Shut-off valves for various media
OnC KnifeGateValves

Shut-off valves in the design as knife gate valves are used for reliable on/off and throttling function of various media. They are designed for a wide range of applications in some of the most corrosive, erosive and abrasive industrial environments.
OnC KnifeGateValves 500 series are wafer style valves casted as monoblock with raised face and ribs in larger diameters for extra body strength.

The slide plate has a cutting edge to cut through blockages caused by media with a high solid content such as cellulose, sludge, pulp, biomass, water, ash, granulate and various types of impurities.

The valve design is modular and allows selection of different materials and actuation types, as well as the associated automation accessories for adaptations to the process requirements.

---

The OnC KnifeGateValves also have a short overall length compared to a conventional gate valve, which is much larger in size. As a result, a knife gate valve is much lighter and requires less installation space.

**Features**
- Short face-to-face length and light weighted.
- Easy to install, maintain and disassemble, fewer components compared to conventional gate valves.
- Full bore opening unlike butterfly valves.
- Especially suited for slurries and high viscous liquids because there are virtually no pockets for solids to collect.
- High quality soft seating permits use in isolation application.
OnC KnifeGateValve KV500.NG (Normal Gate)

- **Size**: DN50 – DN400
- **Pressure**: DN50 - DN150: PN10, DN200 - DN250: 8 Bar (manufacturer standard), DN300 - DN350: 6 Bar (manufacturer standard), DN400: 4 Bar (manufacturer standard) (on request PN16, ANSI CL150 & ANSI CL300)
- **Direction**: Bi
- **Actuation**: Hand wheel, Chain wheel, Pneumatic, Hydraulic and Electric

OnC KnifeGateValve KV500.TG (Throughgoing Gate)

- **Size**: DN50 – DN600
- **Pressure**: PN10 (on request PN16, ANSI CL150 & ANSI CL300)
- **Direction**: Uni
- **Actuation**: Hand wheel, Chain wheel, Pneumatic, Hydraulic and Electric
OnC KnifeGateValve KV500.NG (Normal Gate)
The OnC KnifeGateValve KV500.NG is a uni-directional valve designed for isolation application where solid-liquid mixes, corrosive, abrasive, viscous liquid, abrasive slurries, pulp stock and dry materials are involved.

The design of the body and seat ensures non-clogging shut off. The body is made of single casting, and it has cast jaws without welding on pressure-containing parts to make it even more rugged.

The design incorporates a rigid fabricated yoke that will accommodate hand wheel or pneumatic actuators. Internal cast wedges and gate guides allow for tight shut off.

OnC KnifeGateValve KV500.TG (Throughgoing Gate)
The OnC KnifeGateValve KV500.TG is a bi-directional valve specially designed for media with high consistency, to handle high-density paper stock, wood chips, plastic pellets, etc., which makes the valve suitable for a wide range of demanding applications in industries like pulp and paper, power, chemical, waste and water treatment, etc.

The double seat design in the OnC KnifeGateValve KV500.TG model assures a non-clogging shut off on either normal or reverse flow. The body is made of full lug-style, split cast body with reinforced ribs for additional strength. The port design allows greater flow capacity and lower pressure drop.

The gate design eliminates unbalanced forces on the valve plate and allows trouble-free opening and closing of the valve.

Benefits
+ Various material compositions (stainless steel, cast iron, nitrile, Viton®, PTFE, etc.)
+ PN10 pressure rating for all diameters
+ Low pressure loss, full opening
+ Variable diameters (DN50 – DN600)
+ Manual and automatic actuation
+ Silicone-free
+ Leakage rate class VI

Applications
• Paper
• Power station
• Mining
• Chemistry
• Water/wastewater
• Food