

RHINO GATE®



THE SEARCH IS OVER™
THE ULTIMATE KNIFE GATE VALVE SOLUTION
FOR ABRASIVE SLURRY ISOLATION

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SPECIFICATIONS

SIZE RANGE:

50NB (2") - 300NB (12")

PRESSURE RATING:

1.03 MPa (10.3 bar) (150psi)

FACE TO FACE STANDARD:

MSS-SP81

SHUT OFF PERFORMANCE:

Exceeds ASNI-FCI 70-2 Class VI.

Zero downstream leakage.

Zero atmosphere leakage.

TEMPERATURE RATING:

90°C (194°F)

FLANGE DRILLING:

ANSI B16.5 Class 150

AS 2129 Table D and E

BS 4504 PN16

Others available on request

TESTING:

Shell Test: Hydrostatically tested to 1.5 CWP

Resilient Seat Test: Hydrostatically tested to 1.5 CWP

Test certificates available upon request.

PLACE OF ORIGIN:

Designed and made in Australia.



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ADVANTAGES

EASILY FIELD REPAIRABLE

One piece liner allows for quick and easy replacement.

Simple 8 piece design is easy to understand, rebuild and maintain.

100% LEAK FREE DESIGN

Fluid media is fully contained in liner.

No mess. No catch basins.

No flush ports. No drip trays.

ONE PIECE POLYURETHANE LINER

Liner can be replaced over and over again extending the life of the valve continuously.

"LIVE LOADED" GLAND PACKING

Easily replaceable, one piece, elastomer gland packing offers zero leakage to atmosphere and minimal maintenance.

"U" SHAPED PERIMETER SEALING

"U" shaped perimeter seal offers bubble tight shut off performance.

BI-DIRECTIONAL

Fully lugged flange faces and full bore design offers bi-directional versatility.



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ADVANTAGES

THICK, ROBUST GATE

Rhinogate Knife Gate Valve's standard gate thicknesses are thicker than the average valve.

VALVE SIZE	GATE THICKNESS
100NB	12MM
150NB	12MM
200NB	12MM
250NB	16MM
300NB	16MM



OPTIONAL SAFETY LOCK OUT

All Rhinogate Knife Gate Valves come with safety lock out as standard which allows the valve to be locked in the closed or open position. Lock out pins include a large handle for easy action. All yokes included a storage bracket to store pin when not in use.



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THE HEART OF THE RHINO GATE



Front View



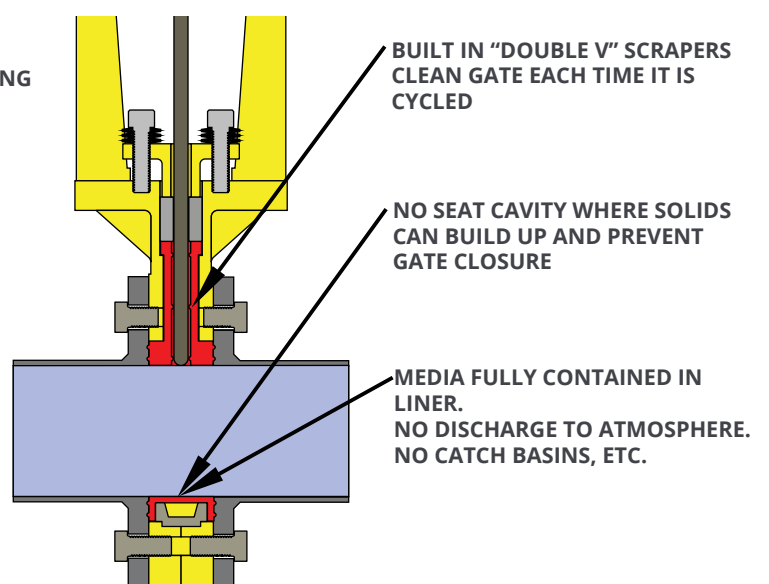
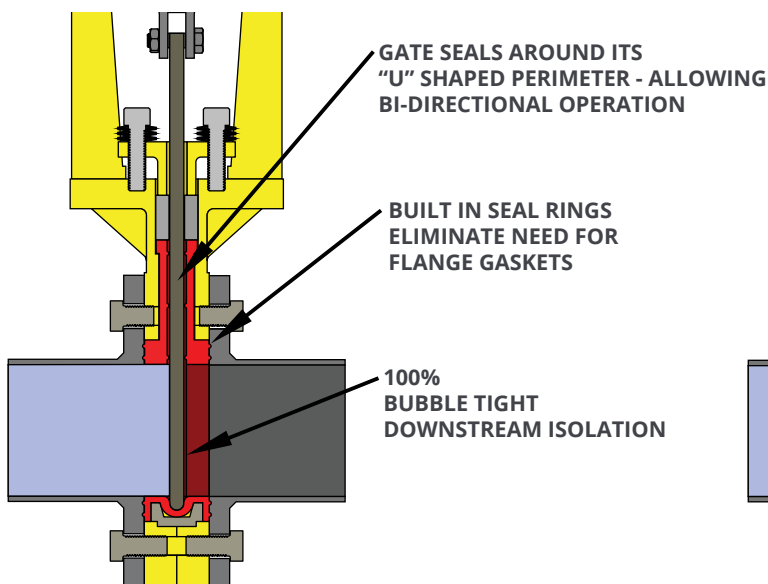
Side View



