

#2 Copper Soldering or Brazing Rod or Iron:

To Use: A soldering iron is a hand tool used in soldering. It was mounted on a gas torch and heated. Once heated, the copper tip melted the solder so that it could flow into the joint between two workpieces. A soldering iron is composed of a heated metal tip and an insulated handle. ... Solder melts at approximately 185 °C (365 °F).

Solder is a metal or metallic alloy used, when melted, to join metallic surfaces [source: Merriam-Webster]. ... When soldering copper, you must make sure the soldering material has a lower melting point than copper, or the tube will melt before the solder does. Different metals can be soldered: Metals that can be soldered include gold, silver, copper, brass, and iron. The bond created when the melted soldered material solidifies. Not as strong as welding or brazing. A soldered bond is not as strong as a welded or brazed one because it is not a mechanical connection.

