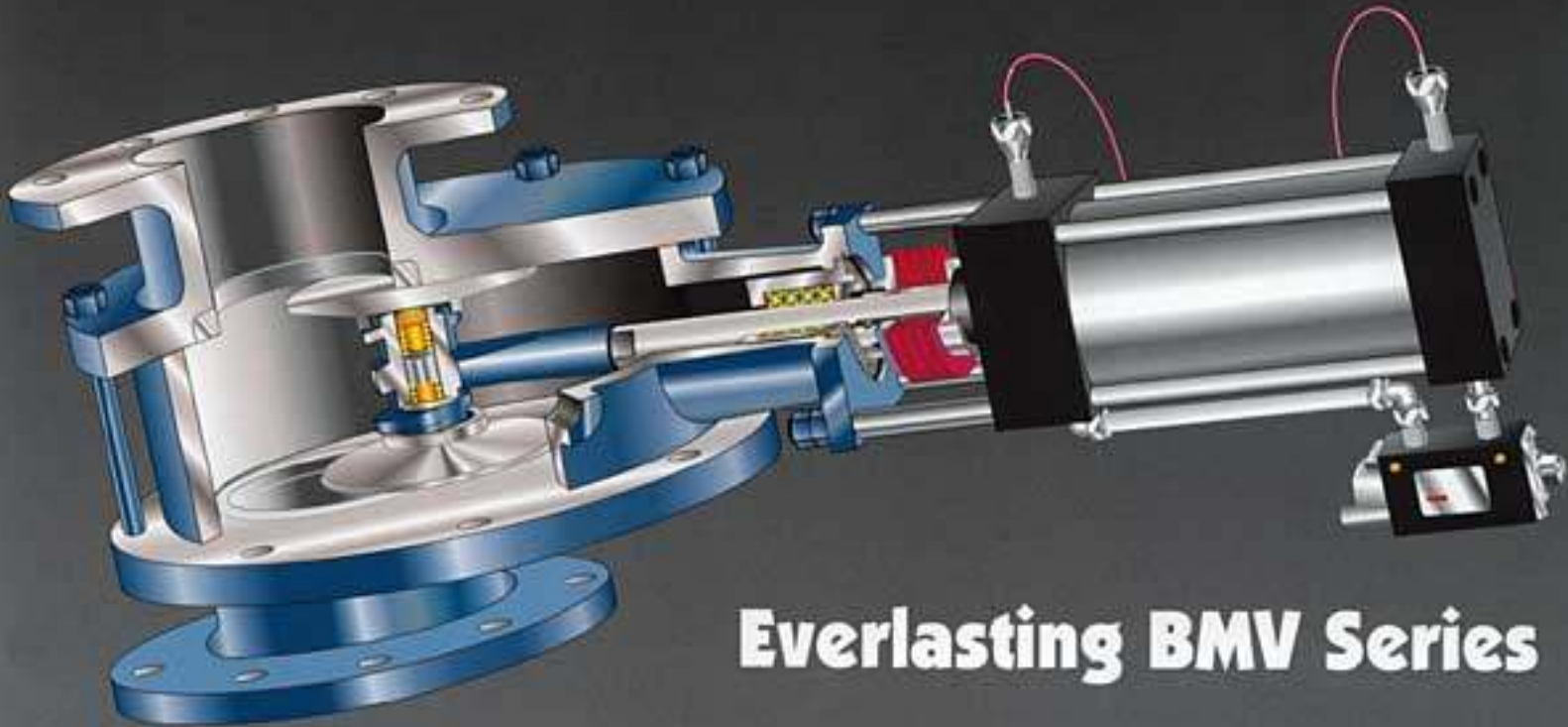




# Everlasting

VALVE COMPANY, INC.

