MY-ESS ribbons for quartz glass lamps.

MY ESS ribbons are used to ensure the reliable flow of electricity to quartz glass lamps. Thanks to their special geometry, they reduce the stress at the boundary between the surrounding glass and the electrically conductive ribbon. As a result, the lamp remains gas-tight and air leaks are prevented.

We have developed ribbons which have the optimum material and shape for conducting electricity: ESS ribbons (Elliptically Shaped for Sealing) made of molybdenum-yttrium-cerium mixed oxide. These can be reliably welded to internal and external power supply wires and are then subsequently enclosed by the quartz glass. Thanks to their flat, elliptical shape, our MY ESS ribbons reduce the stress between the glass and metal components.

Our modern, fully automated production methods guarantee consistent high quality. By cutting down this stress between the glass and metal components, we can reduce the risk of air leaks and consequently increase the durability of your lamps.

Molybdenum-Yttrium oxide.
For good adhesion and low stresses.
To manufacture our ESS ribbons, we dope molybdenum with yttrium-cerium mixed oxide. The benefit compared to pure molybdenum:

- Reduced mechanical stress between glass and metal
- Higher recrystallization temperature
- Improved weldability
- Better foil adherence for glass sealing

Why do molybdenum-yttrium and quartz glass adhere so well? During etching, the dopants in the MY are released at the material surface. As soon as the molten glass comes into contact with the metal surface, the $\text{Y}_2\text{O}_3$ dopants and the quartz glass ($\text{SiO}_2$) form a chemical bond that increases the adherence between the ribbon and the glass.

The benefits to you.

You can use MY-ESS ribbons to produce long-lasting halogen and HID lamps which offer maximum light intensity. Thanks to the high quality of our products, you can achieve high production levels during lamp manufacture.

- High production levels during lamp manufacture
- Constant high quality of our ribbons
- Thicknesses and widths adhere to narrow tolerances
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.