Sectional View

The heart of the Rhinogate knife gate valve is its special once piece, field replaceable polyurethane liner.

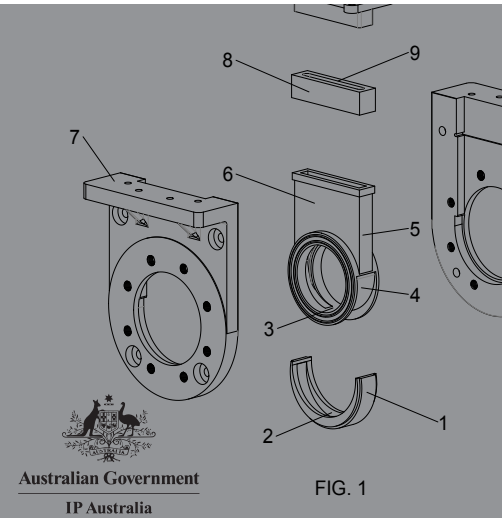
With its full bore design fluid media is fully contained and does not come in contact with any other part of the body. Sealing of the gate is handled with-in the liners "U" shaped perimeter core - offering bi-directional operation and complete bubble tight downstream isolation. Its cavity free seat also eliminates pockets where slurry can build up and prevent the gate from closing. Built in "Double V" scrapers assist in scraping the gate clean each time it is cycled and outside seal rings eliminate the need for flange gaskets when installing the Rhinogate in-line.



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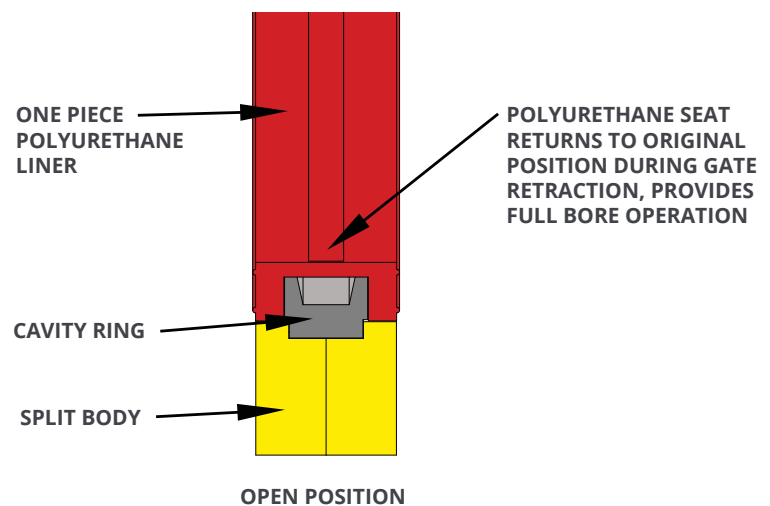
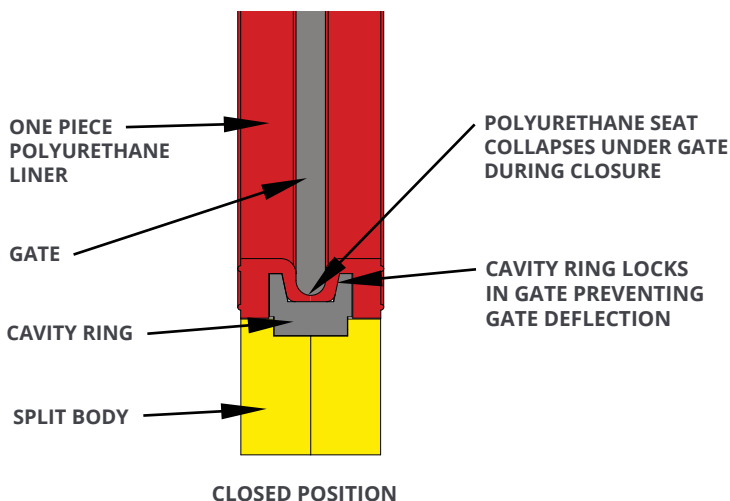
RHINO GATE® REVOLUTIONARY PATENTED* COLLAPSIBLE SEAT



