



POWERS INNOVATION, DRIVES PROGRESS



MTC GROUP

MERCURE METALS & ALLOYS PVT LTD.

ISO 9001:2015
OHSAS 18001
ISO 14001

ENTERPRISE'S PRINCIPLE

Mercure is committed to delivering a comprehensive range of copper and copper-based alloy products, leveraging advanced technology to meet the evolving needs of our customers in India and across the world. Our goal is to provide the highest-quality materials tailored to each customer's requirements and to consistently exceed expectations. Through continuous improvement and strong Total Quality Management practices, we keep raising our standards in quality, reliability, and service.

ABOUT US

Mercure Metals & Alloys Pvt. Ltd is a Joint Venture between the Indigo group and the MTC group. The Indigo Group, with its strong expertise in manufacturing and exporting copper and copper alloy products, enjoys wide acceptance in both domestic and international markets, driven by high customer loyalty and satisfaction.

The MTC Group is a globally renowned organization engaged in the import, trading, and stocking of base metals, operating across 9 locations with 18 facilities in India and maintaining an international presence in the USA, UK, UAE, and Singapore.

Leveraging its extensive network and industry experience, MTC Group ensures the supply of high-quality raw materials best suited to Mercure's requirements.

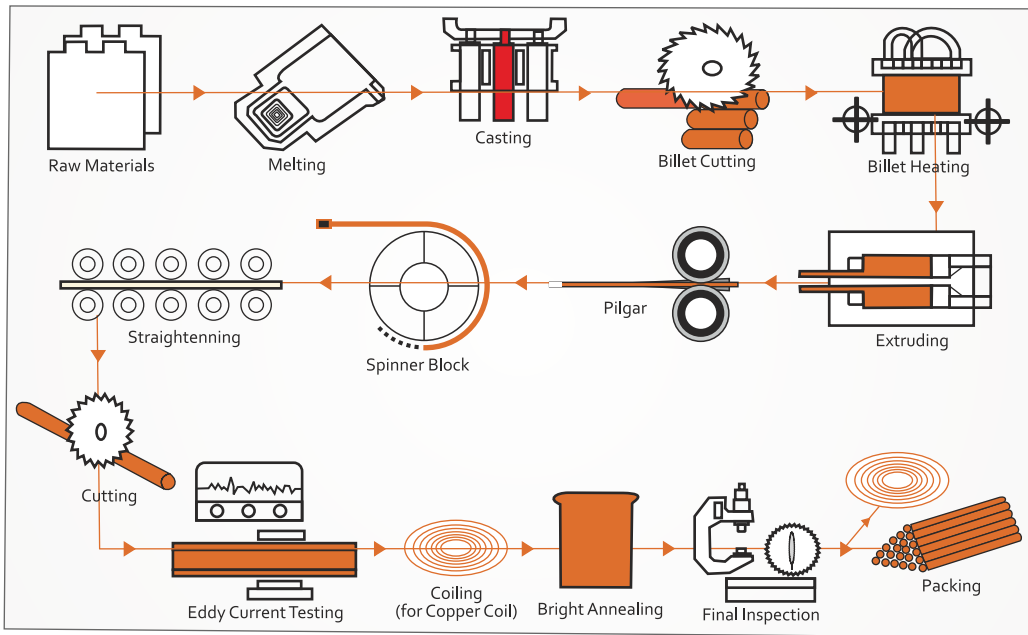
The synergy between these 2 iconic groups has resulted in producing World Class quality Copper products at most competitive pricing. Mercure plant is equipped with most advanced technological processes which brings best quality products. Mercure is India's leading manufacturer of Copper & Copper Alloy Tubes & Pipes with annual production of around 36000 MT.

The products of Mercure Metals and Alloys are always the first choice for the customers in Air conditioning, Oil and Gas and Plumbing Industry. Our brand 'INDIGO' is approved by various Public-Private Undertakings. Indigo is also approved by DAIKIN' to supply Copper tubes for VRV/VRF projects PAN India.

