

- HEATING
- INSULATION
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- FIRING & MELTING



DIN EN ISO 9001
Zertifikat Nr. 71 100 G 016



■ M.E.SCHUPP® - MOLYCOM®-ULTRA

Molybdenum Disilicide Electric
Heating Elements up to 1,800°C

Introduction

Molycom®-Ultra Electric Heating Elements are dense cermet materials, mainly composed of MoSi_2 (molybdenum disilicide) and some Ceramic Components. Above 900°C service temperature the surface will form a protective high temperature layer of pure quartz, which gives the Molycom®-Ultra material a high resistance to oxidation. If this glassy phase should be exposed to contaminants, a lower melting phase forms. This material literally drips off the element exposing more molybdenum disilicide on which a new protective oxide layer forms. Molycom®-Ultra elements become somewhat ductile at approximately 1,200°C.

Molycom®-Ultra elements may be used up to a surface temperature of 1,800°C in oxidizing atmospheres. Long service life and ease of replacement contribute to high furnace utilization and low maintenance costs. New and old elements can be used together and in series.

Molycom®-Ultra elements are manufactured according to established industry standards. The elements can also be used in combination with other molybdenum disilicide elements as an alternative or replacement part.

At low temperatures, an oxidation of molybdenum and silicon on the surface of the elements can occur at temperatures around 550°C. The oxidation product is a yellowish powder known as „pest“ and has normally no detrimental effect on the performance of MolyCom®-Ultra elements because the material is dense.



U-Element



W-Element