The Rhinogate slurry isolation knife gate valve encompasses a revolutionary, patented collapsible seat design.

This design offers bi directional versatility, full bore operation and encompasses no pockets or grooves in the seat area where solids can cake up and prevent gate closure - a feature which is unique only to the Rhinogate.

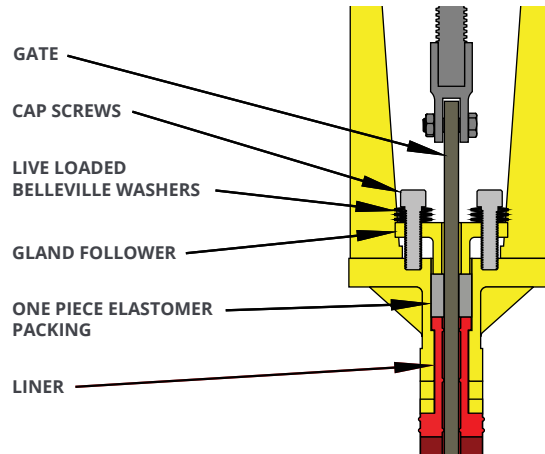
During gate closure the polyurethane seat is forced into the specially designed cavity ring. The groove in the cavity ring locks in the gate, preventing gate deflection and ensures a 100% leak proof seal. Upon gate retraction, the polyurethane seat returns to its original position, there-by allowing full bore operation – and no pockets or grooves in the seat area.



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THE RHINO GATE GLAND ADVANTAGE

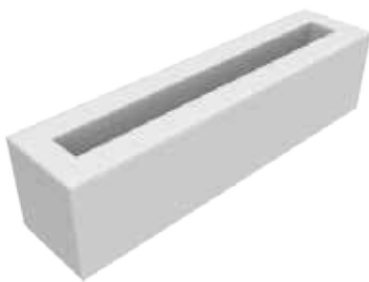


THE RHINO GATE GLAND ADVANTAGE IS A HUGE STEP FORWARD IN KNIFE GATE VALVE TECHNOLOGY

Conventional knife gate valves have had an inherent problem with gland area leakage. Traditionally braided yarn or square shaped seals are used in an attempt to create a seal between the gate and chest area of a knife gate valve - a difficult task to achieve. Premature failing of gland seals on knife gate valves is not an un-common occurrence, often failing within the first 6 months of service.

After years of design, testing and trials - we here at Rhinogate have found a solution to the age-old knife gate valve problem. Finally - a gland packing solution that will not leak nor require extreme amounts of maintenance.

The search is over™



THE RHINO GATE ONE PIECE ELASTOMER GLAND PACKING GUARANTEES NO LEAKAGE.

Rhinogate knife gate valves use a specially engineered, one piece elastomer gland packing. The gland packing is firm. It encompasses incredible shear strength. It's texture is smooth and slippery. These are the traits of a material that has been purpose designed for an application that is extremely demanding.

- ONE PIECE ELASTOMER.
- NO MULTIPLE PIECES OF BRAIDED YARN, O-RINGS OR GASKETS.
- NO LEAKS.



LIVE LOADED BELLEVILLE WASHERS ENSURE MINIMAL GLAND MAINTENANCE REQUIRED.

