Chase Brass & Copper Co.

INCORPORATED

Subsidiary of Kennecott Copper Corporation

Waterbury Connecticut

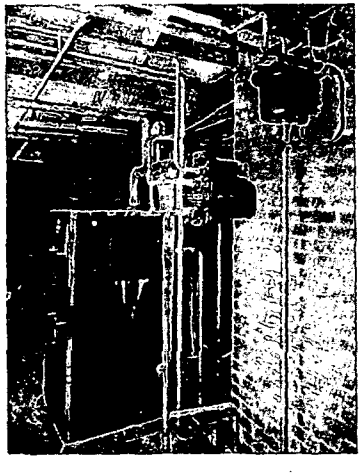
For data on Chase Copper Radiators see page 885

Rustless Heating Lines of Chase Copper Tube and Chase Sweat Fittings

Here are a few reasons why copper tube should be used for heating lines. 1. Copper does not rust, therefore the water or steam inside the lines remains clean. 2. Absence of rust and scale formation assures permanent original steam or water carrying capacity. 3. The resistance to flow in copper tubing is low. 4. Delicately adjusted thermostatic valves and traps are not rust-clogged out of commission. 5. Copper is inexpensive and as satisfactory for giving service as any material known.

TEMPER—Both hard and soft tubing are available for heating lines. In remodelling work, and in replacing old heating systems the soft copper tubing will be found particularly useful. It can be worked down between walls and around corners, long 60 ft. coils eliminate many useless connections. For all soft copper tubing we recommend the extra heavy gage, (known by United States Government specifications as "Type K"). For the average new installation we recommend the light gage copper tube ("Type M").

PRESSURE—Chase copper tube is adaptable for all low pressure heating systems. While we do not recommend the use of copper tubing with any steam system having more than 30 lb. pressure, the factor of safety over such pressure is very great. The bursting pressure, for example, of ¾ in. Chase copper tubing and sweat fittings when connected together is 3,050 lb. per square inch.

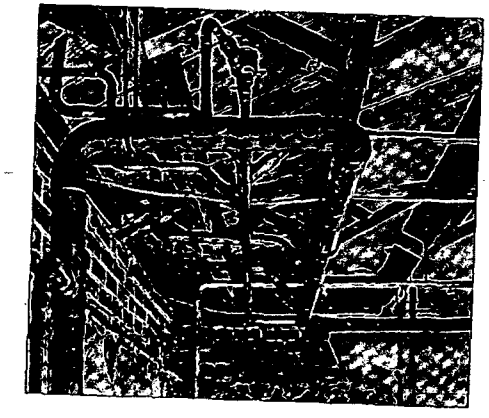


RETURN LINES—While we recommend copper tubing for all heating lines, it is in the return lines that the greatest amount of rusting takes place. Architects and Engineers have learned by experience that these are the lines that are apt to rust and in some installations need replacement, after a very short period of service.

CATALOG—The information on these two pages is necessarily brief. If you would like the detailed story write for a copy of our book, "Chase Copper Tube for Heating Lines."

This is a typical vapor installation. Notice the neatness of the copper tube and sweat fitting heating lines. Also the absence of union connections.

CHASE COPPER TUBE FOR HEATING LINES



Copper tube and sweat fittings are used for the run-outs from main to risers. This minimizes resistance to flow of steam.

Steam Carrying Capacities

The steam carrying capacity of copper tubing is greater than that of iron pipe of the same nominal size. For example, in a steam main, 2 in. copper tubing is capable of taking care of a load of 444 sq. ft. of radiation as compared with 386 sq. ft. for 2 in. iron pipe. This is an increase of 15.1 per cent.

For equal steam pressure drop the capacity of copper tubing is on the average 10 per cent greater than for the same nominal size of iron pipe. Because of this it is frequently possible to use tubing of smaller size.

Pipe Covering

Copper Water Tubing uses the same standard pipe coverings as other heating pipes, but in most cases requires one size smaller covering. This is a saving in the cost of covering.

Costs

The slight extra cost of Chase copper tubing and sweat fittings is a very small amount in dollars to pay for the advantages of a copper tube installation.

SIZES AND WEIGHTS

Nominal Size	Outside Diameter	Inside Diameter	Wall Thickness	Pound per Lineal Foot
½ Inch	0.625 Inch	0.569 Inch	0.028 Inch	0.203 Lbs.
¾ "	0.875 "	0.811 "	0.032 "	0.328 "
1 "	1.125 "	1.055 "	0.035 "	0.464 "
1¼ "	1.375 "	1.291 "	0.042 "	0.681 "
1½ "	1.625 "	1.527 "	0.049 "	0.940 "
2 "	2.125 "	2.009 "	0.058 "	1.46 "
2½ "	2.625 "	2.495 "	0.065 "	2.03 "
3 "	3.125 "	2.981 "	0.072 "	2.68 "
3½ "	3.625 "	3.459 "	0.083 "	3.58 "
4 "	4.125 "	3.935 "	0.095 "	4.66 "