**At Mercure... we are Driven by Copper,
Defined by Excellence.**



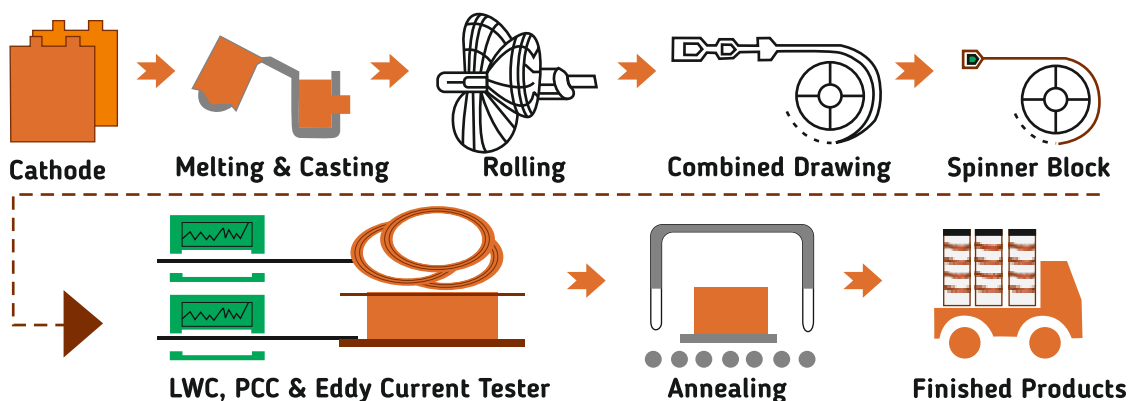
Manufacturing Process for Copper & Copper Base Alloy Products



Mercure uses advanced technologies to manufacture its products, including induction melting, extrusion with a 1600-tonne hydraulic press, cold drawing using pilger mills and drawbenches, gas-fired and bright annealing furnaces, straightening, coiling, and final inspection/testing. Raw materials are lab-tested and then sent to the melting shop, where they are cast in water-cooled molds and cut into billets. After pre-heating, the billets are extruded into mother tubes,

rods, or sections, then pickled (if needed), pointed, cold-drawn, and annealed as required. Products are straightened, and tubes undergo eddy-current or hydrostatic testing. Depending on temper requirements, they are annealed for soft temper or further drawn for half-hard or hard temper. Final checks include visual and dimensional inspection, flaring, flattening, physical properties, and grain-size testing before packing and dispatch.

Cast & Roll Technology for manufacturing Copper Tubes



Mercure also has the most advanced manufacturing capacity of Cast & Roll technology that is a widely accepted technology for manufacturing copper tubes. The process involves casting and rolling to produce tubes with precise dimensions and excellent surface finish. Pure Copper cathodes are issued to melting & casting to produce Mother tubes of size 90mm x 25mm x 20mtr length. These mother tubes have to pass through online surface milling machine to mill the surface upto 1mm to remove the oxidation. The milled shell passes through high speed rolling mill to be reduced 90% to a size of 52mm x 2.5mm. It is further drawn to 30mm on Cascade drawing machine. Final sizes are then drawn on high speed spinner block. Final tubes are level winded or issued to CTL machine, customized to order. Next, tubes are heated in Bright Annealing Furnaces. After final inspection & testing, tubes are packed as per customers specifications.

Eco-friendly CFC-free Refrigerant Compatible & "ROHS Compliant" Copper Tubes for ACR

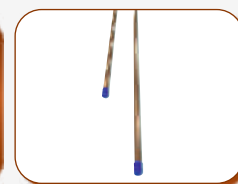
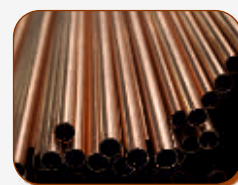
We would like to introduce ourselves as manufactures of "INDIGO COPPER TUBES" for VRV/VRF Application. Our Brand Name "INDIGO" is approved by Daikin, Samsung, LG, Voltas, Carrier, Blue Star & Mitsubishi as a premium vendor of Copper Tubes for VRV/VRF and non VRV applications.