Rhinogate knife gate valves utilize special "live loaded" Belleville washers to ensure even loading across our one piece elastomer packing. Once torqued up our live loaded gland will not come loose, nor need repeated tightening like other conventional knife gate valves.

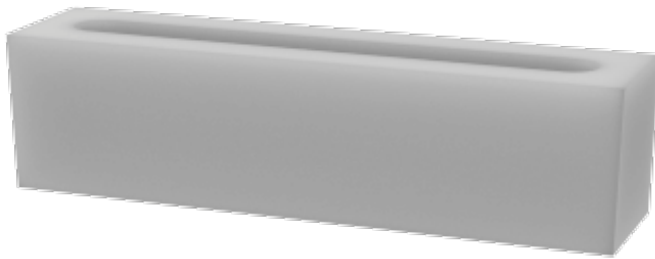
- LOAD REMAINS "PRE-LOADED" AND "LIVE" AT ALL TIME.
- NO CONTINUOUS TIGHTENING REQUIRED.
- MINIMAL MAINTENANCE REQUIRED UNLIKE OTHER GLANDS.

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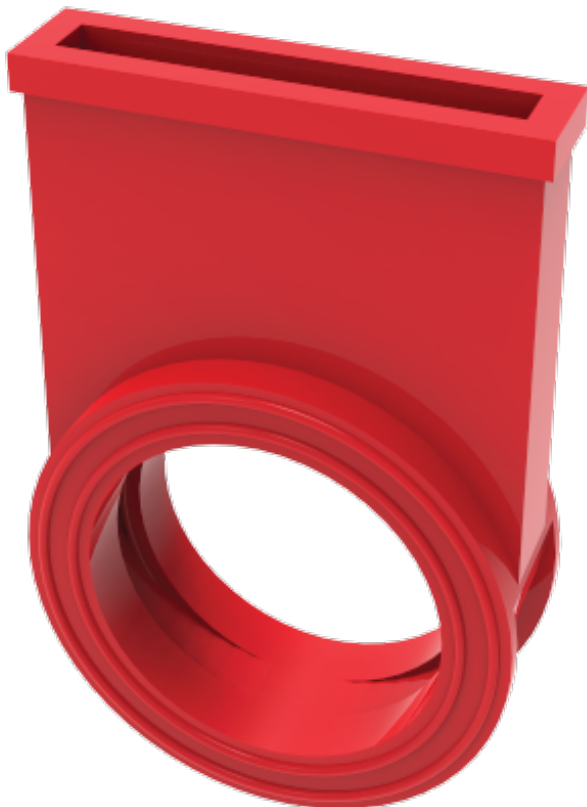
RHINOGATE®

**THE ULTIMATE KNIFE GATE VALVE SOLUTION
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TYPICALLY WHEN REBUILDING A RHINOGATE KNIFE
GATE VALVE, JUST THE LINER AND GLAND PACKING
ARE REPLACED.



