PRODUCTS **CATALOG**

COPPER TUBES FOR AIR CONDITIONING, MEDICAL GAS & REFRIGERATION

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Product introduction

Copper tube is a type of pipe made from copper that offers high thermal conductivity, excellent corrosion resistance, strong pressure tolerance, and is easy to form and join. In medical applications, copper tubes must meet strict cleanliness standards, while in air conditioning and refrigeration systems, their ability to efficiently transfer heat is crucial. These tubes are typically manufactured in accordance with international standards such as ASTM B280, ASTM B819, and EN 12735-1, making them a reliable and safe choice across various industrial sectors.

Why Choose Cuvanta® Copper Tubes?

- **High Thermal Conductivity**
  Copper conducts heat better than most metals – ideal for HVAC and cooling systems
- **Corrosion Resistance**
  Proven longevity in harsh environments, resisting moisture and chemical exposure.
- **Antibacterial Properties**
  Naturally inhibits microbial growth – perfect for clean medical gas lines.
- **Ease of Fabrication & Jointing**
  Easy to bend, braze, flare, and weld. Saves time, reduces labor cost.
- **Recyclable & Sustainable**
  100% recyclable without performance loss – a green solution.

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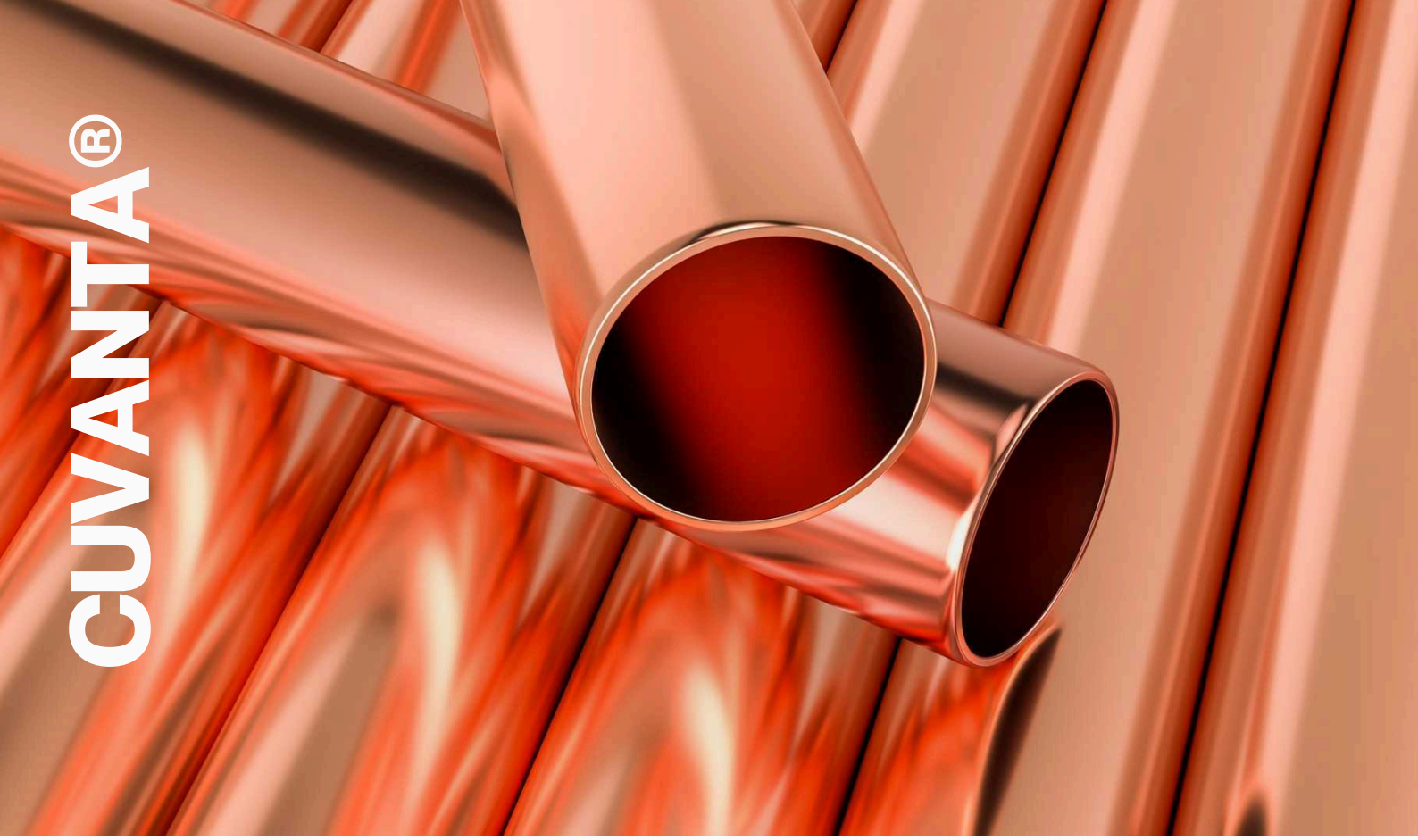
ASTM B280

