## Heat exchanger tube assembly

In the refrigeration cycle, for higher efficiency, the liquid refrigerant condensed in the condenser and flowing in the capillary tube towards the evaporator should be cooled and pressure reduced; while the vapor refrigerant sucked by the compressor from the evaporator through the suction tube should be heated up from saturated to superheated condition. Hence, the two tubes are brought together to achieve both of these objectives. This twin tube system is called the "heat exchanger" or "suction tube assembly" of the refrigeration cycle.

To help the heat exchange, the two tubes can be soldered together as in the tube-on-tube copper heat exchangers, or the capillary tube can be passed through the suction tube as in the Al-Cu mono-tube heat exchangers.

We manufacture large quantities of both types as well as special ones for freezers like combi, frost-free, or home air conditioner.

Copper, capillary, and (partially) aluminum tubes are cut to lengths and brought together by using special machines.

Aluminum-copper connections of the mono-tube suction tubes may be made by different methods like, Zn-Al alloy brazing, ultrasonic soldering, or resistance butt welding.
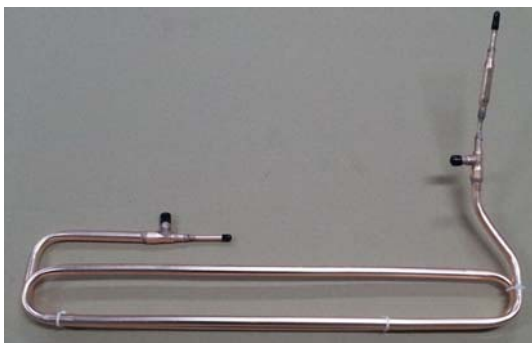
**Our quality controlling:**

● All heat exchangers are tested against leakage by special instruments.
● All capillary tubes of every heat exchanger are tested by flow meters.
● All heat exchangers meet the internal cleanliness criteria defined by R134a, R600a.
● All open ends are capped with plastic caps; packed with strong carton box on wooden pallet or wooden boxes for long distance sea voyages.

**Material:**
Copper tube, aluminum tube, capillary tube
There is bundy tube black cathode painting to instead of copper tube or aluminum tube to save costs.

**Product picture**