

# NewCon Co.

**Your final knife gate valve solution.**

Maximum durability, performance and value without the mess.

## Valve Features

### Zero leakage to atmosphere

Work environments are safer with NewCon. Purge-less NewCon Knife Gate Valves (KGVs) prevent slurry from expelling into the atmosphere during cycling and costly, adjacent equipment is safe from the corrosiveness of expelled slurry. Plus, with NewCon valves, there is no need for splash guards and flush water slurry containment systems.

### Extremely durable liner

The NewCon KGV liner is made of high quality urethane, which far exceeds the wear-life of gum rubber and other softer liner or sleeve materials. Aside from being highly abrasive resistant, the not-so-secret quality of urethane is that it rejects solids. The competition's softer sleeves and liner materials allow for the solids to embed, causing premature gate and resilient seat failure.

### Inexpensive rebuilds

When rebuilds are determined to be necessary, past experience has shown that our customers often rebuild NewCon KGV's for around 10% to 15% of the cost of new, by simply installing a field-replaceable urethane liner and molded elastomer gate seal. Robust NewCon stainless steel gates rarely need to be replaced.



### Self-flushing design

As a NewCon valve cycles to "closed", the beveled edge (facing upstream) redirects the flowing slurry toward the beveled urethane liner seat at a very precise angle. Velocity increases, turbulence develops and intensifies, and then the slurry is displaced as the gate settles into the seat. It's a patented, simple, and proven design. Solids of any size do not get trapped in our urethane liner seat. It just doesn't happen. Repeat worldwide NewCon customers know the design works, and they'll tell you so, because they wouldn't have bought a NewCon valve a second time if we couldn't isolate their slurries. To view an animation of the valve assembly, visit us online at: [newconvalve.com](http://newconvalve.com).



### Made in America

NewCon KGV's—made in America for 30 years... and counting...



Visit us online at:

**[www.newconvalve.com](http://www.newconvalve.com)**

Contact us at: NewCon Company

605 West 37th Street, Hibbing, Minnesota USA 55746-2829

Phone: 218-262-3841 | FAX 218-262-2905

Sales E-mail: [sales@newconvalve.com](mailto:sales@newconvalve.com) | [newcon@newconvalve.com](mailto:newcon@newconvalve.com)

## Standard & Optional Valve Features

Safety lock-out pins, and protective rod boots



Hand-wheel safety lock-outs

Bevel-gear safety lock-outs



HT2 premium urethane liner for added abrasive resistance and temperatures to 250 degrees F

Steel reinforced rubber coated flange seals in 16" valves and larger



Optional gate coatings are available.

304 stainless gates are standard, but other alloys are available (316, 2205, 2507, 255, 17-4PH, AL6XN, and C276)

Optional 316 stainless valve body fastener kits are available.

NewCon ductile iron bodies are internally and externally epoxy coated.

Body halves are drilled and tapped to match ASME B16.5/150 flanges as standard. Optional drilling is available.

Electrical and/or control accessories are available.

All NewCon valves are hydro-tested to 1.5 X the rated pressure. Optional pressure test ratings are available.

**MADE IN THE USA**

# NewCon valves have worldwide applications.

NewCon valves are being used extensively worldwide in mineral processing applications such as Taconite/Iron Ore, Copper, Gold, Soda Ash/Borax, Phosphate, Lead, Coal, Cement, and Limestone. You will find NewCon installations in a variety of heavy duty large and fine coarse slurry applications.

In mining, our typical applications include ball mills, hydro-cyclones, tailings, flotation, process water, concentrate slurry, thickeners, screen box isolation, water recirculation, sag mill discharge, and more.

In coal-fired power generation, NewCon valves are being used in a variety of applications, including scrubber isolation, bottom ash slurry, pyrite, pump discharge, sluice lines, lime slurry isolation, reaction slurries, ash hopper load-out isolation, absorber suc-

tion and discharge isolation, and gypsum management.

NewCon valves can also be found in many other industries where severe slurries are found, such as cement, sand and gravel, water treatment, steel manufacturing, pulp and paper, alumina, and wastewater treatment.

For nearly 30 years, NewCon Company has been manufacturing abrasive resistant, purge-less knife gate slurry valves. The NewCon valve has evolved and proven itself, over-and-over, to be dependable, price competitive, and to be the permanent, long-term solution for abrasive slurries.

