



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 environment 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

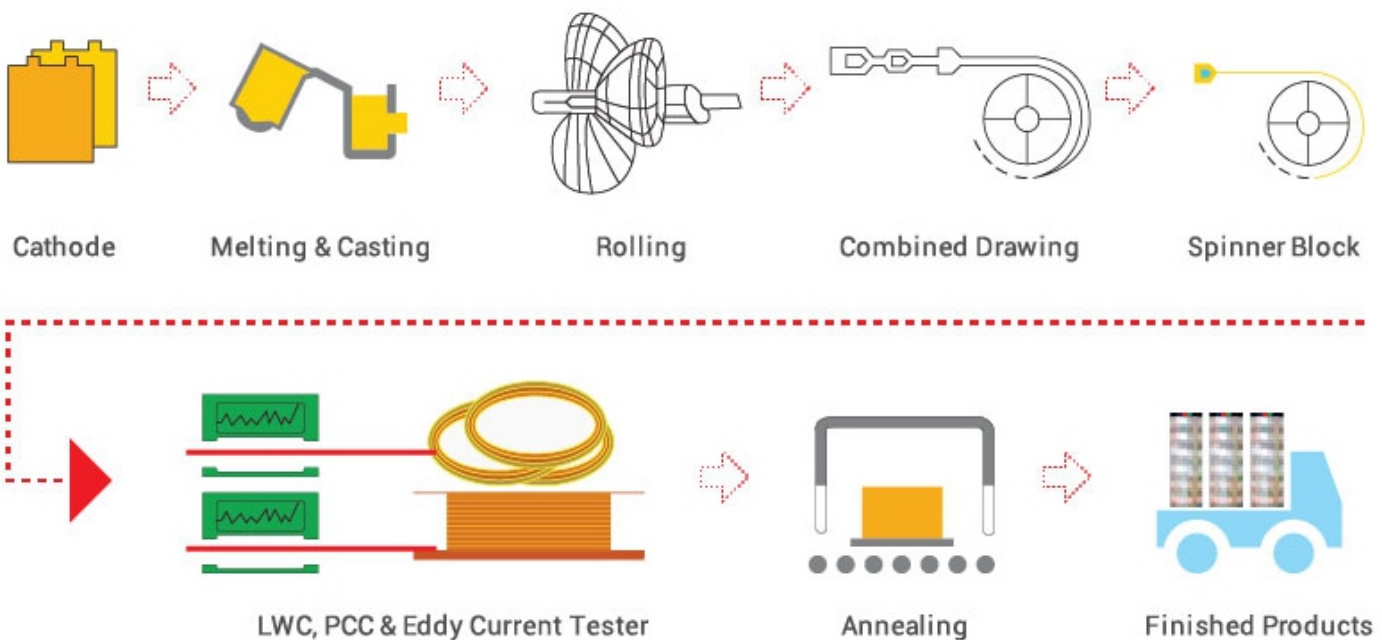
- ETP Grade Copper Cathode used as a raw material.
- Soft annealed, clean inside and out (Carbon free).
- On-Line Eddy Current tested.
- Conforms to ASTM B68, B75, B280, B287 1-2, E243.
- CFC Free – R134A, R600 & R410A and RoHS compliant.
- Controlled contamination levels.

SPECIFICATION CHART

Standard	Standard Specification	Alloy No.	%Chemical Composition		Mechanical Properties				
			Copper (Cu)%	(P)%	Temper	Tensile Strength	%Elongation	Hardness	Average Grain size
ASTM	UNS	C12200	99.9	0.015 to 0.04	H58 O60	MIN 250 MIN 205	- MIN 40	- -	- MIN 0.04
	B68	C12200	99.9	0.015 to 0.04	O50 O60	MIN 210 MIN 210	MIN 40 MIN 40	- -	0.015-0.04 MIN 0.04
	B88	C12200	99.9	0.015 to 0.04	O50 O60 H58	MIN 205 MIN 205 MIN 250	- - -	50 HRF MAX 55 HRF MAX 30 HRF-30T	MIN 0.04 MIN 0.025 -
	B280	C12200	99.9	0.015 to 0.04	O60 H58	MIN 205 MIN 250	MIN 40 -	- -	- -
JIS	H3300	C1220	99.9	0.015 to 0.04	H OL O	MIN 315 MIN 205 MIN 205	- MIN 40 MIN 40	MIN 55HR MAX 55HRF MAX 50HRF	- MAX 0.04 0.025 - 0.06
BS EN	EN 1057	CW024A Cu-DHP	99.9	0.015 to 0.04	R220 (O) R290 (H)	MIN 220 MIN 290	MIN 40 MIN 3	40 - 70 HV5 MIN100HV5	- -

