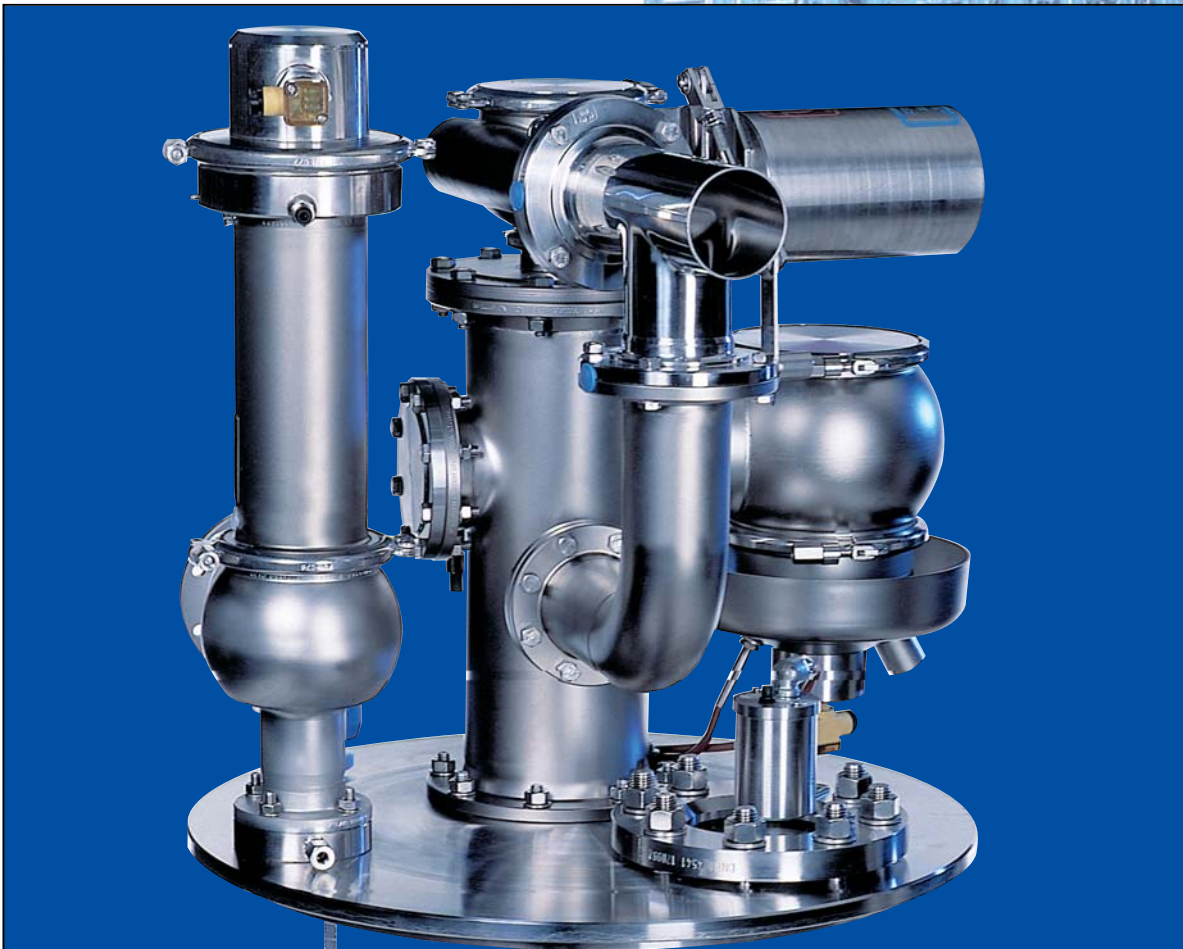


Tanktop System VARITOP

a modular concept for individual applications



"The Tanktop System VARITOP . . ."

. . . is a compact system used for the protection and cleaning of process tanks satisfying highest hygienic demands.

