



# The S-Line Dome Valve

High-Integrity Isolation Valve for  
Chemical Powder Processing

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Chemical materials are often fine, abrasive, cohesive, hygroscopic, corrosive or hazardous, which can lead to leakage through conventional valves, excessive wear, system pressure losses and product build-up.

Manufactured entirely in 316 stainless steel, the S-Line Dome Valve provides pressure-tight sealing, superior corrosion resistance and reliable operation with difficult powders, making it one of the most robust isolation valves available for chemical processing plants.

## Phone

+44 01302 552200

## Email

sales@clydepc.co.uk

## Web

www.clydepc.co.uk



ISO9001 | ISO14001



British Engineering

## Key Features

### Inflatable Sealing Mechanism

The fast closing bulk material cut-off Dome Valve incorporates a unique pressure tight sealing arrangement.

### Full Bore Flow

Full Bore unobstructed material flow, capable of closing through static or moving material

### Pneumatic Actuation

Fast acting heavy duty pneumatic air actuation using a combination of leading cylinder and vane actuators

### Nominal Bores

ranging from 50 - 400mm as standard

### Temperature Range

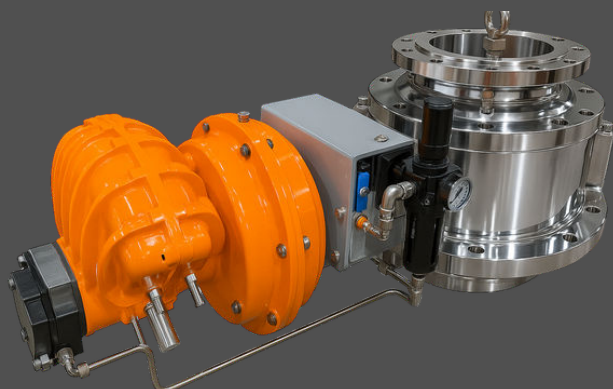
-20 to 450 deg C

### ATEX

ATEX options available for hazardous environments

## Why Chemical Plants Choose the S-Line Dome Valve

- **Pressure-tight sealing:** Ensures complete isolation, even with ultra-fine powders that are prone to leakage, supporting both product quality and environmental safety requirements
- **Reliable closure with product present:** The valve maintains its sealing performance even when powders or granules are present in the seat area, reducing unplanned downtime and enabling more flexible operations
- **Exceptional wear resistance:** Built to withstand continuous exposure to abrasive solids, prolonging operational life and reducing the frequency of replacement or servicing
- **Corrosion-resistant stainless steel construction:** All key components are manufactured from high-grade stainless steel, protecting against chemical attack and supporting long-term reliability in aggressive processing environments
- **Minimal maintenance and low lifecycle cost:** The valve's durable design minimises routine maintenance needs, resulting in lower overall cost of ownership and less operational disruption.



## Operating Capabilities

Parameter Capability

Valve sizes 50 – 400 mm

Pressure rating 7 barg (up to 30 barg optional)

Temperature range -20°C to 480°C depending on configuration

Construction 316 stainless steel

Seal life Approximately 1,000,000 cycles

Major maintenance interval Over 3,000,000 cycles