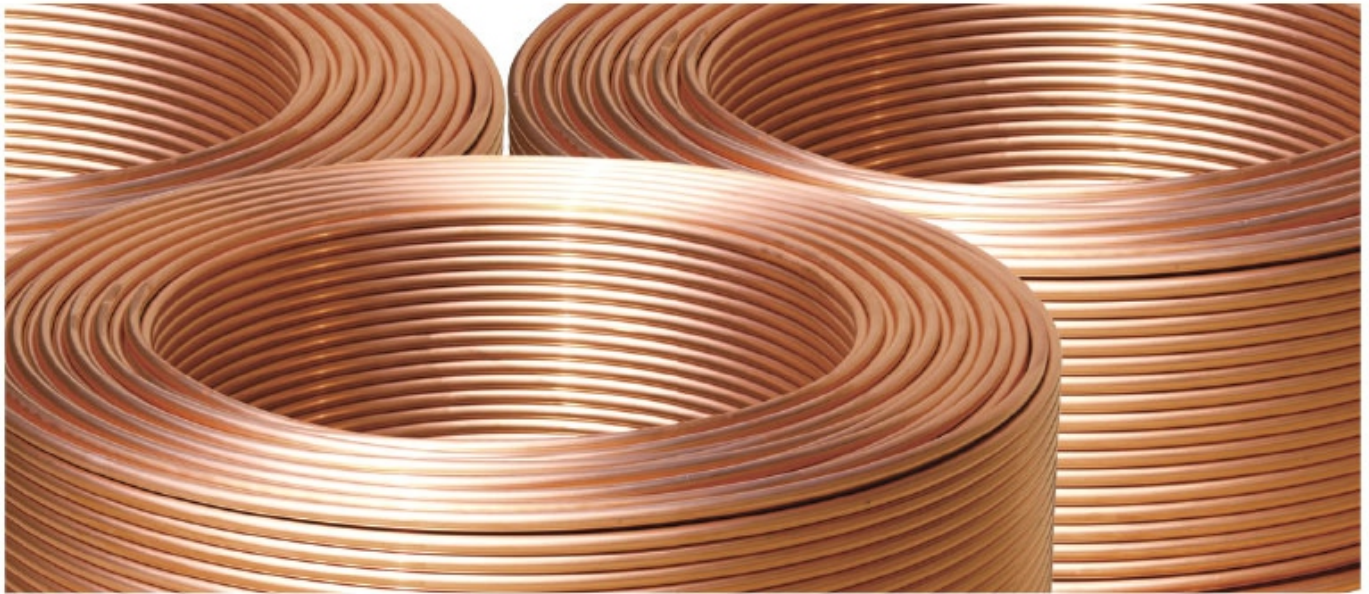
DETAIL	METRIC UNITS	ENGLISH UNITS
MATERIAL	Cu-DHP	Cu-DHP
DENSITY (AT 20° C)	8.9 g/cm ³	0.321 lb/in ³
MELTING POINT	1083°C	1981°F

PRODUCTION PROCESS OF COPPER TUBE



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 – O60)
LIGHT ANNEALED
(ASTM B68 – O50)

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

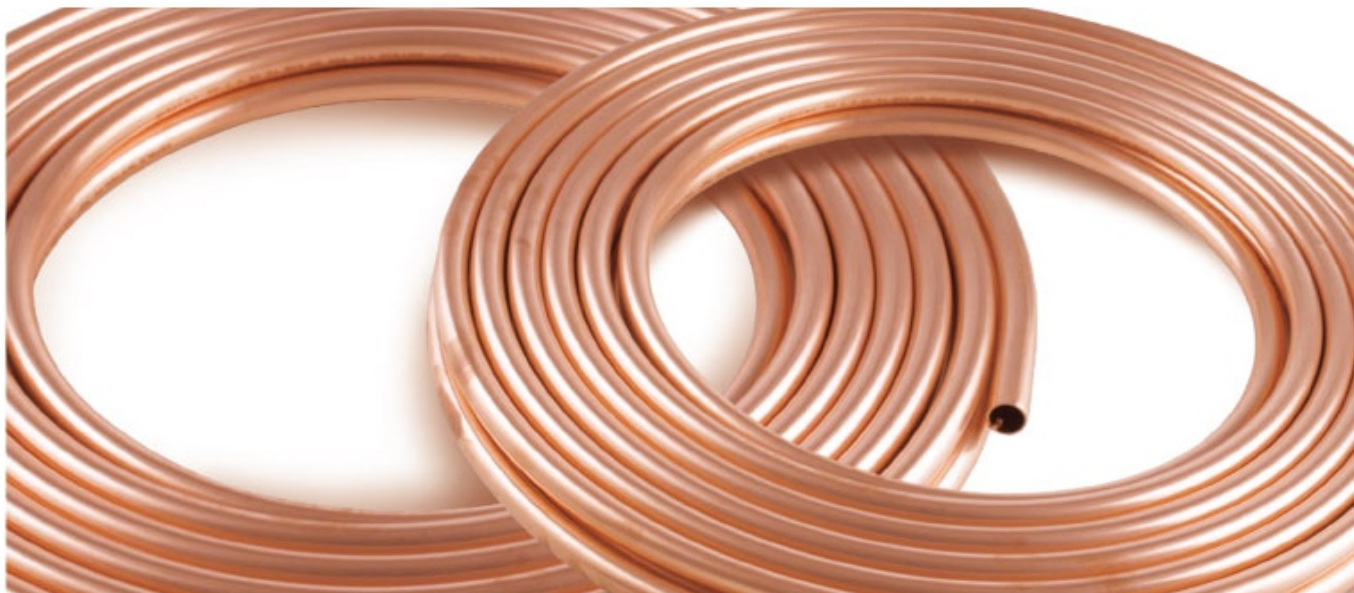
OUTER DIAMETER		LWC											
		WALL THICKNESS (MM)											
MM	INCH	0.31	0.35	0.41	0.51	0.56	0.61	0.71	0.81	0.91	1.00	1.20	1.50
4.76	3/16"	✓	✓	✓	✓	✓	✓	✓	✓				
6.35	1/4"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7.94	5/16"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
9.52	3/8"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12.70	1/2"		✓	✓	✓	✓	✓	✓	✓	✓	✓		
15.88	5/8"			✓	✓	✓	✓	✓	✓	✓			