ISO 9001  
CERTIFIED  
COMPANY

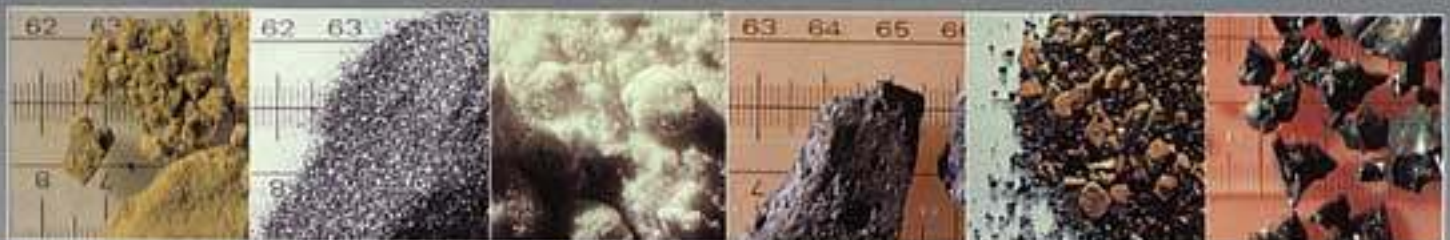


## Everlasting BMV Series



*Sizes 2" to 12"; vacuum to 100 PSIG;  
Temperature to 550 F.*

**For applications where abrasive solids are handled**



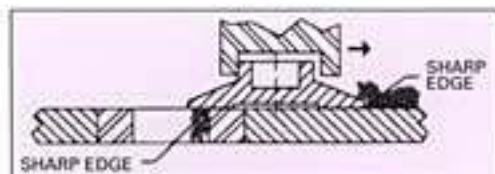
# Everlasting

## Self Cleaning Internals

Its open body configuration allows fines to move about freely preventing accumulation that causes binding of moving parts or damage to seats in other traditional designs. Media has room to be displaced by the discs with each cycle and the eccentric body to port design promotes settled product to swirl each time the valve opens, thereby cleaning it's interior.

## Sealing Surfaces Protected

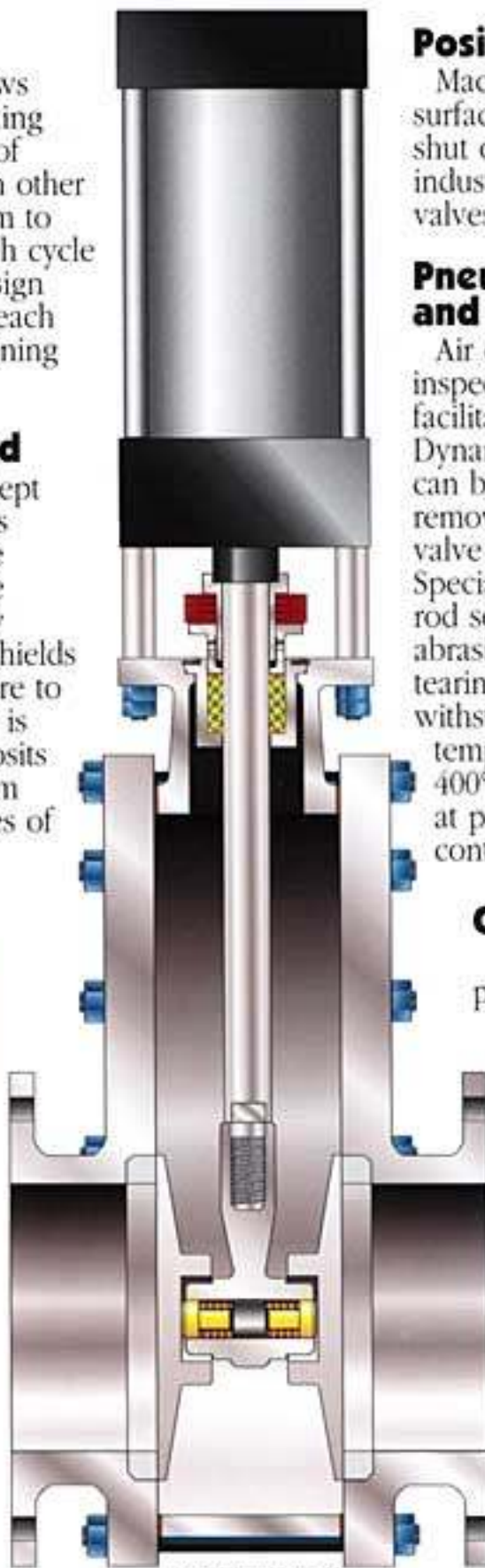
The Rotating Shearing Disc concept since being introduced in 1904 has proven itself in applications where media is abrasive and erosive. The spring loaded discs are held firmly against the path they travel, then shields their sealing surfaces from exposure to any harsh process while the valve is open. Valve is bi-directional. Deposits that may form will be sheared from the sealing surfaces by sharp edges of the seat rings and rotating discs.



