



### The tank-bottom valve of choice

ASEPCO valves are designed for use in the most demanding high-purity fluid streams, including media preparation, fermentation, harvest, separation, refining and purification.

ASEPCO's patented valve architecture includes a unique radial diaphragm that forms three seals in one - at the inlet, on the compound shoulder and an O-ring at the bottom of the valve chamber. This architecture ensures:

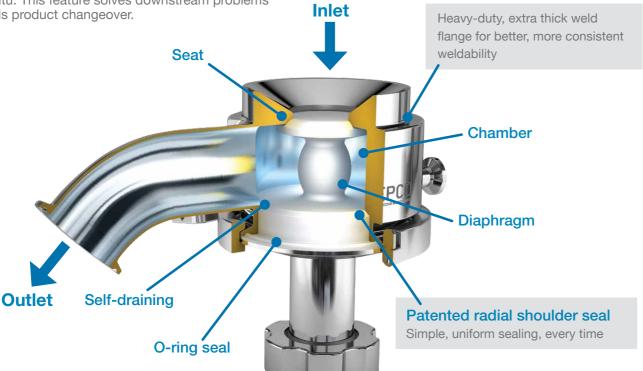
- Self-draining with no entrapment areas
- No leakage
- No cross-contamination
- Easy to clean
- Extremely fast and easy maintenance

Delivering purity and reliability, ASEPCO tank bottom valves are preferred over weir style valves which can introduce product entrapment, leakage and be high maintenance.

## Impressive cost savings

Customer statements include "savings of up to 80% maintenance time".

A special steam port can be added to the ASEPCO radial diaphragm valves for steam-in-place or flush through. whilst in-situ. This feature solves downstream problems and speeds product changeover.



### Lowest lifetime cost

ASEPCO valves have an easy diaphragm changeover principle - taking less than a minute to complete in most circumstances. Valve benefits include

- No tools needed and no special training required
- Integrated, non-adjustable travel stops
- Flush mount design and simple clamp assembly
- Simple four step procedure, as shown below
- Remove Tri-clamp
- 2 Remove actuator from valve body Remove actuator and diaphragm assembly
- Remove used diaphragm from actuator
- ⚠ Install new diaphragm on actuator

# Extensive testing proves reliability

Diaphragms materials are USP Class VI and FDA CFR 177.300 tested and approved, with extensive steam and lifetime testing. This means they complete an impressive continuous 100-hour testing in 132-137C, with actuation every 20 minutes.

Radial diaphragm tank-bottom valves

- The only truly flush diaphragm tank valve
- No pocket, unlike other designs
- Completely drainable
- Welds flush to tank bottom—eliminates gaskets, bolts, and seams
- Meets ASME\* BPVC, ASME BPE, CE-PED. ATEX standards
- Standard 316L material dual certified to EN 1.4435/ASME SA479
- Delivered with material test reports (MTRs)
- Serialised and laser etched

ASEPCO Radial diaphragm

A special steam port added to our

associated with steam or cleaning

standard tank-bottom valve

fluid ports on closed valves

Totally eliminates dead legs

flanges to fit your existing equipment.

Valve sizes: 0.5", 1.0", 1.5", 2.0", 2.5", 3.0", and 4.0"

Many valve body configurations are available, including custom machined



#### ASEPCO Radial diaphragm tank-bottom valve

Can be ordered with up to three ports to allow it to be CIP/SIP or flushed while closed



#### ASEPCO Radial diaphragm insulate valve

- ▲ Use with freeze tanks or any tank that has a critical temperature control mission
- Extended body allows for direct welding of vessel iacket



#### ASEPCO Radial diaphragm retrofit valve

- ▲ Use to add ASEPCO valves to existing tanks
- Many different designs to fit your specific situation



#### ASEPCO Radial diaphragm tangential valve

- Use in situations where a tank valve needs to be mounted off-center
- Easy to clean and eliminates pooling in the tank

### **Actuators**

Sterillite valve

A full range of actuation options available:

Manual

Pneumatic

Automation with switches or controllers.

Work with all manufacturers linear switches and controllers (i.e. Westlock, Stonel, Burkert, etc.)



# **Diaphragms**

Eight materials cope with virtually every pressure, temperature and chemical challenge in the food and biopharm industries.

Materials include:



Silicone Silicone Plus **EPDM EPDM Plus** Viton A Viton A (steam resistant) Viton GF PTFE

All diaphragms are laser-etched with cure dates and batch numbers, ensuring that they are completely traceable



#### Fluid Technology Group

A Spirax-Sarco Engineering Company

Watson-Marlow Fluid Technology Group has eight world-class factories supported by direct sales operations in 28 countries and distributors in more than 50 countries. For contact details visit our website:

www.wmftg.com



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Alitea

Flexicon

MasoSine

**BioPure** 

Asepco



#### Watson-Marlow online

Our engineers around the world can help you choose the perfect pump, tubing, connector and valve for your needs.

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