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

OUTER DIAMETER		PCC – 50FT – 100FT PANCAKE COILS															
		WALL THICKNESS (MM)															
MM	INCH	0.30	0.35	0.41	0.45	0.46	0.51	0.56	0.61	0.66	0.71	0.76	0.81	0.91	1.00	1.20	1.50
4.76	3/16"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
6.35	1/4"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7.94	5/16"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
9.52	3/8"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
12.70	1/2"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
15.88	5/8"				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
19.05	3/4"										✓	✓	✓	✓	✓	✓	✓
22.22	7/8"										✓	✓	✓	✓	✓	✓	✓

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, heat exchangers, 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

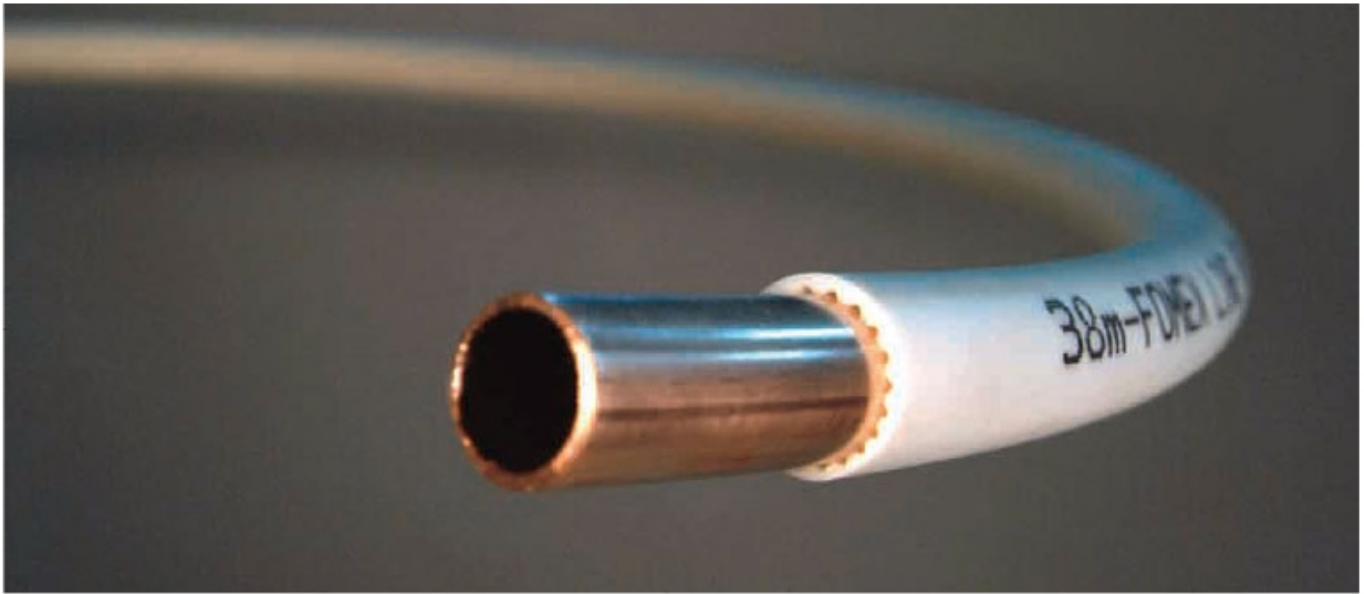
PARTNERS IN PROGRESS

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 - O60
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



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