Extra High Performance Copper Products

GREAT LAKES COPPER

COPPER-IRON TUBE FOR REFRIGERATION APPLICATIONS



JOB NAME _____

CONTRACTOR _____

JOB LOCATION _____

WHOLESALER _____

ENGINEER _____

STREAMLINE® REP _____

PRODUCT DESCRIPTION

Streamline® XHP Copper-Iron Tube for use in refrigeration applications. Available sizes ranging from 3/8" to 2-5/8" in outside diameter for 130 BAR / 1885 PSI pressure ratings at 150°C / 300°F.

MATERIAL

Streamline® XHP Copper-Iron Tube shall be made from material in compliance with UNS C19400 grade of copper alloy.

KEY SPECIFICATIONS

Streamline® XHP Copper-Iron Tube is made to meet ASTM B1018, with outside diameters that align with standard ASTM B280 copper tube. Streamline® XHP Copper-Iron Tube is third party listed by UL for continuous operating pressure of 130 BAR / 1885 PSI at a max operating temperature of 150°C / 300°F.

INSTALLATION

Streamline® XHP XHP material was developed for use with high-pressure refrigerants. Compared to conventional pure copper Cu-DHP (99.9% Cu; UNS C12200), Streamline® XHP material is a CuFe2P alloy (2.1-2.6% iron; UNS C19400).

This material's wettability is comparable to that of Cu-DHP. Streamline® XHP is not subject to any restrictions for the selection of brazing alloy. Commonly used brazing filler metal types such as BCup Alloy (may contain 0% - 30% Silver – Ag) or Bag Alloy (may contain anywhere between 24% and 93% Silver – Ag) can be used. The brazing alloy chosen must be clarified with the brazing alloy supplier for each specific application. The selection of brazing alloy may depend on a few factors: applicable codes, OEM specifications, vibration, and operating temperatures.

SPECIFICATION LANGUAGE

Copper-Iron Tube shall conform to the requirements of ASTM B1018. Copper-Iron Fittings shall conform to the dimensional requirements of ASME B16.22 and ASME B16.50. Performance criteria of copper-iron tube and fittings shall conform to UL 207.

1. Operating pressure: 130 BAR / 1885 PSI Max
2. Temperature range: 120°C / 250°F Continuous
3. Tube and fittings shall be listed to UL 207
4. Tubing shall be marked with 3rd party certification testing agency's logos or trademark, along with the maximum operating pressure

OR Piping systems for CO2 applications shall be made from Streamline® XHP tube and fittings.

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COPPER-IRON TUBE DATA

Streamline® XHP Copper-Iron Tube is cleaned in conformance to ASTM B1018 and ASTM B280, the refrigeration industry standard. The tube is protected with green caps, which maintain the standard of cleanliness from the factory to the job site. Unless otherwise specified at time of order, each piece of tube is hard drawn, cleaned and capped, incised marked, and color-coded with black ink.

ITEM NO.	DESCRIPTION	SIZE	WALL
130X02020	3/8" OD x 20' ACR XHP130	3/8"	0.028
130X03020	1/2" OD x 20' ACR XHP130	1/2"	0.037
130X04020	5/8" OD x 20' ACR XHP130	5/8"	0.045
130X05020	3/4" OD x 20' ACR XHP130	3/4"	0.054
130X06020	7/8" OD x 20' ACR XHP130	7/8"	0.063
130X10020	1-1/8" OD x 20' ACR XHP130	1-1/8"	0.079
130X12020	1-3/8" OD x 20' ACR XHP130	1-3/8"	0.097
130X14020	1-5/8" OD x 20' ACR XHP130	1-5/8"	0.115
130X20020	2-1/8" OD x 20' ACR XHP130	2-1/8"	0.150
130X24020	2-5/8" ID x 20' ACR XHP130	2-5/8"	0.186

REFERENCES

C19400 Minimum 97.0% Cu, 2.1-2.6% Fe
ASTM B1018 Seamless Copper-Iron Tube for Air Conditioning and Refrigeration Field Service
ASTM B280 Seamless Copper Tube for Air Conditioning and Refrigeration

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