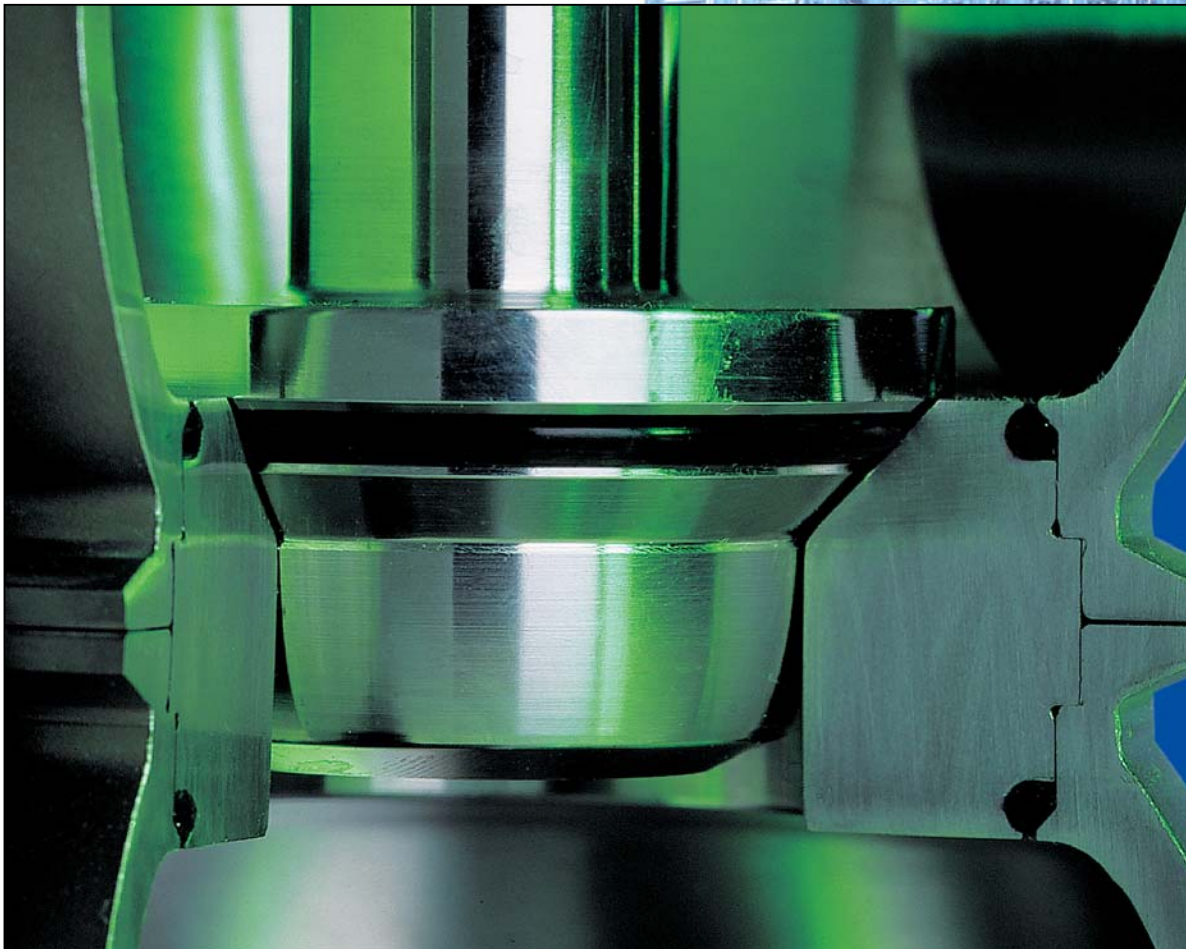
