ML current conductors.

We supply molybdenum-lanthanum oxide (ML) wires and pins for conducting electricity in halogen lamps and gas discharge lamps. Why do we recommend molybdenum-lanthanum oxide? By using different alloy materials and optimized production processes, we are able to improve the properties of pure molybdenum. To make sure that our electrically conductive pins and wires benefit from particularly high ductility and dimensional stability, we dope our molybdenum with $\text{La}_2\text{O}_3$. 
The stabilized microstructure and modified recrystallization behavior prevent the premature embrittlement and fracture of our material. A high level of resistance to oxidation is particularly important at application temperatures of over 300 °C: The oxidation rate of ML is considerably lower than that of pure molybdenum.

ML has a particularly fine-grained fiber structure. After recrystallization, the material forms a stacked microstructure, i.e. a structure consisting of elongated, interlocked grains. As a result, the recrystallization temperature is significantly higher than in the case of pure molybdenum and even higher than that of AKS-doped molybdenum (AKS = aluminium-potassium silicate). Our ML wires and pins remain ductile at room temperature and at very high operating temperatures.

In fully automated production processes in particular, the yield strength of every coil of wire must be consistently high. Only then can a uniform springback be guaranteed. You can rely on our wire. With our low manufacturing tolerances, we help you achieve trouble-free production without downtimes.

The surfaces of current conducting wires must meet exacting requirements. Because our wires undergo an electropolishing process, they have a particularly smooth and flawless surface. The high surface quality and a very low split level ensure an airtight connection between the glass and the conducting wire. We subject each individual wire to eddy current testing. This ensures that we supply only flawless wires.
The advantages of ML at a glance:

- High surface quality
- Low split level
- Higher recrystallization temperature
- Elongated grain structure for higher ductility
- Greater creep resistance

As standard, we supply ML wire in diameters of 0.3 to 2.0 mm on standard coils. Do you need a special solution? That's not a problem. Just contact us.

**A single source for all your needs.**

We handle every stage in the manufacture of our products in-house. From the raw materials through to the finished product: including the development of new materials. In this way, we can guarantee that you benefit from the very best quality.