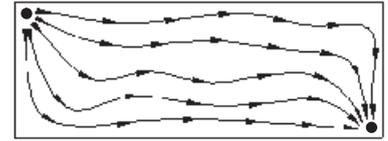
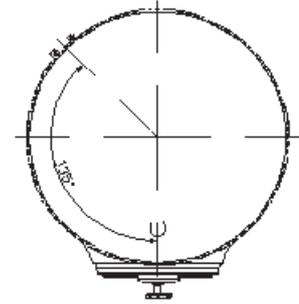
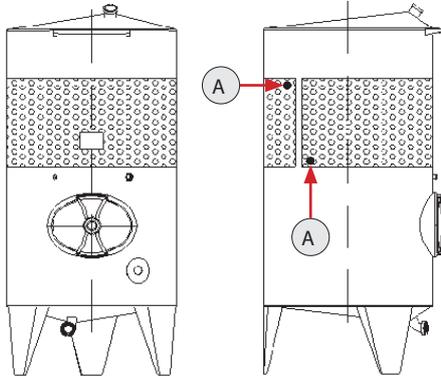


Double jacket type V1

- encompassing the entire tank circumference
- inlet/outlet connectors at the back of the tank

Connectors:

[A] double jacket inlet and outlet connectors



flow illustration V1

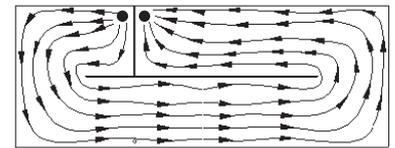
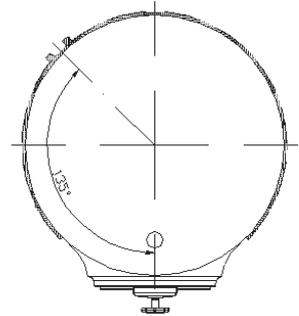
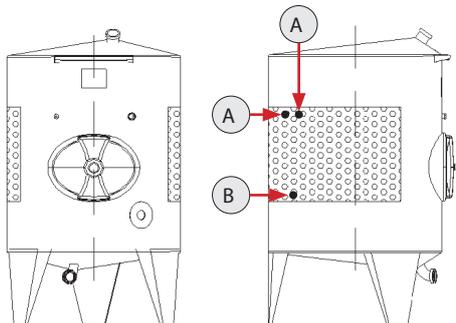
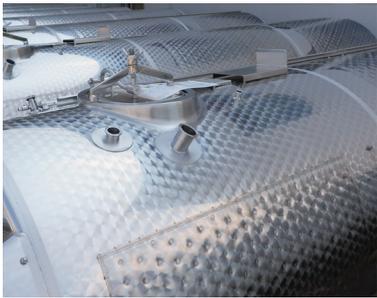
Double jacket type V2

- encompassing approx. 3/4 of tank circumference
- inlet/outlet connectors at the back of the tank

Connectors:

[A] double jacket inlet and outlet connectors

[B] connector for cooling medium release from the double jacket



flow illustration V2

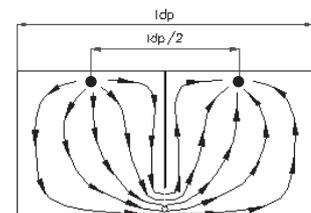
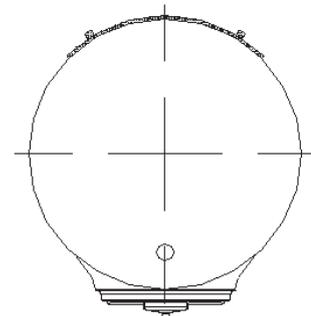
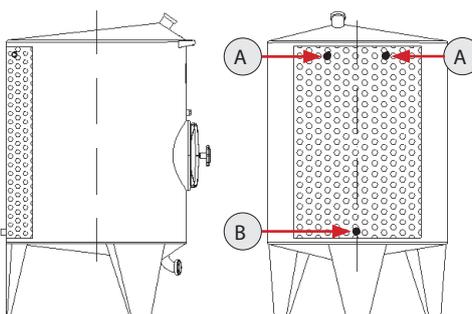
Double jacket type V3

Installed at the back of the tank. Partially welded into two sections down the middle. Can be installed on cylindrical, rectangular, and oval tanks. Installation over the weld on the tank jacket is not possible.