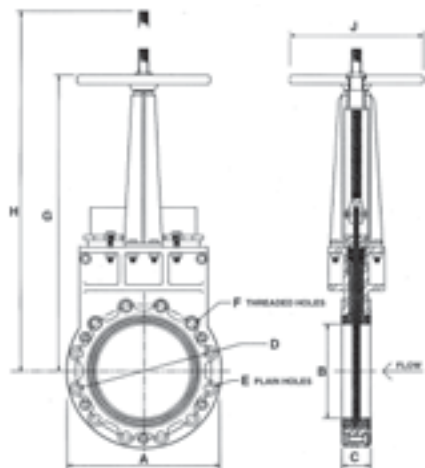
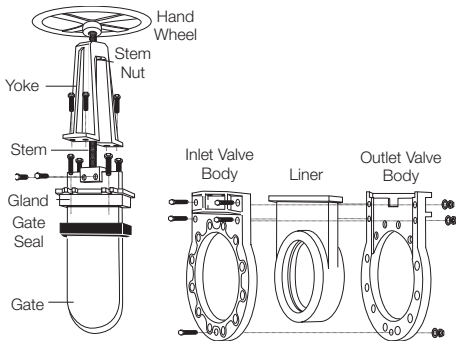
The NewCon knife gate valve is used primarily for on-off service applications, and offers 100% isolation without the inconvenience of slurry being expelled to atmosphere. With

NewCon, adjacent equipment, such as electric motors, are safe from the mess caused by purging KGV's, and a NewCon valve will keep slurry inside the pipe (where it belongs) for an extended period of time.

NewCon offers, by far, the industry's shortest lead times, and is committed to our customers with over \$2.5 million in inventory, including quantities of hydro-tested valves ready for shipment. Most common size valves (2" through 40") with manual, air or hydraulic actuators can be shipped from stock. A growing list of customers worldwide are choosing NewCon to replace existing knife gate valves, as well as pinch, butterfly, and ball valves when used in on-off services.

## Construction Materials

- Manual Valve Construction Materials:
- Inlet and Outlet Valve Body – Epoxy Coated Ductile Iron
- Valve Liner – Abrasive Resistant Urethane
- Gate Seal – Molded Elastomer
- Gate Seal Gland – Ductile Iron
- Handwheel Yoke – Aluminum Alloy
- Stem Nut – Bronze
- Handwheel – Aluminum Alloy
- Handwheel Stem – 416 Stainless



## Operators and Actuators



Electric



Options include Chain Wheel and Spring Return Air Cylinder.

## Valve Details

Size	A	B	C	D	E	F	G	H	J	Gate Thickness	Pressure Rating
2	8.5	2.0	2.0	4.75	2@.656	2@5/8"-11	16.5	20.25	12.0	.50"	150 psi
3	8.5	3.0	2.0	6.0	2@.656	2@5/8"-11	16.5	20.0	12.0	.50"	150 psi
4	9.5	4.0	2.0	7.5	6@.656	2@5/8"-11	18.75	22.81	16.0	.50"	150 psi
6	11.5	6.0	2.25	9.5	6@.781	2@3/4"-10	22.75	30.12	16.0	.50"	150 psi
8	12.5	8.0	2.75	11.75	6@.781	2@3/4"-10	29.0	37.0	24.0	.50"	150 psi
10	16.0	10.0	2.75	14.25	8@.906	4@7/8"-9	33.0	43.25	24.0	.50"	150 psi
12	18.25	12.0	3.0	17.0	8@.906	4@7/8"-9				.625"	150 psi
14	20.5	13.25	3.0	18.75	8@1.031	4@1"-8				.625"	150 psi
16	23.5	14.75	*	21.25	12@1.03	4@1"-8				1.125"	150 psi
18	25.0	17.25	*	22.75	10@1.17	6@11/8"-7				1.125"	150 psi
20	27.25	19.0	*	25.0	14@1.17	6@11/8"-7				1.50"	150 psi
24	32.0	23.0	*	29.5	12@1.29	8@11/4"-7				1.50"	150 psi
28	36.5	25.75	*	34.0	16@1.37	12@11/4"-7				1.50"	150 psi
30	38.75	29.75	*	36.0	16@1.29	12@11/4"-7				1.50"	100 psi
36	46.0	34.5	*	42.75	20@1.62	12@11/2"-6				1.50"	100 psi
40	50.75	37.75	*	47.25	22@1.62	14@11/2"-6				1.75"	100 psi