*Shearing action clears disc face and it's path of particulate.*

## Self Lapping Discs

They rotate as the center of the applied force and the centroid of friction force move toward alignment. High cycling is beneficial. Scratches that develop on the wide sealing surfaces are polished away as the valve is opened and closed, there is no similar valve.



U.S. PATENT 5,396,919

## Positive Shut Off

Machine lapping of the sealing surfaces at the factory assures tight shut off. Leak rates are less than industry standards for metal seated valves: ANSI B16.34; MSS-SP61.

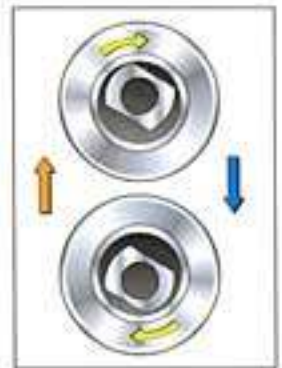
## Pneumatic Actuator and Valve Are Separated

Air cylinder standoff allows easy inspection of sealing means and facilitates field packing.

Dynamically loaded stuffing box can be field packed without removing the valve from line.

Special cylinder rod seal resists abrasion and tearing, and withstands

temperatures to 400°F (+204°C) at point of contact.



*Self lapping discs.*

## Options

Air cylinder mounted proximity limit switches on single rod cylinder; or mechanical style with double ended cylinder. Electric solenoid or manually operated cylinder air valve. All NEMA classifications can be furnished to meet your specifications.

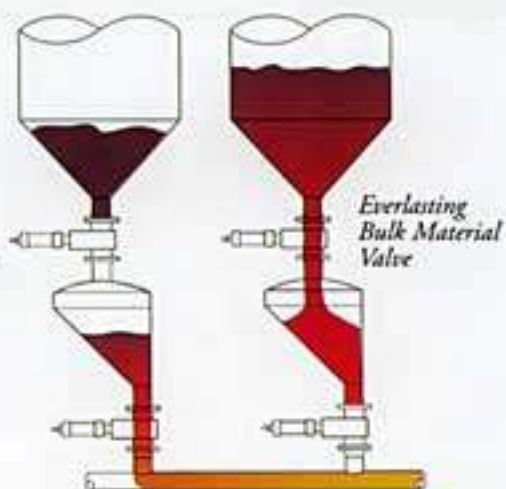
Plant air or electric loss fail safe protection using an electro-pneumatic air reservoir system is available. Special bracketing of the air cylinder increases valve temperature rating to 750°F.

## The Everlasting bulk material valve.

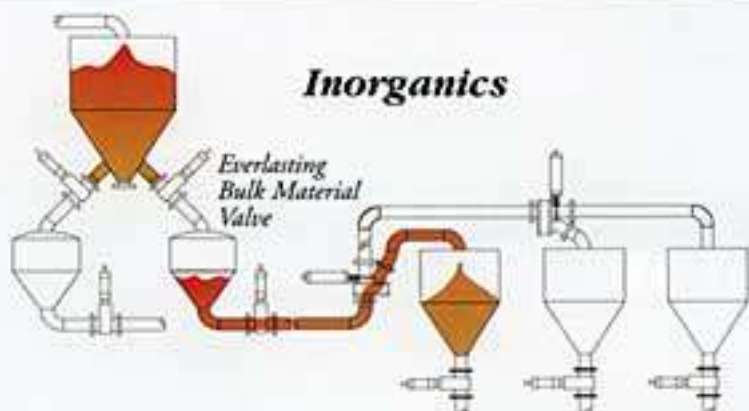
A compact valve that performs where others require repairing or replacement more than once a year.

