



# Enviro-Safe Ball valve (ES Series)

Corrosion resistant valves for critical applications.

Designed, Mfg. & Sales by:

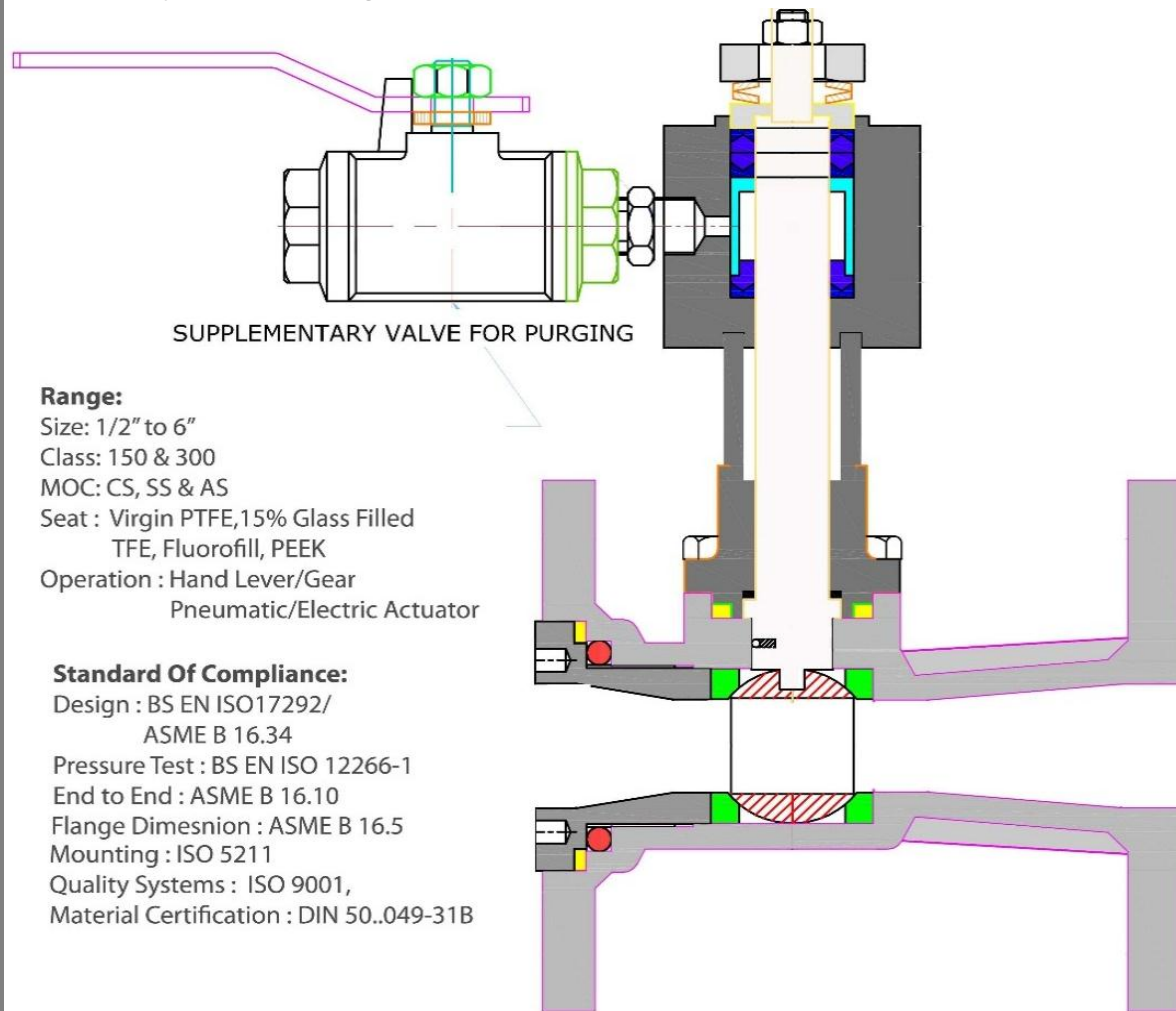
**Mevada Engineering Works Pvt.Ltd. (MEWPL)**

## General Description

MEWPL has launched a high range of Enviro-Safe Ball Valves to address the major issue for the Environment Safety for today & future.

MEWPL's primary aim was to design a range of Class 150/300 ball valves to prevent external leakage in demanding applications such as highly toxic media (phosgene, chlorine etc.) or with very costly media where wastage is unacceptable.