Mercure Metals has once again spearheaded in developing and introducing eco-friendly CFC-free compatible and RoHS compliant copper tubes to help Indian industry for speedy phase out usage of CFC's.

Indigo Green Copper Tubes ensures consistent quality ACR grade Copper tubes for new generation high-end VRV/VRF/Multi-V/DVM Plus/City Multi high efficiency and large capacity Air-conditioning systems

Indigo Green Copper Tubes are produced by using

- * Floating Mandrel technique during Re-drawing, for 360 degree consistent CONCENTRIC TUBES.
- * Total loss lubricant during Re-drawing and Inert atmospheric vacuum type Bright annealing furnace for ultra dean tubes with low residual content below 0.038 gm/sq.mtr.
- * Advanced Eddy Current Testing for defect-free 100% flawless tubes
- * Electronic Temperature and Process controlled Bright Annealing process for consistent Hardness uniformity along the entire tube length, circumference and bright mirror finish
- * R410A Refrigerant Compatible Copper Tubes.



We are India's first BIS Certified Copper Tube Manufacturing Company

INDIGO Pipes has a unique manufacturing process and laboratory to confirm that the total residue does not exceed 0.03g/m² as specified in EN12735-1 ASTM B280. After cleaning all tubes are individually end-capped to maintain their internal cleanliness. All straight tubes are manufactured in 5.8mts/3mts length for ease of movement and are bundled and wrapped in plastic for maximum protection. Individual coils are also wrapped in Plastic, packed into Cardboard Cartons in Wooden Boxes

Mercure Metals meets the mandatory inspection requirements

Chemical Composition	Copper + Silver minimum 99.90%, Phosphorous minimum 0.015. max 0.040%
Carbon content Test	Window based software determines the content of carbon on the inner surface of copper tubes and fittings using combustion method.
Tensile Strength	INDIGO pipes have been tested to the best of its tensile strength keeping in mind all the testing norms in the industry
Non-Destructive Test	Each tube is subjected to an Eddy current test for detection of local defects

TECHNICAL SPECIFICATION COPPER TUBES

Standard	JIS H3300	ASTM B-68	BS 2871 PART 3	DIN 1785	IS 2501	BS 2871 PART 2	IS 10773
Symbol	C 12200	C 12200	C 106	SrCu 25	DHP IS191 PART VIII	C 101	DHP
Cu	99.9 Min	99.9 Min	99.85 Min	99.9 Min	99.8 Min	99.90** Min	99.90 Min
Sn	-	-	0.01 Max	-	0.01	-	-
Pb	-	-	0.01 Max	-	0.01	0.005	-
Ni	-	-	0.10 Max	0.01 Max	0.10 Max	-	-
Fe	-	-	0.03 Max	-	0.03	-	-
As	-	0.01 Max	0.05 Max	-	0.05	-	-
P	0.015-0.40	0.015-0.040	0.013-0.050	0.015-0.040	0.015-0.10	-	0.015-0.040
Total Impurities Max.	-	-	0.06*	-	0.06	0.03*	-
Condition	O 1/2H H	O50 - O60	M1/2H O	F 25	O, 1/2H, HD	O M	O, LD, HD
Yield Strength N/mm ²	-	-	-	150-240	-	-	-
Tensile N/mm ²	205 Min 245-325 315Max.	-	-	250 Min	205Min 235Min 235Min 280Min	200 - 250 Min. 270 Min.	210 Min 245 Min 290 Min
Elongation %	40% Min.	-	-	30% Min.	25%	40% Min.	40% Min
Hardness HV 5	-	-	105 Min 80-100 60 Max	-	-	100 Max 60 Max	-
Grain Size Mm (75X)	0.25-0.06-	0.015- 0040 0.040 Min	0.05 Max	-	-	-	0.040 Min

