

# Constant Pressure Valve



## Challenge

Maintaining a reliable, repeatable back pressure on process lines with varying flow rates and viscosities is a challenge in today's processing facilities. Traditional back pressure valves are costly and hard to maintain. They use laminated diaphragms, which are prone to cyclic fatigue, pressure shocks and chemical attack from aggressive media and cleaning chemicals. These diaphragms are expensive to replace, both in materials costs and plant downtime.

## Solution

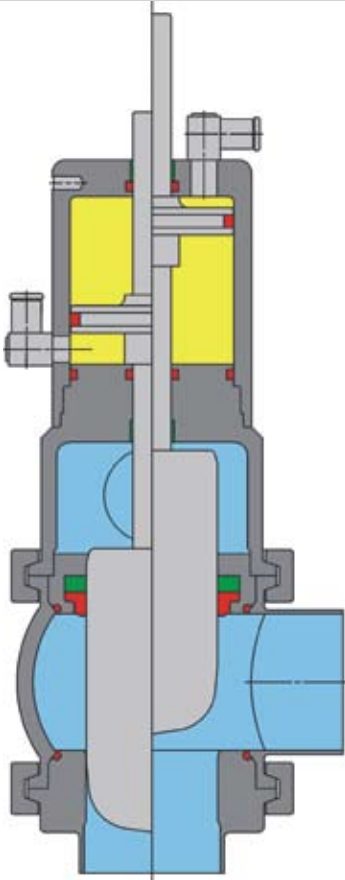
Norit Südmo designed a balanced, 100% stainless steel valve that eliminates the issues related to diaphragm fatigue, while providing excellent control of back pressure with varying flow and viscosity characteristics. Norit Südmo's lip seal arrangement provides easy maintenance compared to other valves that use diaphragms.

What sets our Constant Pressure Valve apart from the competition is that it is available in more sizes – from 1 to 4 inches – and has a stainless steel regulating cone instead of a diaphragm. The simple design is a variation on our proven single seat valve range. It can be retro-fitted into any existing system, regardless of manufacturer. With no automation required, the self-regulating air supply unit is set at installation and the need for adjustment is eliminated.

Norit Südmo's Constant Pressure Valve is backed by our proven technology, superior service and extensive application know-how.



# Constant Pressure Valve



## Benefits

- One-piece balanced solid stainless steel plug
- Standard FDA elastomers for dairy applications
- Dual air supply for actuation during CIP to ensure 100% cleaning
- No automation feedback loops required to ensure accurate constant back pressure
- “Set and forget” self-regulating air supply unit
- Low cost seal kit eliminates expensive diaphragm

## Applications

- Separators in liquid milk and cheese facilities
- Milk standardization systems
- Utility header returns
- Filling operations

## Standard Specifications

### Materials

- Product contact: 316L (1.4404)
- Non-product contact: 304 (1.4301)
- Optional: Hastelloy, AL6XN

### Seals

- Standard: EPDM
- Optional: HNBR, FPM (Fluoro-Rubber), FFP (Perfluorinated Fluoro-Rubber)

### Operating Pressure

- Control air pressure: 10-60 psi
- Product pressure: 20-90 psi

### Connections

- Standard: Sanitary O.D. tube butt weld
- Optional: Sanitary O.D. tube clamp
  - Welding ends for metric tubes
  - Welding ends for ISO tubes
  - DIN nut

### Finish

- <= 32 Ra product contact
- <= 63 Ra non-product contact

## Options

- Improved mechanical polish/electropolish
- Sterilization chamber
- Control unit
- 3.1B material certification

Südmö North America reserves the right to make changes in the technical specifications at any time.



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