Connectors:

[A] double jacket inlet and outlet connectors on top (left/right)

[B] connector for cooling medium release from the double jacket



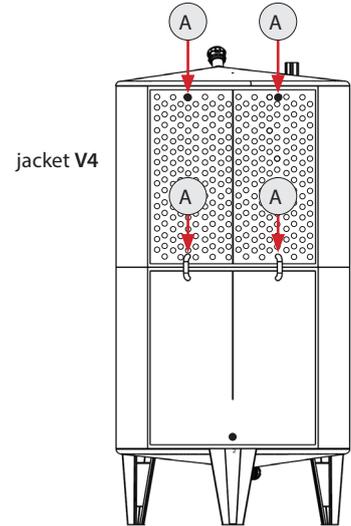
flow illustration V3

Double jacket type V4

Installed at the back of the tank. Completely welded down the middle and divided into two sections. Mainly used in sequential connections of multiple double jackets on a single tank.

Connectors:

[A] double jacket inlet (2x) and outlet (2x) connectors on top and at the bottom of each section



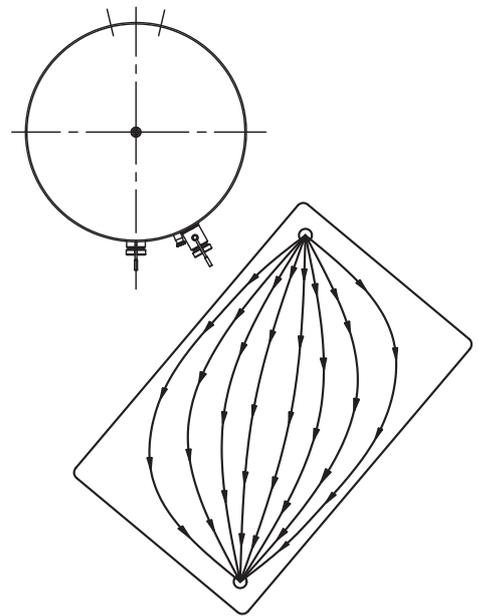
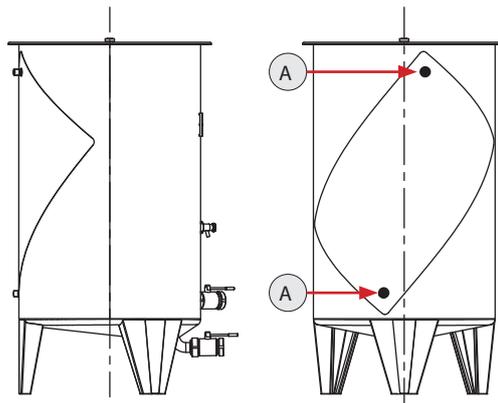
Double jacket type V5

Can be installed on small cylindrical open top tanks type S and S-excl., as well as other cylindrical tanks of small diameters (up to 1270 mm).

This double jacket cannot be installed over the weld on the tank jacket, therefore the max. height of the V5 double jacket in one section depends on the height of the base tank jacket.

