

ASME Safety Pressure Relief Valves



Challenge

In sensitive processes requiring ASME coded pressure vessels, rupture discs are typically used to protect tanks from being overpressurized. Although, rupture discs are very effective in protecting tanks from rupturing due to overpressure, these devices also have some major disadvantages. When a disc ruptures, the tank contents are contaminated and the disc must be replaced, resulting in product loss and process downtime. Therefore, some customers now use a non-coded pressure relief valve set in conjunction with a rupture disc. This eliminates some of the problems associated with rupture discs, but is far more expensive in capital costs, and creates a cleaning issue that could cause contamination of the product in the vessel.

Solution

Norit Südmo offers a line of spring-loaded ASME Pressure Relief Valves designed to protect sensitive processes against unacceptable overpressure without putting hygienic requirements at risk. If pressure exceeds the design pressure of the vessel, the Pressure Relief Valve will open, relieve the pressure, and immediately close. This ensures that the contents of the tank are not contaminated, and it does not require any downtime as the valve automatically resets. To ensure the highest level of hygienic operation, the valve seat can be lifted during CIP to ensure that all valve parts in contact with the vessel are cleaned and free of bacteria. The valves are designed and manufactured to the highest standards and meet ASME, FDA (3-A) and BPE requirements. Norit Südmo's ASME Pressure Relief Valves are backed by our proven technology, superior service and extensive application know-how.

ASME Safety Pressure Relief Valves



Benefits

- Avoids product contamination during overpressure
- Avoids plant downtime as a result of overpressure
- Seat lift option during vessel CIP with feedback
- Minimum dead leg design and flush mounting capability
- Bellows-sealed internals

Applications

Norit Südmo's ASME Safety Pressure Relief Valves are the ultimate solution for all critical clean service areas in:

- Food
- Dairy
- Brewing & beverage
- Biotech
- Chemical
- Cosmetics
- Pharmaceuticals

Standard Specifications

Materials

- Product contact: 316L (1.4404)

Seals

- Standard: EPDM
- Optional: NBR, FPM (Fluoro-Rubber),
FFPM (Perfluorinated Fluoro-Rubber)

Operating Pressure

- Product pressure range: 1.5 psi - 968 psi

Connections

- Standard: Sanitary O.D. tube clamp
- Other options available upon request

Finish

- ≤ 20 Ra product contact

Options

- Improved mechanical polish/electropolish
- Lift indicator
- Lifting device
- Feedback
- 3.1B material certification
- Large variety of capacities

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

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