



# Clarkson™ KS1 Knife Gate Valves

Reliable, fit-for-purpose slurry isolation technology

Slurry knife gate valves operate in some of the harshest and most remote locations on earth. In these challenging applications, operators often concede routine valve failure, but this comes at a hefty price of downtime and valve replacement costs. There must be a better solution...

An ineffective seal at valve closure can **increase the rate of failure** in a slurry knife gate valve and heighten the chance of a high-pressure downstream leak, putting **personnel and plant at risk**.



Due to **highly erosive and abrasive** process conditions, most severe service knife gate valves must be replaced due to **excessive body wear**.



Knife gate valves without a full round port in slurry service experience **significantly more turbulence** and **fail earlier** than valves with a full round port.



Valves in severe slurry service can require downtime for maintenance or replacement **multiple times per year**, lowering productivity and increasing operating costs.



What if you could solve these challenges with a single valve?

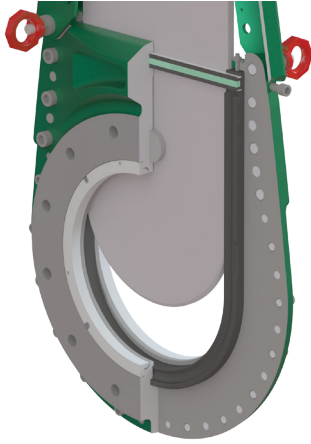


Now you can with the Clarkson KS1 Knife Gate Valve ▶

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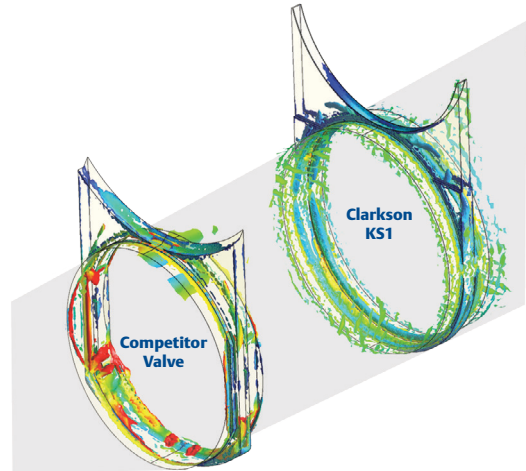
Upgrade your severe service knife gate valves to extend valve life and service intervals, and lower total cost of ownership.

## Discover enduring zero leakage sealing performance



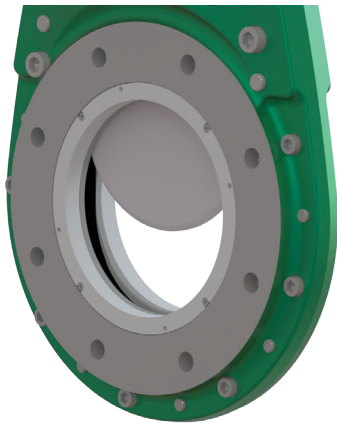
Deploy a patented gate edge seal that creates a continuous seal around the gate, together with a precision-molded elastomer seat to deliver zero leakage. This heavy-duty replaceable seat increases the contact area and resilient sealing ability of the valve compared to standard O-ring designs, resulting in superior isolation performance over an extended lifecycle.

## Perform in heavy slurry conditions



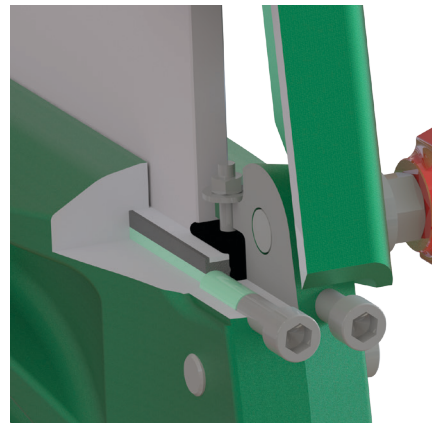
Run your processes for longer with a valve design optimized to thrive in heavy slurry conditions. A full round port eliminates protrusions into the flow, minimizing turbulence across the valve to extend body life. This not only ensures the longevity of sealing components, but also minimizes the damaging impacts of slurry on downstream pipeline equipment.

## Defend your sealing elements



Extend the life of your valves with standard inlet and outlet hardened wear rings to protect the sealing elements and body from abrasive slurry. These durable Ni-Resist rings can be rotated 3 times through 4 positions to extend valve life and replacement intervals, allowing you to improve your asset utilization and process productivity.

## Return to production at speed



Minimize valve repair downtime with external packing adjustments that dynamically self-adjust pressure to the gate edge seal system. Repairs can be performed rapidly using standard tools and readily available spare parts. The valve is also designed to MSS-SP-135 face-to-face dimensions for simple changeout and upgrade of your underperforming valves.

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