

ANNEALED COPPER COIL & TUBE

NCS Tube Innovation in Alloy Technology

NCS Tube is one of the leading producers of copper tubing for plumbing, heating, refrigeration, air-conditioning and industrial usages. We employ the most modern equipment in communications, data gathering and statistical process control in order to assure that all products are manufactured to the highest quality standards and that they will meet the needs of those who use them.

NCS Tube, through years of manufacturing, is extremely knowledgeable with regards to requirements for copper tubing that will be used in an air-conditioning system. We know the damage that can be caused by the presence of oxides, sulfides, lubricant residues or other foreign materials inside systems employing modern high efficiency compressors. Numerous steps are taken at all stages of production to assure absolute cleanliness.

NCS Tube knows that a consistent, soft-annealed temper is needed in the tubes in order to allow field forming without kinking of the tubes during bending.



Mechanical Properties

Temper	Tensile Strength (kg/mm ²)	Elongation (%)	Rockwell Hardness	
			Scale	Hardness
Hard Drawn (H)	45,000min (32min)		30T	55 min
Drawn (1/2H)	36,000min (25min)	--	30T	30 min
Light Drawn (1/4H)	36,000min (25min)		30T	30-60
Light-Annealed (OL)	30,000min (21min)	40 min	*15T F	65 max 55 max
Soft-Annealed (OL)	30,000min (21min)	40 min	*15T F	50 max 50 max

*Rockwell 15T scale shall apply to tubes having a wall thickness of 0.381mm to 0.889mm and F scale shall apply to tubes having a wall thickness of 0.889mm and above.

Chemical Composition

Standard	Chemical Composition (%)		Related Standards
	Cu	P	
ASTM B280 Copper Alloy No. C12200 (DHP)	99.90%	0.015%- 0.040%	BS 2871 DIN 1787 JIS H 3300

Quality Always

NCS Tube products are created from the finest alloys and are manufactured under the most stringent processes for optimal performance.

Unsurpassed Durability

NCS Tube products are created by applying the advanced non-ferrous and the latest alloy technologies developed for strength and long lasting performance.

Manufactured for Easy Shipping

NCS Tube products come in convenient easy-to-install packaging for easy shipping and quick setup.

Distributed by:

Natural Cool Airconditioning & Engineering Pte Ltd
A member of Natural Cool Holdings Limited

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ANNEALED COPPER COIL & TUBE

Seamless Airconditioning & Refrigeration (AC & R) Copper Tube Manufactured to ATSM B280

NCS has an extensive range of high quality refrigeration copper tube, which complies with ATSM B280 standards.

Annealed Pancake Copper Coil

Length: 15m

Wall Thickness mm (swg) Outside Diameter (OD) mm	0.71mm (22 SWG)	0.81mm (21 SWG)
6.35mm (1/4")	1.68kg ✓	1.88kg ✓
9.52mm (3/8")	2.63kg ✓	2.96kg ✓
12.7mm (1/2")	3.58kg ✓	4.04kg ✓
15.88mm (5/8")	4.52kg ✓	5.13kg ✓
19.05mm (3/4")	5.47kg ✓	6.21kg ✓
22.23mm (7/8")	-	7.29kg ✓

✓ Standard Sizes available Ex-Stock

Weight indicated in kg is for each 15m coil.



Quality Assurance

All Tubes are manufactured from copper which meets the chemical requirements of Copper C12200 (Copper including silver: 99.9% min., Phosphorous 0.015-0.040%).

All Tubes are electronically tested by Eddy Current method, to the requirements of ASTM E243.

All Tubes are cleaned, evaporated and capped to meet the requirements of the standard.

All Tubes are PSB tested and certified.



Hard Drawn Straight Copper Pipe

Length: 5.8m

Wall Thickness mm (swg) Outside Diameter (OD) mm	0.71mm (22 SWG)	0.81mm (21 SWG)
12.70mm (1/2")	1.38kg ✓	1.56kg ✓
15.88mm (5/8")	1.75kg ✓	1.98kg ✓
19.05mm (3/4")	2.11 kg ✓	2.40kg ✓
22.23mm (7/8")	2.48kg ✓	2.82kg ✓
25.40mm (1")	2.85kg ✓	3.23kg ✓
28.58mm (1-1/8")	3.21kg ✓	3.65kg ✓
34.93mm (1-3/8")	3.95kg ✓	4.49kg ✓
41.28mm (1-5/8")	4.68kg ✓	5.32kg ✓
53.98mm (2-1/8")	-	6.99kg ✓

✓ Standard Sizes available Ex-Stock

Weight indicated in kg is for each 5.8m coil.

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