



## **DeZURIK KGC-MD MAXIMUM DUTY CAST KNIFE GATE VALVES**



## Design and Construction

DeZURIK KGC-MD Maximum Duty Cast Knife Gate Valves are designed to provide long service life in highly abrasive applications including Pulp and Paper, Mining, Chemical, Petrochemical, Power, Steel and Food Processing industries. These Maximum Duty Knife Gate Valves are specifically designed to provide the shearing and sealing capabilities needed in demanding services such as cyclone separators, recycle high density cleaners, recycle detrashers, hydropulpers, pulper rejects/knotters, or sand cleaners.

The KGC-MD Knife Gate Valves are available in 3-24" (80-600mm) sizes with metal or dual metal and resilient seats. To withstand highly abrasive media, the valves are available with a replaceable hardened seat, hardened gate, full 100% port opening, high performance packing system with wire scraper rings, and heavy-duty superstructure. All these features combine to provide a longer service life, less downtime and less maintenance than other valves designed for these tough applications.



Metal seated KGC-MD Maximum Duty Knife Gate Valves installed in High Density (HD) cyclone separators at a recycle paper mill. These valves lasted three times longer than the previous valves installed in this service.



## Heavy-Duty Cast Body

The cast body and packing gland are available in 304 and 316 Stainless Steel with ANSI Class 150 flanges. The body features cast gate guides to provide support for the moving gate. Cast gate jams at the bottom of the body hold the gate securely against the seat to assure positive shutoff. The body has raised face end connections with drilled and tapped lugs. Additional body materials include 317, 254, 2205 duplex stainless steel or Hastelloy C.

## Full Port ID

The 100% area round port on the KGC-MD allows high flow capacity and minimum pressure drop. The seat ID is equal to the inside diameter of standard (ASME B36.10) pipe.

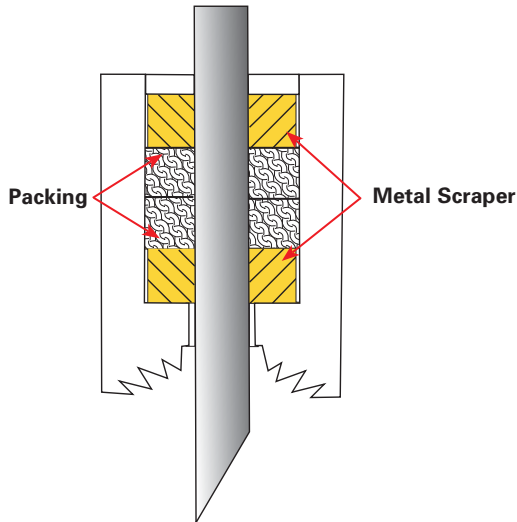
## Purges in Chest and Seat Area

As an option, purges in both the chest and seat area are available to prevent process media buildup.



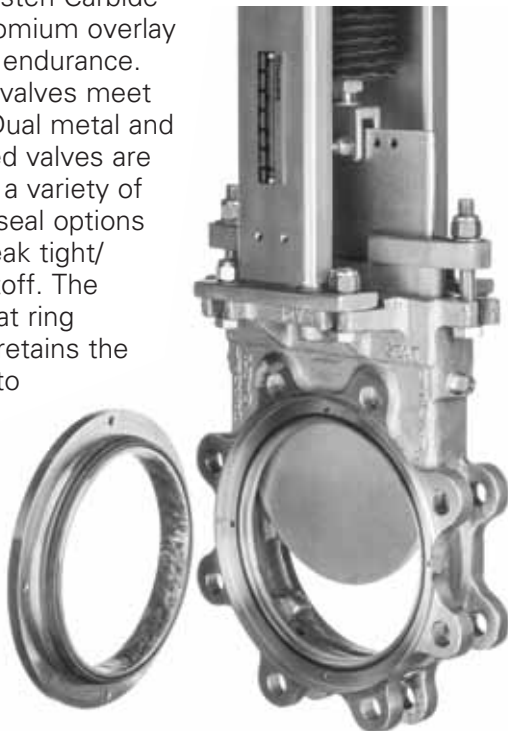
## DeZURIK Exclusive Premium Packing System

The KGC-MD High Performance Packing System includes a number of features that reduce external leakage, minimize friction, reduce actuator thrust, and allow field replacement of packing. The DeZURIK exclusive rounded gate edge, rounded cast packing chamber and packing, form a tight seal. The system includes various braided packing options sandwiched between a top and bottom wire scraper ring to wipe the gate and prevent process media from entering the packing chamber.



## Replaceable, Wear Resistant Metal or Resilient Seat Options

Both metal and resilient seated valves are available in the 100% area round port design. Metal seats are available in either Carbon Steel or 316 Stainless Steel. They can also be ordered with a Chrome Carbide, Tungsten Carbide or Cobalt Chromium overlay for maximum endurance. Metal seated valves meet MSS SP-81. Dual metal and resilient seated valves are available with a variety of resilient seat seal options and provide leak tight/drip tight shutoff. The removable seat ring mechanically retains the resilient seat to prevent it from becoming dislodged.



## DeZURIK Exclusive Rounded Gate Edges

The standard 410 Stainless Steel gate has a rounded gate edge that is precision machined with a ground finish on both sides and edges. The rounded gate edge moves smoothly through the packing with minimal packing disturbance, thus requiring less adjustment and maintenance of the packing system.

## Stem/Gate Clip

A strong, investment cast gate clip complements KGC-MD's robust construction. Gate clip and gate are drilled to match the shoulder screw diameter to provide a heavy-duty connection needed for high cycle applications.

## Protective Stem Cover Bellows

KGC-MD valves are available with an optional Stem Actuator Cover Bellows to improve actuator cycle life in harsh environments where actuator stem protection from dirt and debris is required.



### **High Strength Actuator Legs**

Optional High Strength Actuator Legs provide additional rigidity to withstand horizontal valve mounting, high cycle rates, and vibration common on cyclone applications, without external actuator supports. Available on valve sizes 3-12" (80-300mm).

### **Actuators and Accessories**

DeZURIK pneumatic cylinder actuators are mounted on a sturdy, reinforced superstructure. A variety of cylinder actuator accessories for customizing the valve/actuator package are available to meet your specific requirements.

### **Sales and Service**

For information about our worldwide locations, approvals, certifications and local representative:

Web Site: [www.dezurik.com](http://www.dezurik.com) E-Mail: [info@dezurik.com](mailto:info@dezurik.com)



250 Riverside Ave. N. Sartell, Minnesota 56377 • Phone: 320-259-2000 • Fax: 320-259-2227

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