Ideally suited for dense phase pneumatic conveying and line isolation in dry powder systems.

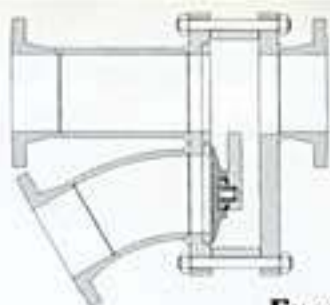
### *Asb handling*



### *Inorganics*



### *Bulk material valves in diverting lines*



### *Everlasting diverters*

## **Everlasting solves plant problems.**

### **Ash Handling**

**Problem:** Sealing members would erode and have to be replaced on a weekly basis.

**Solution:** Flapper style valves cycling once a minute wouldn't always close against large chunks of 600°f vitrified coal ash trapped between its sealing members. Their disc would erode needing replacement on a weekly basis. The **Everlasting BMV** (bulk material valve) was installed providing trouble free service in this high temperature (see options), high cycling application.

### **Inorganics**

**Problem:** Production is moving granular abrasives with a bulk density of over 100 lbs/ft<sup>3</sup>.

**Solution:** **Everlasting Valves** replaced transporter feed knife gate valves that developed internal and external leakage. Transporter outlets, now fitted with **Everlasting Valves**, replaced ball valves that suffered packing leaks. Our diverter valves have eliminated endless hours of maintenance in the finished product area that were previously spent repairing pinch valves. In each location the users enjoyed a fast pay back on their investment.

### **Diverter Valves**

The **Everlasting Diverter Valves** can be switched on the fly, and no lubrication is required. The designs of each style are based on the open body Rotating Disc technology proven since 1904 in our two-way valves. The disc and seats are solid hardened alloys in the 38RC to 59RC range this provides exceptionally long life in abrasive media. These valves have performed in titanium dioxide, fly ash, Portland cement, Alumina silica and calcified Kaolin, sugar, coal and other erosive particulate. Actuators include lever, handwheel, pneumatic cylinder, the valves are flanged, and pressure and temperature ranges vary with design type.

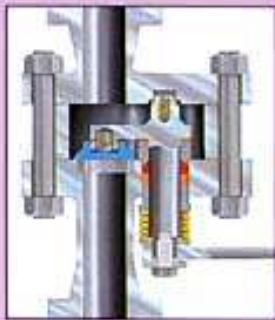
# Everlasting BMV series specifications

## Standard Design:

- Press Range:** Vacuum to 100 psig (7 bar)  
**Temp Range:** Cast Iron 450°F (+232°C)  
 Carbon Steel 550°F (+287°C)  
**Ends:** Flat Faced - 125# Drill  
**Operator:** Air Cylinder, Linear