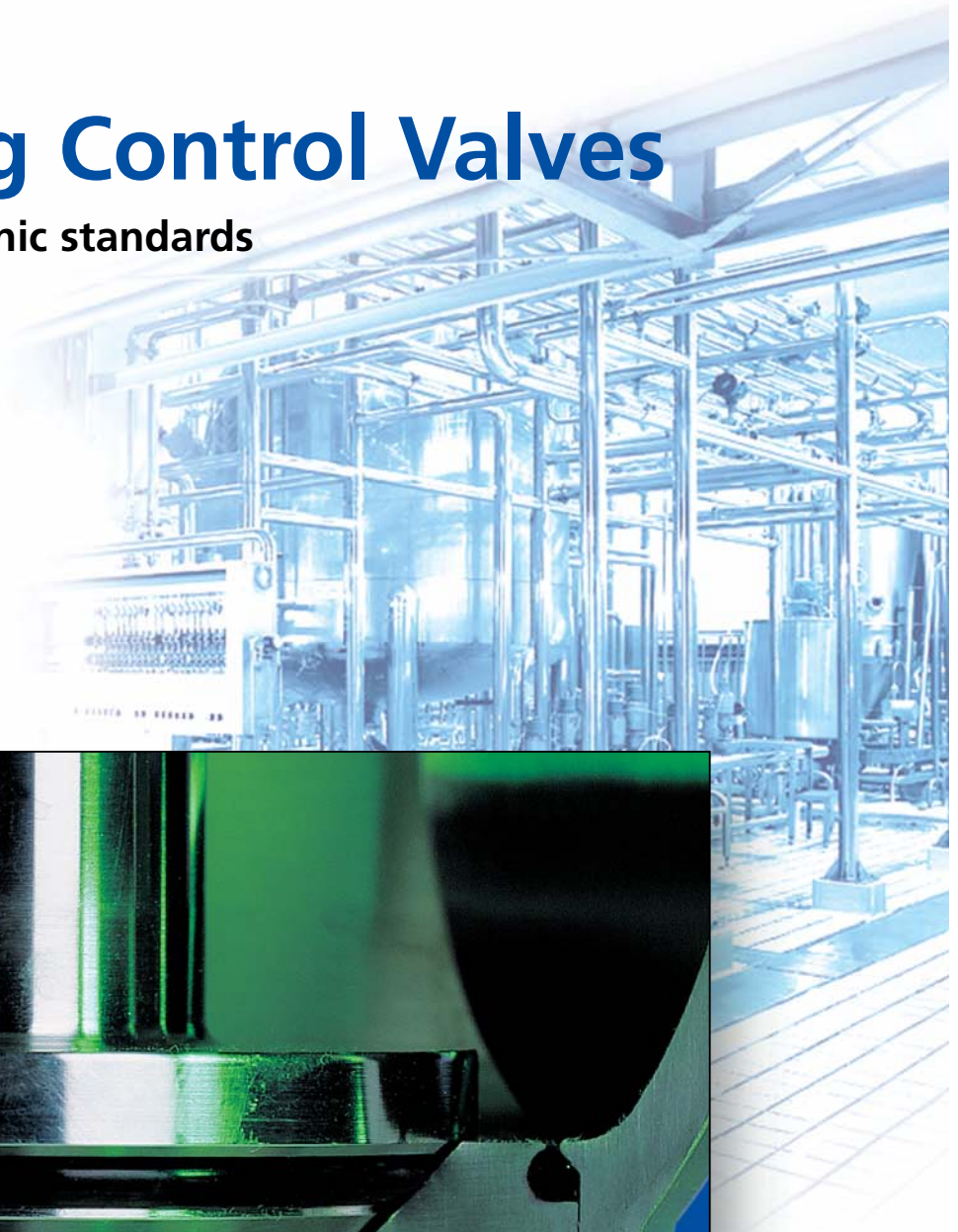