SIZE USED FOR VRV AIR-CONDITIONING TUBING

SR. No.	SIZE (MM)	SIZE (INCHES)	TOLERANCE IN OD	THICKNESS IN MM	TOLERANCE IN THICK	TEMPER	LENGTH	WEIGHT	MAX WORKING PRESSURE IN MPA	BURSTING PRESSURE IN MPS
1	6.4 MM	1/4"	+/-0.08 MM	0.80 MM	+/-0.10 MM	0-COIL FORM	50'	1.875	13.80	68.3
2	9.5 MM	3/8"	+/-0.08 MM	0.80 MM	+/-0.10 MM	0-COIL FORM	50'	2.975	8.40	41.5
3	12.7 MM	1/2"	+/-0.08 MM	0.80 MM	+/-0.10 MM	0-COIL FORM	50'	4.050	6.00	29.5
4	15.9 MM	5/8"	+/-0.09 MM	1.00 MM	+/-0.15 MM	0-COIL FORM	50'	6.300	5.90	29.5
5	19.1 MM	3/4"	+/-0.09 MM	0.80 MM	+/-0.15 MM	1/2 HARD-TUBE	10'	1.240	12.5	22.9
6	22.2 MM	7/8"	+/-0.12 MM	0.80 MM	+/-0.15 MM	1/2 HARD-TUBE	10'	1.460	10.6	19.4
7	25.4 MM	1"	+/-0.12 MM	0.88 MM	+/-0.15 MM	1/2 HARD-TUBE	10'	1.840	10.2	18.6
8	28.6 MM	1.1/8"	+/-0.12 MM	1.00 MM	+/-0.15 MM	1/2 HARD-TUBE	10'	2.330	10.3	18.8
9	31.8 MM	1.1/4"	+/-0.12 MM	1.10 MM	+/-0.15 MM	1/2 HARD-TUBE	10'	2.880	10.2	18.6
10	34.9 MM	1.3/8"	+/-0.12 MM	1.21 MM	+/-0.15 MM	1/2 HARD-TUBE	10'	3.480	10.2	18.6
11	38.1 MM	1.1/2"	+/-0.12 MM	1.32 MM	+/-0.15 MM	1/2 HARD-TUBE	10'	4.150	10.2	18.6
12	41.3 MM	1.5/8"	+/-0.12 MM	1.43 MM	+/-0.15 MM	1/2 HARD-TUBE	10'	4.840	10.2	18.6

LIGHT WEIGHT SIZE USED FOR AIR-CONDITIONING APPLICATION

SR. NO.	SIZE	THICKNESS IN MM	TEMPER	LENGTH	APROX WEIGHT PER NO. IN KGS
1	6.4 MM	0.65 MM	0-COIL FORM	50'	1.5
2	9.5 MM	0.65 MM	0-COIL FORM	50'	2.5
3	12.7 MM	0.71 MM	0-COIL FORM	50'	3.5
4	15.9 MM	0.71 MM	0-COIL FORM	50'	4.5
5	19.1 MM	0.81 MM	0-COIL FORM	50'	6.4
6	19.1 MM	1.00 MM	HARD-TUBE	10'	1.6
7	22.2 MM	1.00 MM	HARD-TUBE	10'	1.8
8	25.4 MM	1.00 MM	HARD-TUBE	10'	2.1
9	28.6 MM	1.00 MM	HARD-TUBE	10'	2.4
10	31.8 MM	1.10 MM	HARD-TUBE	10'	2.9
11	34.9 MM	1.20 MM	HARD-TUBE	10'	3.5
12	38.1 MM	1.35 MM	HARD-TUBE	10'	4.3
13	41.3 MM	1.45 MM	HARD-TUBE	10'	5
14	44.5 MM	1.55 MM	HARD-TUBE	10'	5.8

Quality Testing

Every product we manufacture undergoes a rigorous and technology-driven quality assurance process. At Mercure, uncompromising quality is a defining hallmark. Each product line is subjected to advanced, stringent testing protocols to ensure every batch meets the highest standards of performance and reliability.