## Options:

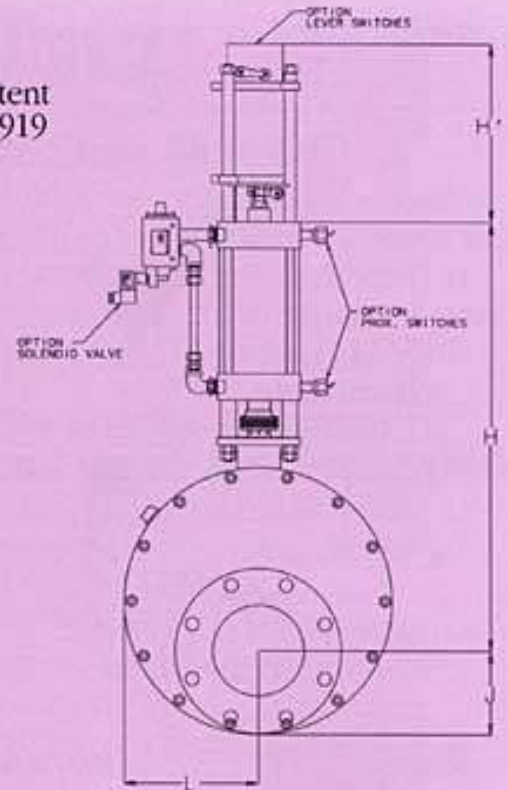
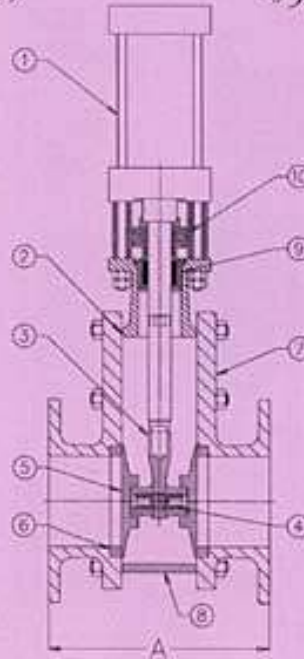
- Limit or Proximity Switches
  - \* Field mounted Limit Switches or Visual Indication require Double Ended Air Cylinder
- Solenoid Valve
- Manual Air Valve
- Fail-Safe Air Reservoir



• 750°F (+400°C) Design

**Process Valve** pressures from vacuum to 10,000 psig, temperatures to +1,500°F, sizes 1/2" to 18"

U.S. Patent #5,396,919



Item No.	Nomenclature	Construction
1	Air Cylinder	Aluminum Body
2	Gaskets	Synthetic Fiber - Nitrile Binder
3	Disc Drive	Hardened Steel Alloy
4	Disc Springs	17-7 Stainless Steel
5	Discs	440 Stainless Steel
6	Seats	440 Stainless Steel
7	Body	Cast Iron or Carbon Steel
8	Distance Ring	Cast Iron or Carbon Steel
9	Stuffing Box	Brass - Zenar/Graphite Packing
10	Gland Springs	Electroless Nickel Plated

Size in. (mm)	A	H	H'	J	L	Wt. approx. lb (kg)
2" (50)	7 (179)	17.375 (440)	7 (178)	3 (76)	3.75 (95)	60 (27)
2.5 (65)	8.25 (210)	19.25 (489)	7.5 (196)	3.5 (89)	5 (127)	65 (30)
3 (80)	8.25 (210)	19.5 (495)	8 (203)	3.75 (95)	5 (127)	70 (32)
4 (100)	9.75 (248)	23 (584)	9 (229)	4.5 (114)	6.25 (159)	110 (50)
5 (125)	10.5 (267)	25.5 (648)	11 (280)	5 (127)	7.75 (196)	180 (82)
6 (150)	10.5 (267)	28.75 (730)	12 (305)	5.5 (140)	9 (229)	220 (100)
8 (200)	13.5 (343)	36 (915)	13.5 (343)	7 (178)	11.5 (292)	350 (160)
10** (250)	15 (381)	41.25 (1049)	13 (330)	8.13 (207)	13 (330)	480 (220)
12** (300)	15 (381)	47.875 (1216)	18 (457)	9 (229)	15.5 (394)	700 (320)

Inquire for other sizes. Dimensions are approximate, use for estimating. Consult factory for construction drawings.

\*Cast Iron only \*\*Carbon Steel only

## How to order Bulk Material Valve: Figure number example: 6" BAO-SVGO

Six inch; Bulk Material Valve, cast iron construction, outside stuffing box, solenoid valve, GO proximity limit switches. Materials of construction stated above are standard. Mechanical and field mounted limit switches require double-ended air cylinders.

Series	Body	Options	
<b>B</b> - BMV	<b>A</b> - Cast Iron <b>C</b> - Carbon Steel	<b>SV</b> - Solenoid Void <b>GO</b> - "GO" Proximity Switches <b>EX</b> - Mechanical Limit Switches (H') <b>MV</b> - Manual Air Valve	<b>FS</b> - Fail-Safe Air Reservoir System <b>HT</b> - High Temperature (750°F) <b>SP</b> - Special Accessories or Design