Experience has shown that repeated valve operation eventually causes wear in the stem sealing area and this leads ultimately to external leakage



### Range:

Size: 1/2" to 6"

Class: 150 & 300

MOC: CS, SS & AS

Seat : Virgin PTFE, 15% Glass Filled  
TFE, Fluorofil, PEEK

Operation : Hand Lever/Gear  
Pneumatic/Electric Actuator

### Standard Of Compliance:

Design : BS EN ISO 17292/  
ASME B 16.34

Pressure Test : BS EN ISO 12266-1

End to End : ASME B 16.10

Flange Dimension : ASME B 16.5

Mounting : ISO 5211

Quality Systems : ISO 9001,

Material Certification : DIN 50.049-31B

## Applications

The Enviro-Safe valve can be prepared for use on chlorine, including the supply of ball, stem and related parts in either Hastalloy or Monel as required.

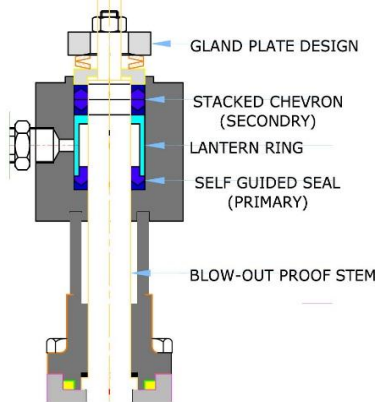
In addition the valve can be used in numerous applications including phosgene, hexane, toluene, ethylene oxide, \*T.C.A.I., Ionone, hydrogen, high temperature thermal fluids, super-heated steam and many others

A further use for the Enviro-Safe is on high cycling duty, where the design of the valve ensures significantly extended life and minimal maintenance. \*Tri-chloro-acetal-isocyanate



## DESIGN FEATURES

### **Enviro Safe leak proof gland construction**

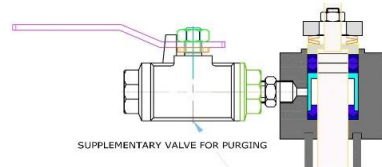


MEWPL's Enviro-Safe range of ball valves has a high cycle life at an increased range of temperatures and pressures. At the heart of the valve's high integrity performance is its dual stem packing. The unique primary seal is designed so that it will always fail in service BEFORE the secondary seal. With a monitoring port drilled through to a lantern ring which is located between the two sealing stages, primary seal leakage can be detected whilst the secondary seals ensure overall integrity. This unique and foolproof stem packing design is live loaded with stainless steel disc springs and has been proven in testing to be bubble-tight on helium even after primary seal leakage. Primary seal integrity can then be restored by simply tightening down the gland plate

The Enviro-Safe features stem purge boss which is tapped to 1/4" NPT standard threads that allows connection of instrumentation/sensing devices.

### **Monitoring / Purge port**

Enviro Safe valves are provided with special purging port in Stuffing box either to monitor the leak pressure via using sure gauge etc. or by installing supplementary valve for purging any inert gas to stop the line pressure leak in atmosphere.



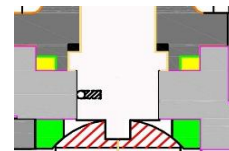
### **One Piece Design**



*Joint less design makes it suitable for applications where leakage to the atmosphere is not acceptable.*

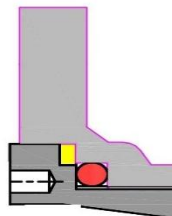
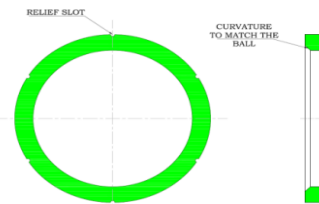
### **Antistatic Device**

When static charge is generated due to high velocity of working fluid & gets concentrated on the ball, spring loaded ball between ball to stem & stem to body discharges static electricity.



### **Seat Design**

*The special design seat feature with relief slots on seat O.D. Relieves cavity pressure developed in cavity of body to upstream seat. This design reduces friction, minimize seat wear and lowering operating torque.*

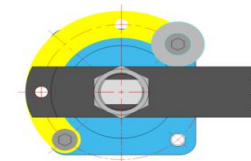


### **Dual body Seals**

*Double body seals ensures positive body joint sealing against pipeline stresses. Step is provided with 'O' ring as inner body seal that prevents the contact of the fluid with the outer body seal of graphite having pure carbon.*

### **ISO 5211 Mounting Pad**

*All our ball valves are equipped with Integral mounting pad as per ISO 5211 that facilitates easy mounting of hardware viz. Pneumatic Actuator, Gear Box, Limit Switch, Locking Arrangement, etc.*



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