

Dry Molybdenum Electrodes



Dry molybdenum electrodes provide a cost-effective solution to applying direct electrical heating to glass. It is non-advancing and therefore should only be used in areas of low wear and modest temperatures, such as a forehearth. As the electrode is 'dry' there is no heat loss due to water-cooling.

The electrodes can be supplied coated to prevent oxidation during heat-up, and may be installed horizontal or vertical.

Special water boxes to provide added security against glass leaks can be provided if required.

KTG Engineering also manufactures molybdenum/alloy bi-metallic electrodes.

Tin Oxide Electrodes



Tin oxide electrodes have been used for many years for the electric melting of glass. The main use is in heavily oxidised glasses, which would erode molybdenum electrodes, resulting in excessive molybdenum consumption and contamination of the product. On lead glasses tin oxide electrodes are usually used in the furnace, forehearth and gathering bay systems. For high quality soda lime glass tin oxide electrodes can be used in the forehearth and gathering bay systems.

KTG Engineering's tin oxide rod electrodes have a number of long internal, blind holes, drilled through the base. These fit over pure silver rods, mounted on the water-cooled pot connector, which is retained by an insulated support assembly. The power cable is connected to a brass terminal fitted between the water cooling tubes of the pot connector. Due to the heat of the furnace the ends of the silver rods melt and make a very efficient molten silver contact with the tin oxide electrode, while at the same time the water cooling on the pot connector prevents leakage of glass past the electrode.

Standard sizes available are 64, 88, 100, 150, 160mm diameter.

Advancing mechanisms are available for sizes of 88mm and above.