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**SERIES 942**

# **VORTEX BREAKER KNIFE GATE VALVES FOR RECYCLE/REJECTS**

4" to 12" 150psi (10bar)



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**Bray**<sup>®</sup>

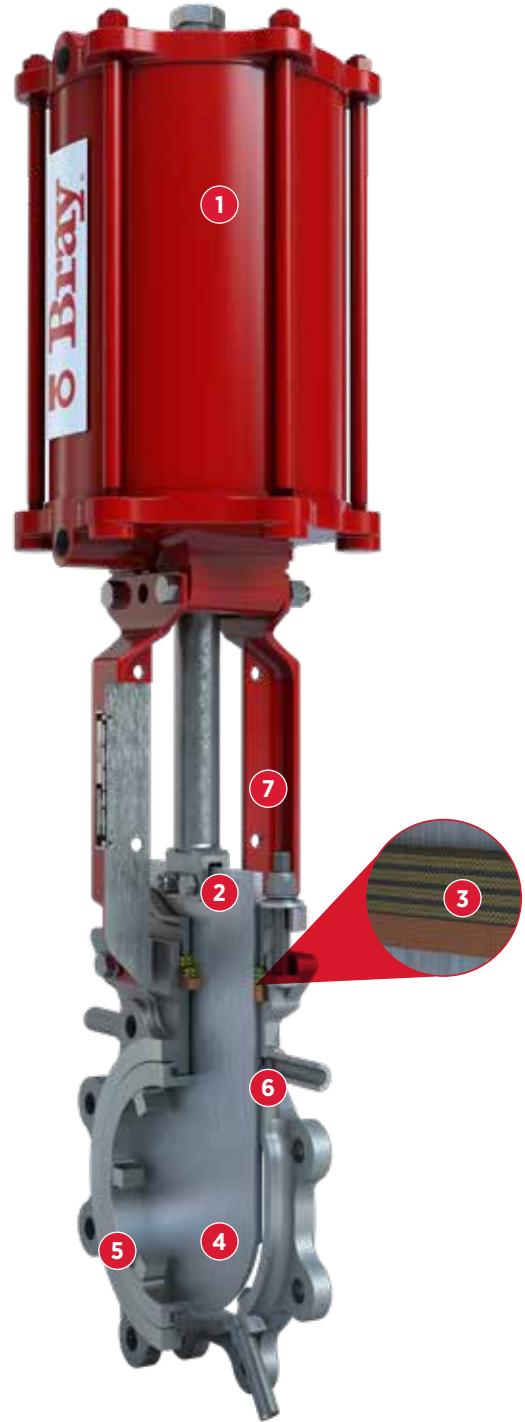
## FEATURES & BENEFITS

### DESIGN FEATURES

The Bray Series 942 is engineered for on/off service and isolation of pulp and paper recycle and rejects applications. The 942 offers superior performance in demanding, high-cycle services that require shearing capabilities such as cyclone separators and recycle high density cleaners.

Bray Series 942 heavy duty is an engineered solution featuring a standard replaceable Vortex Breaker designed to interrupt cyclonic flow formation which causes premature gate damage.

- 1 Pneumatic actuator sized and designed for high cycle applications.
- 2 Clevis design and horizontal strain-hardened bolting stabilizes gate ensuring proper alignment and reducing failure points commonly found in knife gate valves.
- 3 HD packing system using a copper scraper and high performance packing, including machined packing chamber, live-loaded packing gland to assure extended cycle life and minimizes thrust of actuation.
- 4 Abrasion and impact resistant 17-4PH H-900 gate with rounded edge for longer packing life.
- 5 Standard Hi-Chrome vortex breaker designed to disrupt cyclonic flow formation of reject materials (staples, wire, nails, sand, etc.) provides extended service life.
- 6 Purge ports in seat and chest area allow full flushing capability while cycling.
- 7 Robust cast yoke superstructure engineered for heavy duty actuators, complete with gate guard (not shown).



### APPLICATION

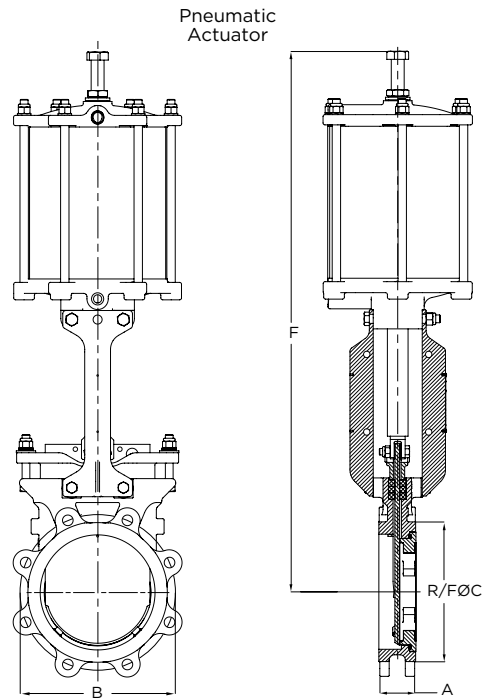
- > Knotter, Rejects, Pulpers, Scavengers and Cyclone Cleaners

Series 942 Lug Style



**RECYCLE PROCESS**

1. A & B are closed while system fills
2. A opens and rejects media drops through Valve A into Valve B
3. Quality pulp flows upward to the process and reject material falls down for recycling
4. Valve A closes and Valve B opens discharging rejects until empty
5. Valve B then closes



**TECHNICAL SPECIFICATIONS**

<b>Size Range</b>	NPS 4 to 12   DN 100 to 300
<b>Body Style</b>	Single piece   Lug
<b>Pressure Rating</b>	4-12 150psi   100-300mm 10 bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face to Face</b>	MSS SP-81
<b>Certification</b>	CE/PED
<b>Design Standard</b>	MSS SP-81
<b>Testing Standard</b>	MSS SP-151

**STANDARD CONSTRUCTION**

<b>Body</b>	CF8M (316)
<b>Gate</b>	17-4PH H-900
<b>Seat</b>	Hard Faced
<b>Gland</b>	304
<b>Packing</b>	4-layer (Copper-Kevlar-Quad Seal-Kevlar)
<b>Topworks</b>	CS
<b>Vortex Breaker</b>	Hi-Chrome

DIMENSIONS (Inches)					WEIGHT (lbs)
NPS	A	B*	R/FØC	F	PNEUMATIC ACTUATOR
4	2.00	7.50	6.19	25.39	53
6	2.25	9.50	8.50	31.65	84
8	2.75	11.75	10.62	38.74	121
10	2.75	14.25	12.75	44.21	212
12	3.00	17.00	15.00	51.22	313

DIMENSIONS (Millimeters)					WEIGHT (kg)
DN	A	B*	R/FØC	F	
100	51	190.5	158	645	24
150	57	241.3	216	804	38
200	70	295.5	270	984	55
250	70	362.0	324	1123	96
300	76	431.8	375	1301	142

**NOTE**

1 Dimensions are approximate and subject to change. Consult factory for certified drawings.

\* In conformance with ASME B16.5, Class 150 for sizes NPS 4 (DN100) through NPS 12 (DN300.)

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**Bray International, Inc.**

13333 Westland East Blvd.

Houston, Texas 77041

Tel: +1.281.894.5454

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