Connectors:

[A] double jacket inlet and outlet connectors

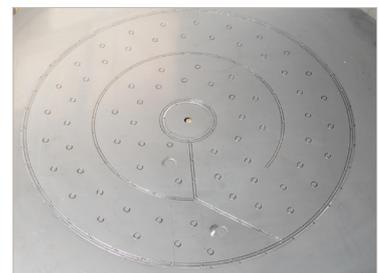


flow illustration [V5]

Heat exchanger on tank bottom - type V6

A heat exchanger can be installed on a flat, conical, or torispherical tank bottom. The laser technology enables different welding lines, which facilitates the adaptation to the existing elements on the base sheet (doors, connectors) and minimizes cooling/heating surface loss.

Jacket dimensions, surface finishing, and jacket connector layout are determined and carried out in accordance with the provided specifications and customer demands.



Multiple double jackets on a single tank

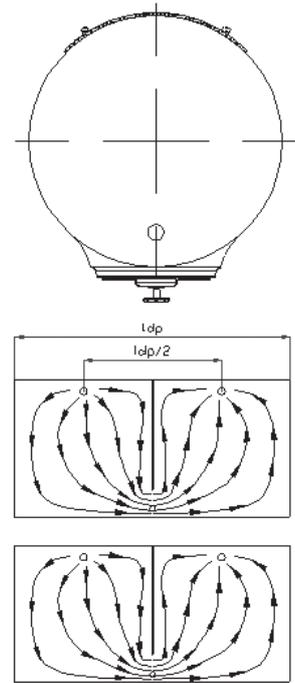
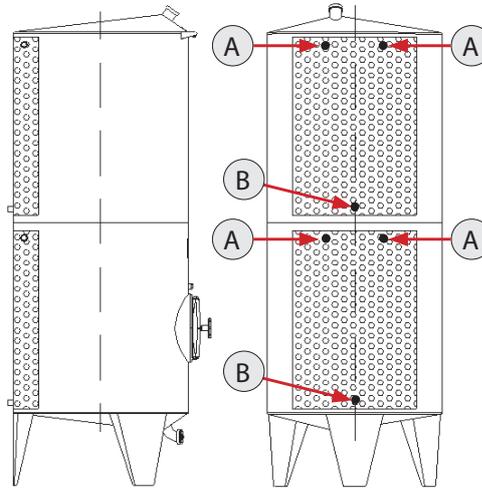
The tank can be equipped with multiple double jackets. In this case, the double jackets can function separately (for heating, cooling) or they can be combined into a single system.

Separate double jackets (V3 + V3)

Two (or more) separate double jackets type V3 on one tank. In this case, the double jackets can carry out different functions (cooling, heating).

Connectors:

- [A] double jacket inlet and outlet connectors on top of both sections (right/left)
- [B] connector for cooling medium release from the double jacket



Connected double jackets - sequential connection (V4 + V3)

Connection of V4 jacket (top) and V3 jacket (bottom).

Connectors on top jacket V4:

- [A] double jacket inlet (2x) and outlet (2x) connectors on top and at the bottom (right/left)

Connectors on bottom jacket V3:

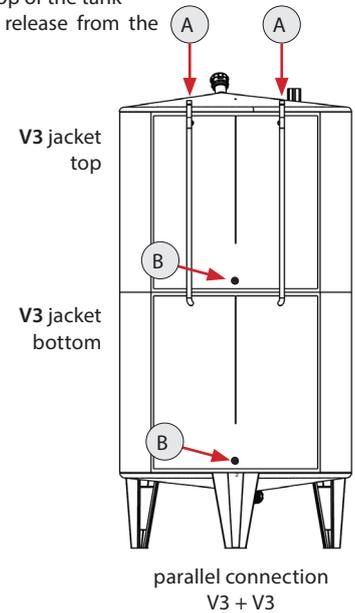
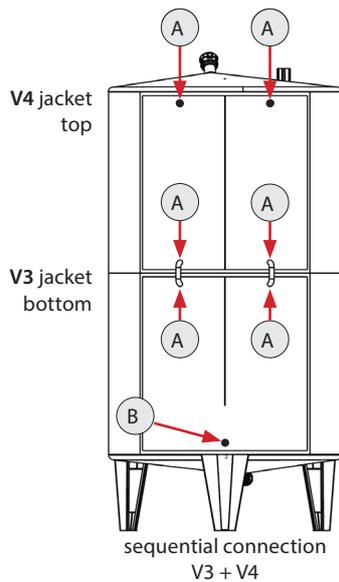
- [A] double jacket inlet and outlet connectors on top (right/left)
- [B] connector for cooling medium release from the double jacket