Standard Wall Thicknesses		
Nominal O.D. (inch)	**Wall Thickness (inch)**	**Wall Thickness (mm)**
3/8" (0.375")	0.030"	0.76 mm
1/2" (0.500")	0.032"	0.81 mm
5/8" (0.625")	0.035"	0.89 mm
3/4" (0.750")	0.042"	1.07 mm
7/8" (0.875")	0.045"	1.14 mm
1 1/8" (1.125")	0.050"	1.27 mm
1 3/8" (1.375")	0.055"	1.40 mm
1 5/8" (1.625")	0.060"	1.52 mm
2 1/8" (2.125")	0.070"	1.78 mm
2 5/8" (2.625")	0.080"	2.03 mm
3 1/8" (3.125")	0.090"	2.29 mm

Physical & Thermal Properties of Copper (C12200)

Property	Value
Thermal Conductivity	398 W/m·K @ 20°C
Electrical Conductivity	100% IACS
Tensile Strength	≥ 290 MPa
Elongation	≥ 30%
Working Temp Range	-100°C to +400°C
Density	8.94 g/cm³
Antimicrobial Activity	≥ 99.9% bacterial kill



ACR Straight Copper Tube (Air Conditioning / Refrigeration)

Standard: GB/T 17791, ASTM B280, JIS H3300, AS/NZS 1571, AS1432, EN12735

Type: Hard-Drawn, Cleaned & Capped

Use: HVAC piping, VRF systems, chillers, heat pumps, refrigeration coils

Note:

Features: Clean surface of internal and external, high precision of size, easy weld and process.

Application: Air conditioner, heat exchanger refrigeration industry, pipeline system connection.

TECHNICAL PERFORMANCE

O.D. (inch)	Wall (inch)	Wall (mm)	Length
3/8"	0.030"	0.76 mm	5.8 m
1/2"	0.032"	0.81 mm	5.8 m
5/8"	0.035"	0.89 mm	5.8 m
7/8"	0.045"	1.14 mm	5.8 m
1 1/8"	0.050"	1.27 mm	5.8 m
1 3/8"	0.055"	1.40 mm	5.8 m
1 5/8"	0.060"	1.52 mm	5.8 m
2 1/8"	0.070"	1.78 mm	5.8 m
2 5/8"	0.080"	2.03 mm	5.8 m
3 1/8"	0.090"	2.29 mm	5.8 m

