As the world’s leading supplier of aluminum vacuum valves and weldments Vacuum Research can provide process solutions that are just not practical with poor conductivity materials such as stainless steel. We have more than 50 years experience with aluminum valves on systems that include temperature, pressure, hazardous environments and of course, high vacuum. Water cooled valves in both gate and poppet styles are available with ANSI flanges up to 24 inches and with ISO flanges up to 630 mm. Highly efficient cooling water circuits with low ΔP and high overall ‘u’ maximize thermal transfer and minimize cooling water consumption. In addition to water cooling all valve styles can be provided with thermal radiation shields on the Gate.

Also available are the many standard options described in the accessories section of this catalog. The most popular of these options are position indicators for remote indication of the valve position, and gauge or roughing ports with NW style flanges. Special solenoids and position indicators for hazardous areas and combinations of ISO, ANSI and Conflat® flanges are also available.

Water Cooled Port Flange

Any Size ANSI or ISO Port
Up To 24 Inch, 600 mm

Teflon Water Lines Covered
With Stainless Steel Braid

Optional Water Cooled Gate
Shown In Open Position

Gate Seal O-Ring

Water Out

Water In

Ordering Information

Water Cooled Valves are always custom-built to provide the features required for each application, however, the starting place is our standard LPWA, or End-Operated Valves described in this catalog.

Select the valve style and size that fits your needs and we will send a drawing showing the water cooling and radiation shield needed.