

Dryer Sequence Isolation Valve

Protecting Critical Equipment

As LNG goes through the Mol Sieve dryer phase, it is important to be able to dependably isolate the critical dryers. Reliable isolation of this equipment will provide the proper risk avoidance that operators are constantly striving to achieve.

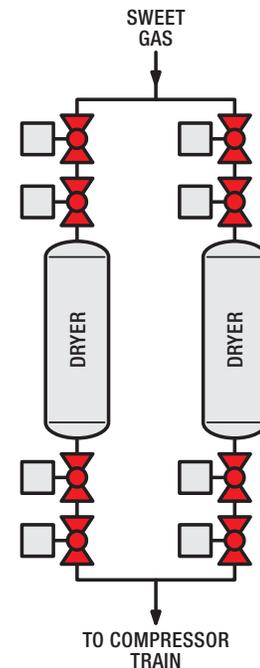
The operating pressures and temperatures experienced in the typical, and even the not-so-typical, Mol Sieve dryer systems are well within MOGAS' field-proven ability to handle an extremely wide range of rapidly changing temperatures. Through years of field experience, working in applications in the power generation, coffee production, precious metals mining and heavy oil refining industries, MOGAS has developed a product line dedicated to absolute isolation of critical equipment, dependable on / off operation that requires the valves to operate over a long life for drain, vent, emergency shutdown and severe isolation applications worldwide.

Superior Performance

While some valve manufacturers profess a rising-stem ball valve is suitable, MOGAS believes the CA-1AS quarter-turn ball valve offers superior performance and longevity. Additionally, the ball / seat interface keeps the ball and seat face in permanent contact throughout its 90-degree operation, minimizing the possibility of entrapping solids carryover from the Mol Sieve dryers between the ball and seat. This provides a continually leak-free, tight, problem-free shutoff – Class VI or better – for these critical valves.

In addition, rising-stem ball valves will leave the stem exposed to the process and could allow leaks in the stem packing, which could lead to deterioration and atmospheric leaks. By design, the inner valve stem seals and packing for the CA-1AS do not come in contact with the media going through the valve.

Dryer Sequence Isolation Valve



MOGAS severe service valves are very well suited for use as Dryer Sequence Isolation Valves with the ability to provide absolute shutoff, which is critical should the need arise to isolate one dryer while it is being serviced.

Design Standards

| | |
|---------------------|--------------------------------------|
| Class: | ASME 150 – 4500 |
| Temperature: | -28 – 1004 F (-33 – 540 C) |
| Pressure: | 965 psig (67 bar g) |
| Shut-off: | Class VI or better |
| Size: | Dependent upon customer requirements |

Normal Operating Conditions

| | |
|---------------------|-----------------------------------|
| Temperature: | 70 – 608 F (21 – 320 C) |
| Pressure: | 753 – 825 psig (52 – 57 bar g) |

CA-1AS Features and Benefits

1 Matched ball and seat sets

- Two-sided seat lapping delivers outstanding seal performance
- Each set is hand lapped with a diamond lapping compound and “blued” to verify continual contact across the entire seat face
- Oversized spheres allow slight overtravel, which reduces wear and can accommodate misaligned actuator stops
- Seating surfaces are protected from erosion in the fully-opened position

2 Forged body

- Corrosion allowance
- Longer valve lifecycle
- Designed to withstand high temperatures up to 1652 F (900 C)
- High pressure up to 30,000 psig (2068 bar g)

3 Pressure-energized inner stem seal

- Two hard-coated and lapped metal thrust bearings serve as both a pressure-energized inner stem seal and stem guide

4 Seat Spring

- Assisted by line pressure, provides a constant mechanical force on ball against seat to maintain seal

Media handling

- Able to successfully handle media, gases with particle entrapment
- Reverse-seat geometry
- Able to minimize the effects of solids build-up on the sealing surface
- Able to provide arcuate cut to spread highly abrasive action encountered when valve first opens, which minimizes wear

Metal-seated ball valve

- Able to maintain needed control of the process
- Able to provide protective isolation of equipment by providing reliable, absolute blockage

Field-proven technology for more than 35 years

- Leak-free isolation when exposed to temperatures up to 1652 F (900 C)
- Temperature control of downstream piping and equipment

Bidirectional sealing

- Floating ball design

Straight-through bore path

- Sealing surfaces not exposed to tortuous effects of high pressure steam
- Greatly minimizes pressure drops
- Allows for higher Cv
- Available in large bore sizes

