-1, BS EN 12735-2, EN 1057, IS 2501

**SPECIFICATION CHART**

<table>
<thead>
<tr>
<th>OUTER DIAMETER</th>
<th>LWC WALL THICKNESS (MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM</td>
<td>.31</td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>4.76</td>
<td>✔</td>
</tr>
<tr>
<td>6.35</td>
<td>✔</td>
</tr>
<tr>
<td>7.94</td>
<td>✔</td>
</tr>
<tr>
<td>9.52</td>
<td>✔</td>
</tr>
<tr>
<td>12.70</td>
<td>✔</td>
</tr>
<tr>
<td>15.88</td>
<td>✔</td>
</tr>
</tbody>
</table>

**APPLICATION**
- VRV & VRF - Air Conditioning And Refrigeration Systems
- AHU’s
- HVAC Industry
- Heat Exchangers
- Evaporator Coils
- Capillary Tube Drawing
PANCAKE COIL

Pancake coil in which the turns are wound into layers parallel to the axis of the coil such that successive turns in a given layer are next to one another. Also called Helical Coil) - Coils up to 100 ft.

TEMPER
SOFT ANNEALED
(ASTM B280 – 060)

SIZES AVAILABLE
Range: OD: 4.76 mm to 22.22 mm
Thickness: 0.30 mm to 1.50 mm
Length: 50ft / 100ft

INTERNATIONAL STANDARD:
ASTM B280 (Product Availability Specified As Per ASTM B743), ASTM B68, ASTM B75, EN1057,JIS H3300

SPECIFICATION CHART

<table>
<thead>
<tr>
<th>OUTER DIAMETER</th>
<th>PCC - 50FT - 100FT PANCAKE COILS</th>
<th>WALL THICKNESS (MM)</th>
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</thead>
<tbody>
<tr>
<td>MM</td>
<td>0.30</td>
<td>0.35</td>
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<tr>
<td>4.75</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>6.35</td>
<td>✔</td>
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<tr>
<td>7.94</td>
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<tr>
<td>19.05</td>
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<td>✔</td>
</tr>
<tr>
<td>22.22</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

APPLICATION
- VRV & VRF - Air Conditioning And Refrigeration System Field Service
- HVAC – Servicing Industry
- Connecting Kits For Indoor And Outdoor Units
- Gas Piping

*Sizes as per Customers Requirement can also be provided
**STRAIGHT COPPER TUBE**

Seamless Copper tubes have an availability in the form of straight cut lengths in soft/hard temper having various application plumbing, heatexchangers, solar, medical gas piping etc.

**TEMPER**
- SOFT ANNEALED (ASTM B68, B75, B88, B280) – O60
- HARD (ASTM B68, B75, B88, B280) – H58

**SIZES AVAILABLE**
- Range: OD: 4.76 mm to 50 mm
- Thickness: 0.41 mm to 2.00 mm
- Length: 10 ft / 3.048 M
  (SOFT ANNEALED)
  (As Per Customers Requirement)

**INTERNATIONAL STANDARD**:
- ASTM B280 (Product Availability Specified As Per ASTM B743), ASTM B68, ASTM B75, EN1057, JIS H3300

**APPLICATION**
- VRV And VRF - Air Conditioning And Refrigeration
- Heat Exchangers
- Chillers
- Solar Equipments
- Medical Gas Piping
- Electrical Heaters
- Piping For Water Gas And Oil
- General Engineering Purpose
- Plumbing

**PARTNERS IN PROGRESS**

Daikin Airconditioning India Pvt. Ltd. • Alfa Laval India Private Limited

Voltas India • Bluestar Limited
COPPER TUBE (COILS/STRAIGHT TUBE) – COATED WITH PVC

Seamless Copper tubes are available with PVC coating. Copper tubes are sheathed with polyvinyl chloride through continuous extrusion process to protect the tubes from external damages allowing it to be placed in tough environmental conditions.

TEMPER
- SOFT ANNEALED - 060
- HARD ANNEALED - H58

SIZES AVAILABLE
- Range: OD 4.76 mm to 19.05 mm
- Thickness: 0.41 mm to 1.20 mm
- PVC Coating Thickness: MAX 3 mm
  (As Per Customers Requirement)

INTERNATIONAL STANDARD:
- ASTM B280, BS EN 1057

APPLICATION
- Fuel gas piping
- Gas Transmission
- Oil and Gas Industry
- Medical Gas piping

Johnson Controls-Hitachi Air Conditioning India Ltd.

Videocon Industries Ltd. • Lloyd Air Conditioners