

Fabri-Valve®

Scaling Service Slurry Valves*

Problem: Some service conditions result in the formation of a hard mineral scale on the inside of the pipe and inside the valve. When the valve closes the scale drags through the elastomer seats, often tearing them.

Solution: It was observed that the Fabri-Valve Fig. 133 did not experience this problem at the top of the valve, the 12 o'clock position. This is because in the opening process the gate fractures the scale away from the seat. However, it did experience some problems at the six o'clock position, because as the valve closed it would shear the scale in the bottom half of the valve against the seat. *The trick is to make the bottom half of the valve act like the top half. To do so we use a unique tandem cylinder operator.*

The upper piston and shaft serve to hold the valve in the full open position. When the upper chamber of the upper cylinder and the lower chamber of the lower cylinder are charged, the valve is held in the open position. The force differential between the upper and lower cylinders is caused by the presence of a piston rod in the lower chamber that reduces the effective piston area. It ensures that the valve holds the open position even though the same air pressure is charged into both chambers.

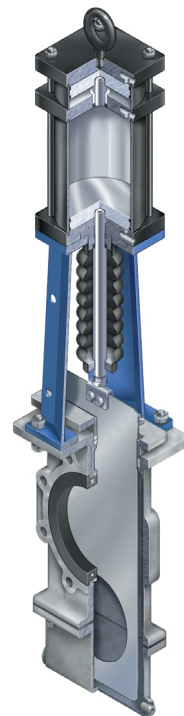
To close the valve, the upper chamber of the upper cylinder is vented, causing the gate to move upward fracturing the scale away from the seat in the bottom half of the valve. Then the upper chamber of the lower cylinder is charged, reversing the gate and fracturing the scale in the upper half of the valve and continuing to the full closed position.



Neutral Position
Valve open



Gate moves up
fracturing scale in
lower valve bore



Gate moves down
fracturing scale in
upper bore

*Patent Pending

Industrial Group

For more information write to:

Engineered Valves
1110 Bankhead Avenue
Amory, MS 38821 USA
or call: (800) 541-1849
(662) 256-7185

Fax: (662) 256-7932
Website: www.engvalves.com
E-mail: engvalves_custserv@fluids.ittind.com

REGIONAL OFFICES

ATLANTIC – USA
Phone 800-231-0328
Phone (717) 509-2200
Fax 800-231-0330
Fax (717) 509-2336

CENTRAL - USA
Phone 800-366-4770
Phone (717) 509-2200
Fax 800-231-0330
Fax (717) 509-2336

PACIFIC – USA
725 E. Cochran Street, Unit E
Simi Valley, CA 93065
Phone 800-926-8884
Phone (805) 520-7200
Fax (805) 520-7205

SOUTH AMERICA
Av. 11 de Septiembre #1363
Of. 1403 Providencia
Santiago – Chile
Phone +56-2-264-9491 (9637)
Fax +56-2-236-1799

MEXICO
Insurgentes Sur No. 600-4° P
Co. Del Valle
C.P. 03100 Mexico D.F.
Phone +52-5-669-5002
Fax +52-5-669-5289

PUERTO RICO
P.O. Box 1225
Hato Rey, PR 00919
Phone/Fax (787) 703-0402

EUROPE
Richards Street
Kirkham, Lancashire
PR4 2HU, England
Phone +44-1772-682696
Fax +44-1772-686006

HONG KONG
Units 1903-04 CRE Centre
928-930 Cheung Sha Wan Road
Kowloon, Hong Kong
Phone +852-2741-6302
Fax +852-2741-6605