# VARIVENT® Modulating Control Valves

with the highest hygienic standards



# Tuchenhagen Modulating Control Valves of the Series A and S . . .



. . . are used for pressure control, rating or mixing of liquids at different temperatures.

Typical applications are: gassing, yeast pitching, wort aeration or filling operations. Special positioners are provided for high accuracy adjustment of the stroke length. Several kvs-values per nominal width may be set so that the valve may be optimized to the process.

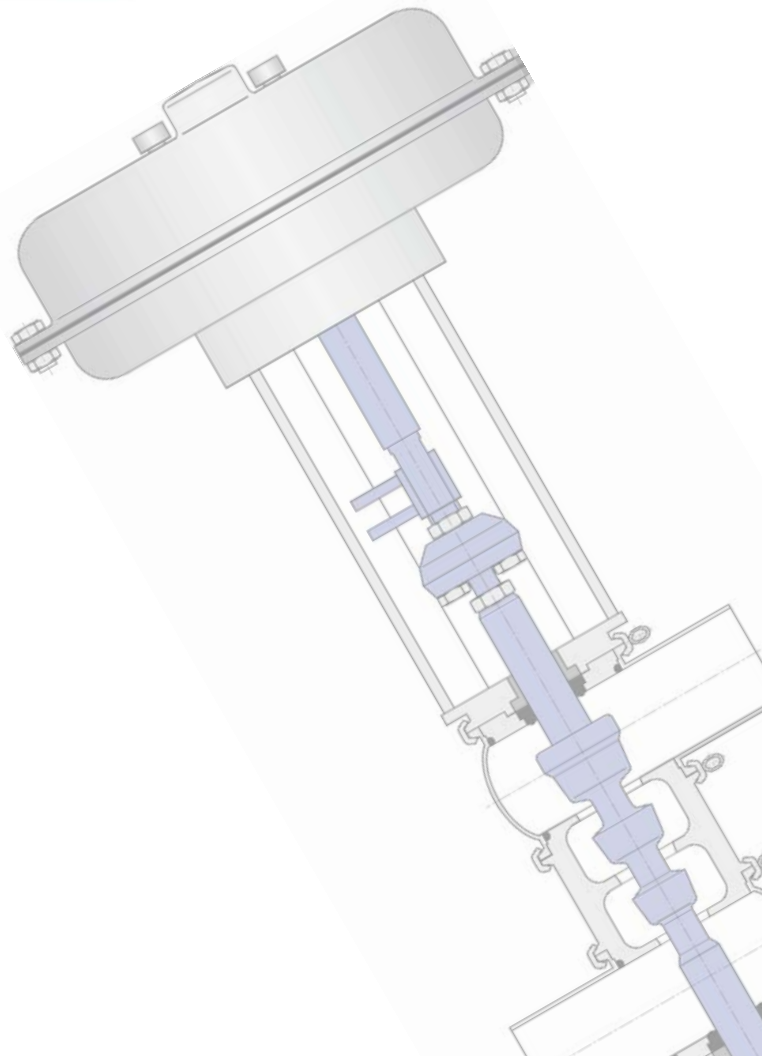
## Design

Linear or equal percentage control cones are integrated in fully cleanable, pocket-free VARIVENT® housings. Control cones and valve seats are easily changed for different operating conditions. The open lantern allows visual inspection for stem seal leaks. Valve constructions using clamp fittings allow easy and rapid assembly. Modulating control valves, series A and S, are suitable for wet room installation.

Actuators are reversible allowing either spring-to-open or spring-to-close operations.

## Special Features

- Positive shut-off by use of a V-ring seat seal made of EPDM or Viton.
- Electro-pneumatic or pneumatic positioner (make on choice) for optimization of the control accuracy
- Limit switch(es) to detect the open and/or closed valve position



**A series** control valves are equipped with a **stainless steel multi-spring diaphragm actuator**.



**S series** control valves are supplied with a **plastic laminated pressed steel sheet diaphragm actuator** (not available for shuttle or 3-stage valves).



#### Connection Fittings

- Welded sockets
- VARIVENT® flange connection
- VARIVENT® clamp connection
- VARIVENT® IDF union
- Fittings as per DIN 11851
- Flanges as per DIN
- Flanges as per ANSI
- IDF male parts

#### Sizes

The following housing sizes and connection diameters are available:

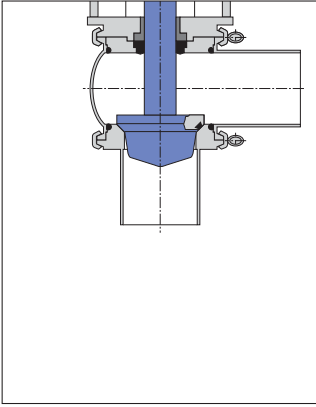
- DIN 11850  
DN 25 to DN 125
- Inch OD  
1" to 4"
- Inch IPS Sch. 5  
2" to 6"

#### Control Valve

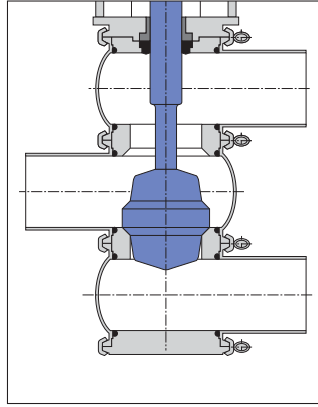
is part of the VARIVENT® System which is:

- Made of stainless steel
- Fully cleanable
- Sterilizable
- Robust
- Easy to maintain
- For all hygienic duties

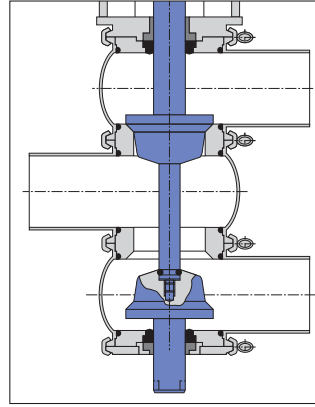
## Control Valve Types



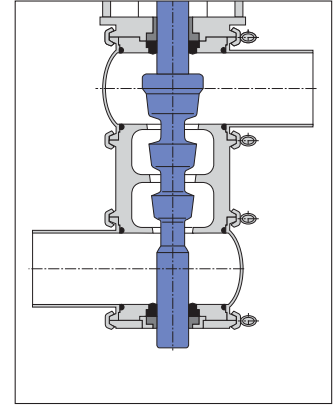
**Valve types AL and SL**  
Single-seat modulating control valve



**Valve type AWW**  
Flow blending control valve with symmetric or asymmetric trim



**Valve type AWWX**  
Flow distribution control valve with symmetric or asymmetric trim



**Valve with 3-stage seat**  
Used to reduce high pressure differences in cavitation free applications at low noise level.

### Mix Matched Housings

Modular valve housings are available in different line size combinations; the lower housing must always have the larger nominal width. They are typically used for blending ingredient streams into a main product flow line.

