



REFRACTORY METALS AVAILABLE FROM TIPALLOY

TIPALLOY T-1W AND T-3W – Copper Tungsten materials recommended as facings or inserts for projection welding electrodes and flash or butt welding dies where high electrical conductivity is desirable and a degree of malleability is necessary.

TIPALLOY T-5W AND T-TC5 – Recommended primarily for projection welding dies where abrasion may be encountered and pressures are light.

TIPALLOY T-10W – Recommended as facings and inserts for flash and butt welding dies and general purpose projection welding electrodes. It may also be used as seam welder bearing inserts and facings for electro-forging dies. It is also high used for welding of materials with high resistance, such as stainless steel.

TIPALLOY T-20W AND TC-10 – Specifically recommended for heavy duty projection welding electrodes and for die facings in electro-forming and electro-forging applications. Also suitable for die material for electrical upsetting of rivets and studs.

TIPALLOY T-30W – This Copper Tungsten, due to its greater hardness, offers increased wear resistance without loss of conductivity in projection welding dies, electrical upsetting, and cross wire welding.

TIPALLOY T-TC20 AND T-TC53 – Copper Alloy Tungsten Carbide materials having good wear resistance and extreme hardness. All contours should be formed by grinding. Recommended for electro-forging and upsetting where high temperatures and heavy pressures are encountered. TC53 material supplied in fully heat treated condition.

TIPALLOY T-100W – An extremely hard Tungsten with low ductility that must be ground to contour. Used primarily when welding non-ferrous metals, such as copper to brass and copper to copper. Also used in electrical upsetting and for electro-forging electrodes.

TIPALLOY T-100M – Used primarily for welding or electro-brazing non-ferrous metals having relatively high electrical conductivity. Welding of copper and brass wires and copper wire braid to brass and bronze terminals are typical applications. Special procedures are generally required.