- * Chemical Analysis
- * Physical Analysis
- * Hardness testing
- * Hydrostatic testing
- * Pneumatic testing.
- * Stress corrosion testing
- * Dimensional inspection.
- * Destructive testing flattening, Drift test
- * Bend test
- * NDT Eddy Current Testing
- * Hydrogen Embrittlement Testing



Product Range

An impressive product range is the first step towards entering a competitive global market, At Mercure we are committed to providing our client with the best quality raw material most suitable to their requirements. We offer a spectrum of Copper & Copper base alloy products which are manufactured using premium quality raw materials with the best manufacturing techniques following series of stringent quality controlled measures. Our products have varied application in Industries such as Airconditioning & Refrigeration, Plumbing & Waterlines, Medical gas, Instrumentation, Electricals, Defence, Gen. Engineering, Oil & Gas, Dessalination Plants, Architectural & Furniture work. Mercure produces Copper & Copper alloy products as per National & International standard based on customers specification.

GRADE

COPPER:

DHP, DLP, ETP, OFHC, DOW, Tellurium Copper,

BRASS:

63/37Brass, 70/30 Brass, 85/15 Brass, Admiralty Brass, Aluminium Brass, Naval Brass, Arsenic Brass, Aluminium Bronze. Leaded Brass, Forging Brass, High Tensile Brass.

CUPRONICKEL:

95/5, 90/10 & 70/30 Alloys

Copper & Copper Alloy Tubes in Straight & Coil Form



Bright Annealed Pancake Coils:

Sizes : 1/8"(3.2mm)OD to 1"(25.4mm)OD
 Length : 50ft/100ft
 Thickness : 10 s.w.g(3.2mm) to 27s.w.g(0.4mm)
 Temper : 0



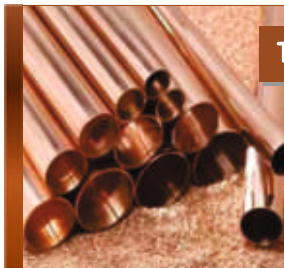
Straight Pipes & Tubes:

Sizes : 2mm OD to 250mm OD
 Thickness : Up to 10mtr or as required
 Length : 0.30mm to 20mm
 Temper : O/HH/H



Finned Tubes: (19/26 fins per inch)

Sizes : 5/8"(15.8mm)OD & 3/4" (19.044mm)OD
 Length : Specific length or up to 10 mtr.
 Thickness : 1.6mm to 1.2mm
 Temper : HH
 Type : Intergroove Integrally Finned Tubes Internally Grooved Tubes, Outer grooved Finned Tubes, Spiral Finned Tubes.



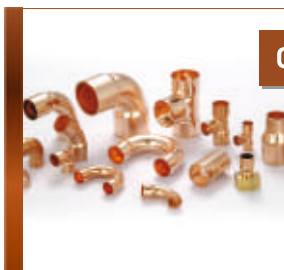
Tubes for Plumbing & Medical Gases:

Sizes : 6mm OD to 159mm OD
 Thickness : 0.5mm to 2.5mm as per Table X, Table Y, Table Z
 Length : 10 Feet or as required
 Temper : H/HH



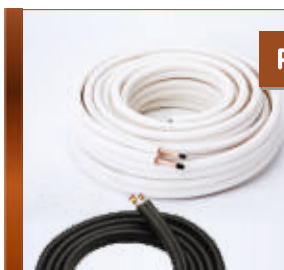
Capillary Tubes:

Sizes : 0.030"ID to 0.090" ID
 Thickness : 0.7mm to 0.4mm
 Length : 100ft standard or upto 500mtrs
 Temper : 0



Copper & Copper Alloy Fittings:

Sizes : 6mm to 250mm
 Shapes : Elbows, Tees, Couplings, Reducers or any non standard type.
 Temper : Seamless, Welded, Flared, Unflared Shouldered, Threaded
 Grade : Copper, CuproNickel, Brass, Gunmetal etc



Pre-Insulated Tube:

Sizes : 1/4" to 3/4"
 Tube : 1.6mm to 0.5mm
 Thickness :
 Insulation : 6mm to 25mm
 Thickness :
 Length : 3mtr to 30mtr or any fix length



Driven by Copper, Defined by Excellence



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MERCURE METALS & ALLOYS PVT LTD.

MERCURE METALS AND ALLOYS PRIVATE LIMITED

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