**ONE PIECE
ELASTOMER
GLAND PACKING**



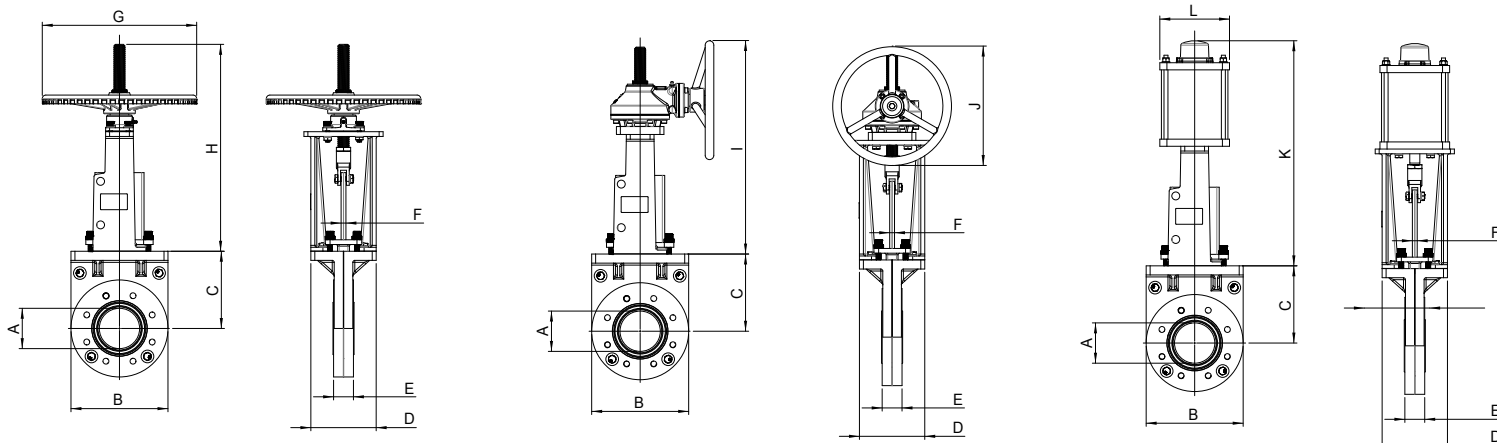
**ONE PIECE
POLYURETHANE
LINER**

REBUILD A RHINOGATE
KNIFE GATE VALVE
FOR AROUND **15%** OF THE
COST OF A NEW VALVE

THE SEARCH IS OVER™

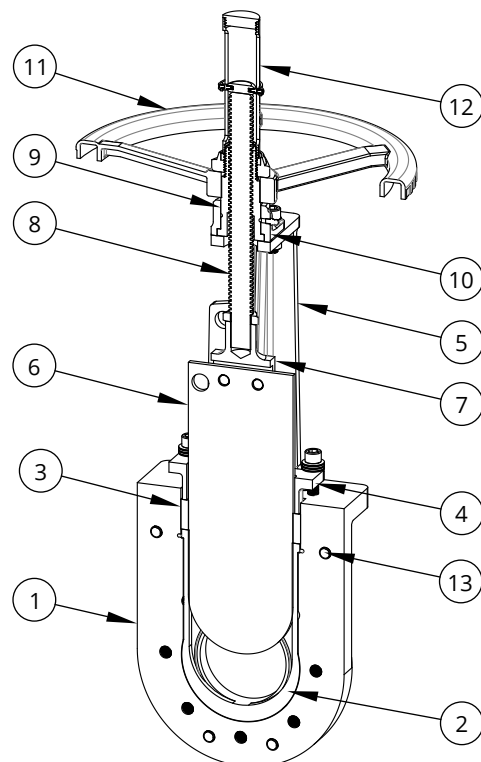
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DIMENSIONS ANDS MATERIALS



SIZE	A	B	C	D	E	F	G	H	I	J	K	L
100NB	101	245	195	165	51	12	390	522	540	300	570	176
150NB	152	295	276	170	57	12	390	625	597	300	725	240
200NB	203	360	351	190	70	12	390	745	632	300	850	240
250NB	254	450	433	221	70	16	600	872	711	300	944	285
300NB	305	520	486	230	76	16	600	1005	776	300	1056	285

ITEM	COMPONENT	MATERIAL
1	BODY	DUCTILE CAST IRON, POWDER COATED
2	LINER	POLYURETHANE
3	GLAND PACKING	ELASTOMER
4	GLAND FOLLOWER	DUCTILE CAST IRON, POWDER COATED
5	YOKE	DUCTILE CAST IRON, POWDER COATED
6	GATE	SS 316L (OTHERS AVAILABLE)
7	CLEVIS	CAST SS 316L CF3M
8	STEM	SS 316L
9	HAND WHEEL SPINDLE	CAST BRONZE ALLOY
10	HAND WHEEL BOSS	DUCTILE CAST IRON, POWDER COATED
11	HAND WHEEL	DUCTILE CAST IRON, POWDER COATED
12	STEM COVER	FABRICATED MILD STEEL, POWDER COATED
13	FASTENERS	SS 316L



GATE OPTIONS			
SS 316L (STANDARD)	SAF DUPLEX 2205	SAF DUPLEX 2207	OTHERS ON REQUEST

RHINO GATE®

**HEAD OFFICE AND MANUFACTURING:
RHINO GATE PTY LTD
4/7 HOLDER ROAD,
MALAGA, 6090,
WESTERN AUSTRALIA,
AUSTRALIA**

**+61-(0)8-9275-8584
WWW.RHINO GATE.COM
INFO@RHINO GATE.COM**

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