

TW-0

(AWS BCuP-2)

Description:

- Copper-phosphorous brazing alloy for joining copper and its alloys. Self-fluxing on copper and excellent fluidity.

Applications:

- Used for copper and its alloys. This brazing alloy has excellent fluidity within its working temperature and therefore easily penetrates tight-fitting joints (clearance between 0.03 and 0.08mm).
- Self-fluxing on copper but requires the use of flux when joining brass.
- Recommended for copper-to-copper joints that are not subject to vibrations.
- Use for joining and repairing copper pipes, cooling coils, heat exchangers, refrigerator units and electrical contacts.

Characteristics:

Melting Range	Solidus 710°C / Liquidus 793°C
Working Temperature	730 - 840°C
Heating Method	Torch, furnace, induction
Tensile Strength	25 kg/mm ² (35,550 psi)
Elongation in 2"	5%
Chemical Composition	Cu 93%, P 7%

Procedure:

1. Clean brazing area removing rust or grease. Use torch with a natural flame.
2. Flux is not needed to join copper to copper. Heat the copper properly until it is a dark red, then add a drop of alloy making it flow.
3. Continue applying the alloy by heating the joint area until it flows completely throughout the joint by capillary action.
4. For joining copper to bronze or brass, cover the area well with flux and heat with the torch until the flux liquefies.
5. Apply the alloy. It is very important that the joint is properly closed to ensure leak-free joints, particularly in overlapping joints of copper pipes.

Available forms:

Round rods (Ø)	1/16" (1.6mm), 3/32" (2.4mm), 1/8" (3.2mm)
Flat rods	0.05" x 1/8" (1.3x3.2mm)
Lengths	18" (457mm), 20" (508mm) y 500mm