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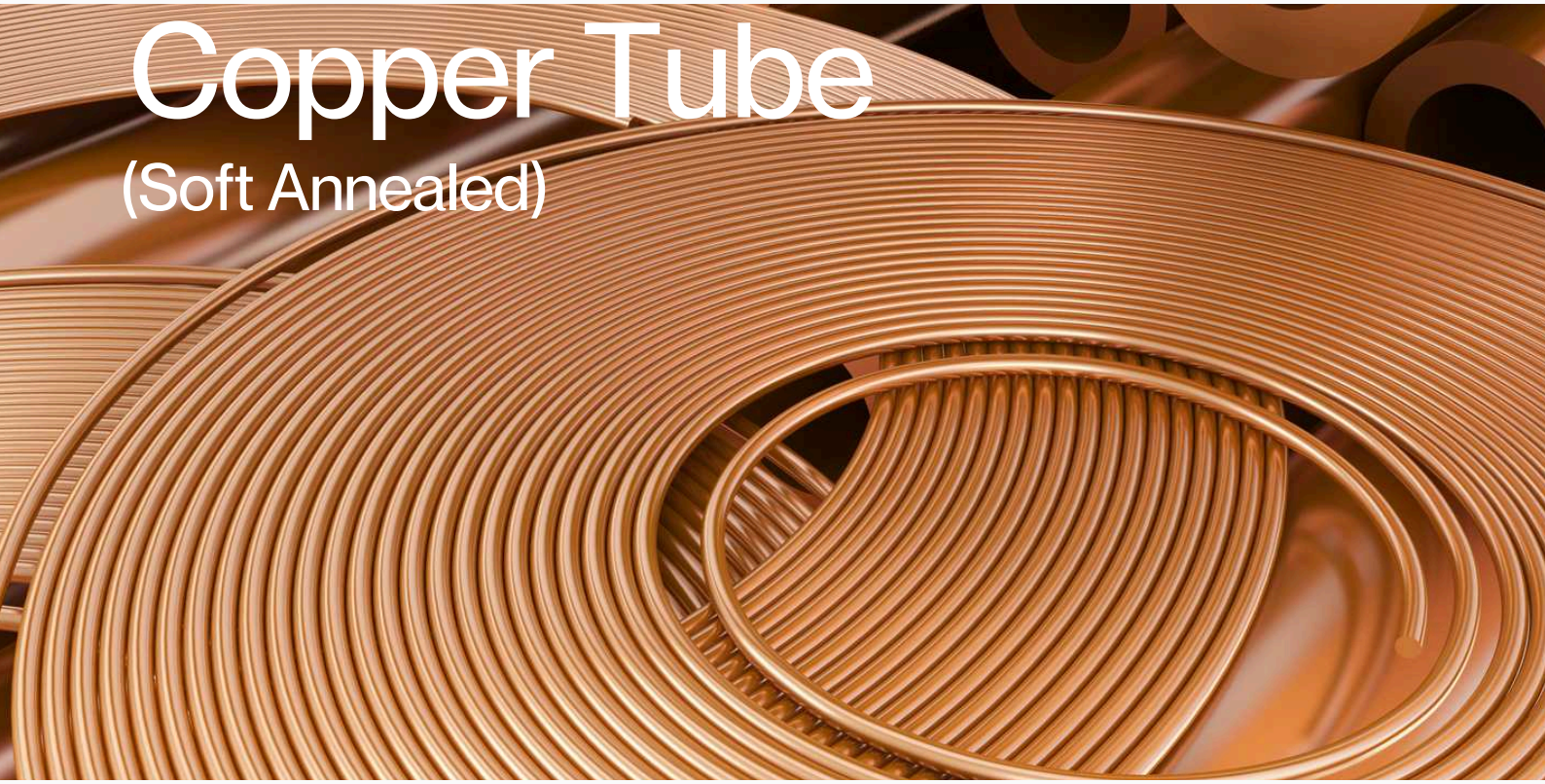
Pancake Coil Copper Tube

(Soft Annealed)



TECHNICAL PERFORMANCE

O.D. (inch)	Wall (inch)	Wall (mm)	Coil Length
1/4"	0.030"	0.76 mm	15 m / 30 m
3/8"	0.030"	0.76 mm	15 m / 30 m
1/2"	0.032"	0.81 mm	15 m / 30 m
5/8"	0.035"	0.89 mm	15 m / 30 m
3/4"	0.042"	1.07 mm	15 m / 30 m

Standard: GB/T 17791, ASTM B280, JIS H3300, AS/NZS 1571, AS1432, EN12735
Type: Soft-annealed, degreased
Use: Flexible A/C line sets, split systems, and household refrigeration

- **Finish:** Bright, oil-free, nitrogen-charged
- **Marking:** Laser-printed with size, standard & batch number
- **Color Cap:** Red (hot gas), Blue (suction line)

Note:

Features: Clean surface of Internal and External, bright finish, high precision of size, single, double or multi-layer pancake shape, easy to transport, process and install.

Application: Air conditioner, refrigeration industry, pipeline system connection, installation and maintenance

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Medical Gas Copper Tube

TECHNICAL PERFORMANCE

O.D. (inch)	Wall (inch)	Wall (mm)	Length
1/4"	0.030"	0.76 mm	5.8 m
3/8"	0.030"	0.76 mm	5.8 m
1/2"	0.032"	0.81 mm	5.8 m
3/4"	0.042"	1.07 mm	5.8 m
1"	0.050"	1.27 mm	5.8 m
1 1/4"	0.055"	1.40 mm	5.8 m
1 1/2"	0.060"	1.52 mm	5.8 m
2"	0.070"	1.78 mm	5.8 m

Standard: ASTM B819
Type: Seamless and cleaned
Use: Oxygen, vacuum, air, N_2O piping in hospitals, labs, clinics

Note:

Features: Clean surface of internal and external, high precision of size, easy weld and process.

Application: Medical gas distribution (O_2, N_2O, N_2, CO_2, medical air), Medical vacuum systems, Mixed gas systems (e.g., Entonox), Installations in hospitals and clinics (ICU, NICU, operating rooms), Medical gas pressure monitoring systems, Mobile medical facilities (ambulances, mobile clinics), Backup and emergency gas systems.

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