

# Reliable tight shut-off

after high pressure blowdown

Long-lasting, steam-tight shut-off even after high pressure blowdown.



Bypass Blow Valve

**BD800** NEW

NOTE: Valve stem/valve seat color may differ from the actual product.

Unique self-cleaning valve trim:  
Scale build-up on valve trim is cleaned and cleared through valve operation

**Valve construction enables effective scale removal to allow for tight shut-off**

When the valve cannot be fully closed due to rust and scale build-up on the valve head or seat, simple and effective in-line scale removal restores steam tight sealing performance.



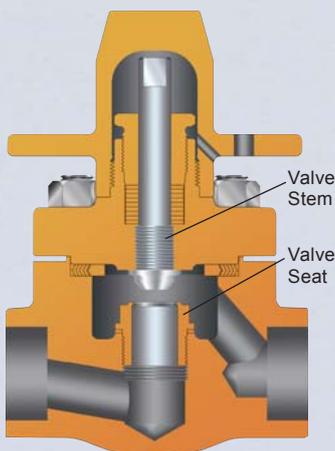
Scale is scraped off and flushed with steam by operating the valve

**Highly durable materials prevent erosion**

Valve stem and seat are constructed from durable materials to prevent erosion.



Pipe wall thinning caused by leakage due to valve trim erosion



**47%\*** of customers who perform bypass blowdown have experienced **internal leakage** of valves.

\* Research by TLV CO., LTD.

Periodic maintenance of steam systems is followed by blowdown on bypass lines by supplying high pressure steam at start-up. However, globe valves often installed on bypass lines are commonly susceptible to internal leakage as the build-up of dirt and scale and the erosion of valve trim prevent the valve from closing completely. The BD800 was developed to eliminate these problems.

## Prevents internal leakage



Valve construction enables **simple scale removal** to clean and clear valve trim to allow for tight shut-off



Valve stem and valve seat are made of **highly durable materials** to prevent erosion



Valve stem, valve seat and other **key parts are replaceable**

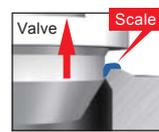


### Scale removal procedure

Scale is removed by operating the valve.

**1**

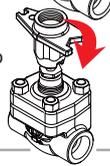
Turn the valve stem counter-clockwise one to two times to **open** the valve.



Steam flows through the gap between scale and valve seat.

**2**

Turn the valve stem clockwise to **close** the valve.

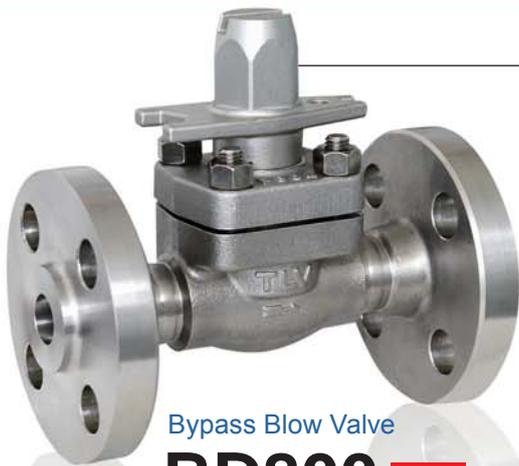


Scale is scraped off the valve seat.

**3**

Repeat steps 1 and 2 another two or three times.

Make sure there is no leakage.



Bypass Blow Valve

**BD800** **NEW**

### Spanner cap is used in place of the valve handle

- Protects valve stem from weather and foreign matter, **preventing the valve stem from sticking**

- For applications with infrequent valve operation, the spanner cap can be fixed to the body to **prevent erroneous operation**



Fixed to body

- Can also be used **as a valve handle**



Adjusting the valve aperture



Tightening the gland retainer

#### Applications

Installation on bypass lines for bypass blowdown or to eliminate steam locking

- Applicable fluids: Steam, water, air
- Material: Stainless steel ASTM A182 F304
- Size: 15, 20, 25 mm (1/2, 3/4, 1 in)
- Applicable standards: API 598, ASME B16.34
- Maximum Operating Pressure PMO: 6.5 MPaG (925 psig)
- Maximum Operating Temperature TMO: 425 °C (625 °F)
- Maximum Cv Value: 3.5 (US)
- Connections: Screwed, socket welded, flanged

For more information, please visit our website at <https://www.tlv.com>



**CAUTION**

To avoid abnormal operation, accidents or serious injury, **DO NOT** use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

## TLV INTERNATIONAL, INC.

881 Nagasuna, Noguchi, Kakogawa, Hyogo 675-8511, JAPAN

Tel: [81]-(0)79-427-1818 Fax: [81]-(0)79-425-1167

E-mail: [tlv-japan@tlv.co.jp](mailto:tlv-japan@tlv.co.jp) <https://www.tlv.com>

Manufacturer  
**TLV CO., LTD.**  
Kakogawa, Japan  
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001  
ISO 14001

