

Molybdenum Heater

✓ Moly-D Two shank

The U shaped elements are most frequently used suspended with the bottom of the "U" down.

The element consists of two cold ends (Lu) and a U-shaped hot section (Le).

The cold ends are twice the diameter of the hot section and are attached by a weld.

The extremities of the cold ends are metallized with aluminum to provide a low-resistance contact surface to which the electrical connections are made with flat braided aluminum straps.

The two-shank element is available in the following hot zone/cold end diameters: 3/6, 4/9, 6/12, 9/18 and 12/24.

These elements are available in two grades: MD-31 for element temperatures up to 1700°C (3100°F) and MD-33 for element temperatures up to 1800°C



✓ Moly-D bent

The molybdenum di-silicide material becomes soft and ductile about 1200°C.

Suspending the elements from the cold ends and allowing the hot zone to hang vertically down is the most frequent method of use.

The Moly-D® elements can be provided with bends in the cold end (Lu) of 30°, 45°, 90° or with bends in the hot zone (Le) of 90°.

The hot zone (Le) is suspended vertically with the bottom of the "U" down.

The bent element is available in the following hot zone/cold end diameters: 3/6, 4/9, 6/12, 9/18 and 12/24.



✓ Moly-D Multi-shank (4 or more)

For applications where the furnace roof is particularly low, the use of horizontally mounted elements can be used. In such cases, four-shank or multi-shank elements might be used where the surface temperature of the element will not exceed 1600°C.

Available in Grade MD-31 in 3/6, 4/9, 6/12, 9/18 and 12/24 sizes.

The multi-shank elements have advantages over two-shank elements in that the hot zones are longer, therefore fewer elements can be used and the cold end losses are reduced.



✓ **Moly-D Accessories**

Moly-D® aluminum straps, held in place by nuts and bolts, are available in two primary styles:

- Single Loop Straps for connecting binding post to element.
- Double loop for connecting element to element.

Moly-D® holders are available in three styles:

- Ceramic type holders are available for the 6/12, 9/18 and 12/24 diameter elements. These holders offer higher temperature capabilities for use with elevated termination temperatures.
- Plate type holders are available for the 3/6, 4/9, and 6/12 diameter elements. These holders are used when a single hole is cut into the furnace wall for each element. A high-temperature fiber insulating board is installed to prevent heat from escaping.
- Metallic holders are available for the 3/6, 4/9, 6/12, 9/18 and 12/24 diameter elements. They work well in applications where spacing is restricted.

