## **ELKONITE®**

Elkonite is a unique family of composite materials consisting of tungsten, molybdenum and tungsten carbide combined with silver or copper. These combinations give Elkonite the high strength and high melting point of the refractory metals along with the high thermal and electrical properties of silver and copper.

Elkonite materials are used for electrodes in electrical discharge machining (EDM) and electrochemical machining (ECM). The spark erosion resistance and good electron emission characteristics of Elkonites make them good EDM electrode materials. They have excellent wear resistance, good metal removal rates and the ability to retain good detail. They are particularly good for machining tungsten carbides as other electrode materials may be in adequate. Elkonite 3W3 is used where speed and wear resistance is important. Elkonites 10W3 and 20S are outstanding on applications requiring high precision cutting and high quality surface finishes. Elkonite 10W3 is used for ECM electrodes because it conducts high current and resists deformation and abrasion from high velocity movement of the electrolyte.



**Elkonite EDM Electrode**