Connected double jackets - parallel connection (V3 + V3)

Parallel connection of two or more V3 jackets on a single tank. Inlet and outlet cooling medium pipes are guided to the top of the tank.

Connectors:

- [A] inlet and outlet connectors on top of the tank
- [B] connector for cooling medium release from the double jacket (2x)



TEMPERATURE CONTROL AND REGULATION COMPONENTS

In order to control the temperature and the flow rate of the cooling/heating medium in the double jacket, you will need a temperature regulator, a control valve, and a suitable power supply.



Temperature regulator
SPR8 + thermometer well
(on each tank)

Designed for product temperature measurement and regulation.
The temperature regulator is installed in a thermometer well (on tank).



Control valve:
Solenoid valve with connector and coil
(on each tank)

Solenoid valve M23D13 G1/2 Fantini, connector and coil IM21, 24 V
Servo-assisted membrane valve, 1/2" connectors (standard inlet and outlet connector on plate heat exchanger tubes).

Solenoid valve M23E20 G3/4 Fantini, connector and coil IM21, 24 V
Servo-assisted membrane valve, 3/4" connectors (standard inlet and outlet connectors on double jacket).



Connection module HSE01
(on each tank)

Designed for temperature regulation element connection. Each SPR8 temperature regulator requires its own connection module.

Connection module functions:

- SPR8 temperature regulator connection,
- motorized ball valve or solenoid valve connection,
- cooling/heating system pump operation control (depending on valve status),
- connection to SPR8 temperature regulator control software via PC.



Supply unit
SP5 / SP10 / SP20 / SP25

The supply unit, equipped with a built-in relay, is designed for power supply and operation control of the SPR8 temperature regulators, as well as the control valves (motorized ball valves and solenoid valves).

The required supply unit power is determined based on the number of temperature regulators and valves, connected to the unit.

If a tank is equipped with a control panel, the temperature control and regulation function may already be integrated, in which case the temperature regulator is not needed.

TEMPERATURE CONTROL CABINET

Central temperature control is carried out using the control units in the temperature control cabinet. The cabinet enables temperature control in multiple tanks (max. 10). Each tank must be equipped with a temperature probe and solenoid valve. It must also be connected to a suitable control unit in the cabinet.

Each control unit enables:

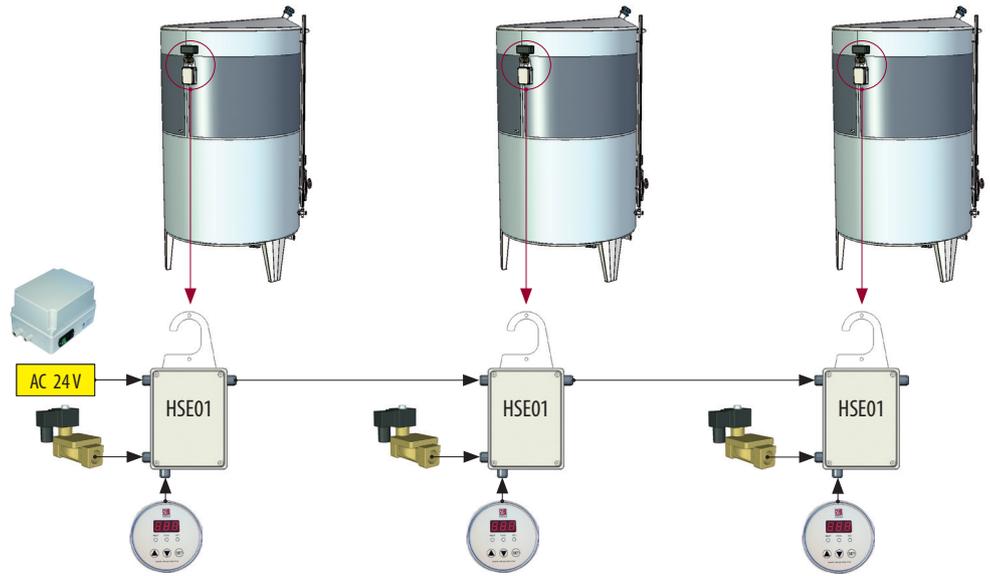
- cooling/heating regulation
- current temperature display
- target temperature setup
- hysteresis setup