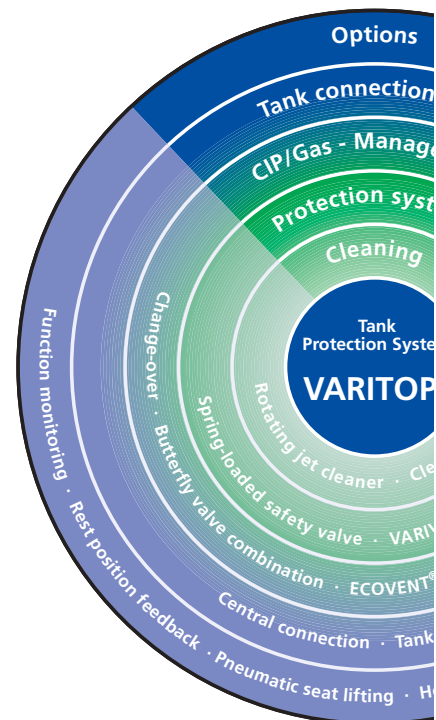
Its a modular concept allows for individual applications on the basis of standardized components.

As an expert with long years experience in cleaning technology, Tuchenhausen offers with VARITOP a perfected and advanced system for tank protection and cleaning that offers to our customers every individual technical solution.

The VARITOP System ensures:

- Reliable function of fully automatic process sequences
- An optimum in plant availability and product quality
- Reproducible cleaning operations

Installation on a
tank dome cover!



The cross connection, a central component of the VARITOP System, ...



... is used for the connection of the cleaning device, the safety and the vacuum valve, the equipment for the CIP/Gas management and the pressure transmitter. The cross connection uses as a standard VARIVENT® flange connections. The vacuum valve is directly welded on to the cross connection.

Cleaning



Cleaning lance

- Low pressure inside cleaning using a sprayball
- Wide range of spray patterns
- Reliable self-cleaning
- Introduction length 500 - 1.200 mm minimum
- Spray nozzles for cleaning the branch-off pipes for safety / vacuum valve.



Rotating jet cleaner

- High cleaning efficiency by means of the slowly rotating fan-shaped jet
- Reliable self-cleaning
- Introduction length 1.000 mm
- Multiple nozzle arrangements provide individual spray patterns
- Spray nozzles for cleaning the branch-off pipes for safety / vacuum valve.

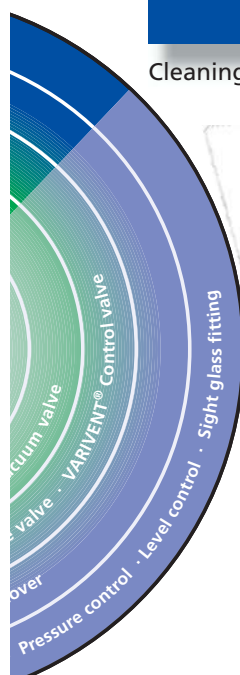
Protection systems

Protection against overpressure

- Spring-loaded safety valve, TÜV type tested for fluids (F) and/or steam / gas (D/G)
- Connections made with VARIVENT® flange connections
- Pipe connections in DIN 11851, if required
- Special approvals, e.g. ASME, CRN etc. upon request

Protection against vacuum pressure

- VARIVENT® vacuum valve, type V
- Sensible response behaviour (as of 25 mm w.c. vacuum pressure)
- Short reaction times / safe closing function
- Hygienic design
- Non-adhesive coating of the valve seat
- Integrated drip pan



CIP / Gas - Management



Automatic CIP / Gas change-over



Pneumatic CIP / Gas change-over using a combination of butterfly valves



Pneumatic CIP / Gas change-over using an ECOVENT® shuttle valve



Gas pressure control using a VARIVENT® modulating control valve

Options

- Feedback of the valve rest position
- Function monitoring of the rotating jet cleaner
- Pneumatic lifting actuator and heating device for spring loaded safety valve and vacuum valve
- Pressure control via VARIVENT® in-line pressure transmitter
- Level control via Tuchenhagen level electrode
- Sight glass fitting

"The basic components of the VARITOP System"

- **Cross connection** for the incorporation of fittings
- Tuchenhagen **Rotating jet cleaner**
- **Cleaning lance** with spray ball
- **Spring-loaded safety valves**
TÜV type tested for fluids (F)
and/or steam/gas (D/G) as well
as special approvals
- **VARIVENT® vacuum valve**,
high efficiency and sensible
response behaviour
- Diverse **CIP/Gas change-over
systems** suitable for high and low
gas rates and/or gas pressure
control
- **Central connection
or tank dome cover**



Installation using a
central connection



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