

BRAZING & WELDING ROD COMPARISON CHART

| Part No. | Material | Colour | Composition | Tensile Strength | Working Temperature | Melting Range | Material Compatibility | Projects |
|----------|-------------------|--------|-----------------------|-----------------------|----------------------------------|-----------------------------------|--|---|
| 211556 | Nickel Bronze | Pink | RBCuZn-D | 515 MPa 75,000 psi | 940°C - 980°C 1724°F - 1796°F | 921°C - 935°C 1689°F - 1715°F | Joining metals: stainless steel, cast iron, nickel, brass alloys | Metal components: Gear teeth, fences, radiators. |
| 211567 | Aluminium | Silver | 4043 Aluminium | 200 MPa 29,000 psi | 574°C - 632°C 1065°F - 1170°F | 574°C - 620°C, 1065°F - 1148°F | Aluminium and zinc-based castings | Soldering aluminium windows, doors, joints, aluminium boats, gutters, aluminium motor castings and zinc-based castings |
| 211578 | Bronze | Blue | RBCuZn-C | 415 MPa 60,000 psi | 910°C - 955°C 1670°F - 1751°F | 866°C - 888°C 1590°F - 1630°F | Steel, cast iron, copper based, galvanized and malleable metals | Weld deposits are non-porous for leak proof joints on water, oil and gas lines. Weld deposits freeze rapidly from a fluid to solid state |
| 228434 | Nickel Bronze | Pink | RBCuZn-D | 515 MPa 75,000 psi | 940°C - 980°C 1724°F - 1796°F | 921°C - 935°C 1689°F - 1715°F | Joining metals: stainless steel, cast iron, nickel, brass alloys | Metal components: Gear teeth, fences, radiators. |
| 228445 | Tobin Bronze Flux | White | RBCuZn-A | 400 MPa 58,000 psi | 900°C 1652°F | 875°C - 890°C 1607°F - 1634°F | Selected beams, bronzes and low strength brazing of steel | For gas welding only. Brazing of brass and bronze. Braze welding of copper and alloys. |
| 228456 | Manganese Bronze | Blue | RBZuZn-C | 415 MPa 60,000 psi | 910°C - 955°C 1670°F - 1751°F | 866°C - 888°C 1590°F - 1630°F | Steel, cast iron, copper based, galvanized and malleable metals | For gas welding only. Not recommended for the joining of copper pipes which carry hot water or sea water |
| 228467 | Silver | Silver | Copper with 5% silver | 250 MPa 36,000 psi | 710°C - 820°C 1310°F - 1508°F | 645°C - 815°C 1193°F - 1499°F | Brazing of copper and copper alloys, silver and molybdenum | For gas welding only. Suitable for silver brazing of copper pipes used in general plumbing applications. Requires the use of Silver Flux Paste 228478 |

INSTRUCTIONS FOR BRAZING

1. Thoroughly clean all areas to be joined with sand paper.
2. A slight oxidising flame should be used to braze. Adjust your flame accordingly.
3. Heat the edges to be joined to a dull red colour. Melt the end of the flux coated rod and at the same time heat both ends of the area being brazed to an equal amount. Ensure that the tinning has occurred on the area being brazed.
4. Melting of the area being brazed is not required in brazing and care should be taken not to overheat the base metal.
5. Continue adding the filler rod to the base metal until the required size and shape is attained.
6. Allow the joint to cool, remove any flux residue with a wire brush or acid solution followed by a water **rinse**.