Superior Molybdenum Glass Melting Elektrodes

QSIL provides the industry with the highest standards for efficient glass melting and electric boosted melting with its high purity molybdenum (Mo) glass melting electrodes (GME). The high temperature strength and rigidity of molybdenum electrodes, plus the inherent electrical properties of molybdenum, provide maximum operating efficiency.

- > Standard or tapered threads
- > Mo GME (coated and uncoated)
- > Machined or centerless ground surfaces 128 micro in. (3.25 µm) or better
- > High purity (99.95% minimum)
- > Bubble free, low carbon electrodes
- > 1.25 in. (32 mm) to 8 in. (203 mm) diameter
- > Uniform recrystallized grains for creep resistance

We machine simple or complex thread forms to precise customer requirements.

diameter		diameter variations (powder metallurgical)		diameter variations (electron beam melted)	
mm	inch	mm	inch	mm	inch
31.7	1 1/4	± 0.38	± 0.015	± 0.5	± 0.02
38.1	1 1/2	± 0.38	± 0.015	± 0.5	± 0.02
50.8	2	± 0.76	± 0.030	± 0.5	± 0.02
63.5	2 1/2	± 0.76	± 0.030	± 0.5	± 0.02
76.2	3	± 1.0	± 0.040	± 0.5	± 0.02
101.6	4	± 1.0	± 0.040	± 0.5	± 0.02

Length variations ± 5 mm / ± 0.2 inch

QSIL's molybdenum is the "best" choice for electric heating in the glass melting process:

> Excellent strength and stability at temperatures over 2000 °C
> High thermal and electrical conductivity
> Low coefficient of thermal expansion (CTE)
> Resistance to corrosion
> Minimizes detrimental glass discoloring
> Good machinability

Chemical Characteristics

Molybdenum powder chemical compositions are used for producing glass melting electrodes.

HIGH PURITY MOLYBDENUM ELECTRODES

element		standard
Mo	min.	99.95 %
C	max.	0.005 %
Ca	max.	0.003 %
Cu	max.	0.002 %
Fe	max.	0.005 %
Mg	max.	0.001 %
Mn	max.	0.001 %
Ni	max.	0.0015 %
Sn	max.	0.003 %

Mass fraction in %
Information on testing methods available upon request.

Maximum variations from straightness will be 0.030 inch per foot (2.50 mm per meter). Maximum variation in cut lengths will be +1/4", -0 inch (+6.35 mm, -0 mm). Special tolerances upon request.

For additional information please contact:

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