Component connection - image 1:

Cooling regulation /CoL/

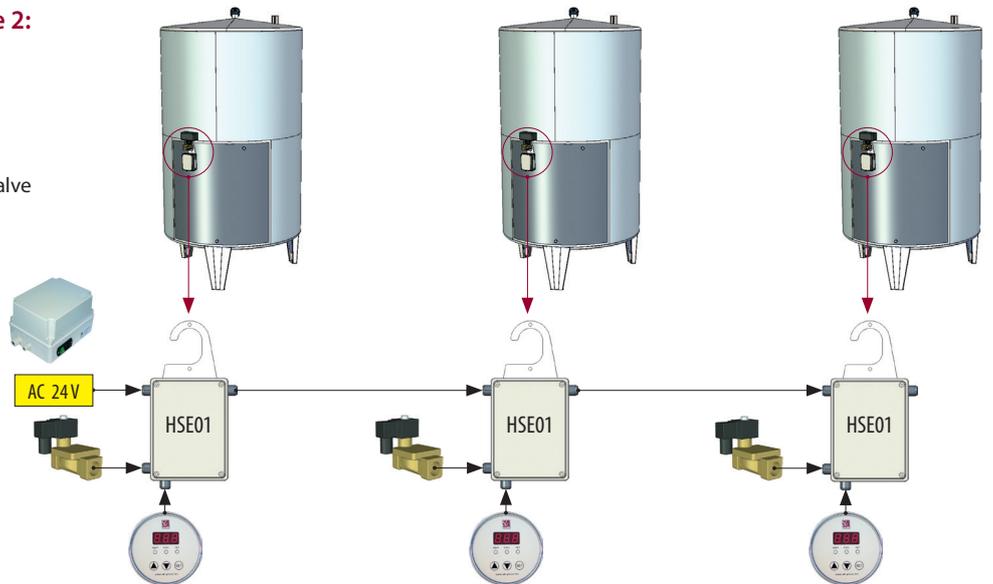
- ▶ double jacket with connectors
- ▶ thermometer well
- ▶ temperature regulator SPR8
- ▶ motorized ball valve or solenoid valve
- ▶ connection module HSE01
- ▶ supply unit



Component connection - image 2:

Heating regulation /HEA/

- ▶ double jacket with connectors
- ▶ thermometer well
- ▶ temperature regulator SPR8
- ▶ motorized ball valve or solenoid valve
- ▶ connection module HSE01
- ▶ supply unit



Component connection - image 3:

Heating and cooling regulation /H_C/

If there are multiple double jackets on one tank, they can be connected to double jacket connection elements, so that the entire system only requires one set of equipment (control valve, thermometer well, temperature regulator, connection module, supply unit).

If a tank has two double jackets, which are used for different purposes (e.g. bottom jacket for heating, top jacket for cooling), you will need the following equipment:

- ▶ 1 x thermometer well
- ▶ 1 x temperature regulator SPR8
- ▶ 1 x connection module HSE
- ▶ 2 x motorized ball valve or solenoid valve
- ▶ supply unit

