

KRONES fermentation and storage tanks

The innovative cellar concept



Breathing innovation into an old tradition

Large tanks used to be constructed at our Steinecker plant up to the mid-1980s. KRONES has reclaimed this tradition once again and breathed new life into expertise from another time.

To achieve this, KRONES works according to a concept whereby individual parts are prefabricated in the factory and the tanks are completed at the construction site. The individual container assemblies, such as cooling cone, frame cooling plates, support frame, insulating roof, etc., are prefabricated and then assembled on site.



Reduced operating costs

KRONES has brought significant improvement to fully automated cellar systems with the double-seat valve technology of TwinPro, as this concept achieves a reduction in operating costs while maintaining consistently high standards of hygiene and product quality.

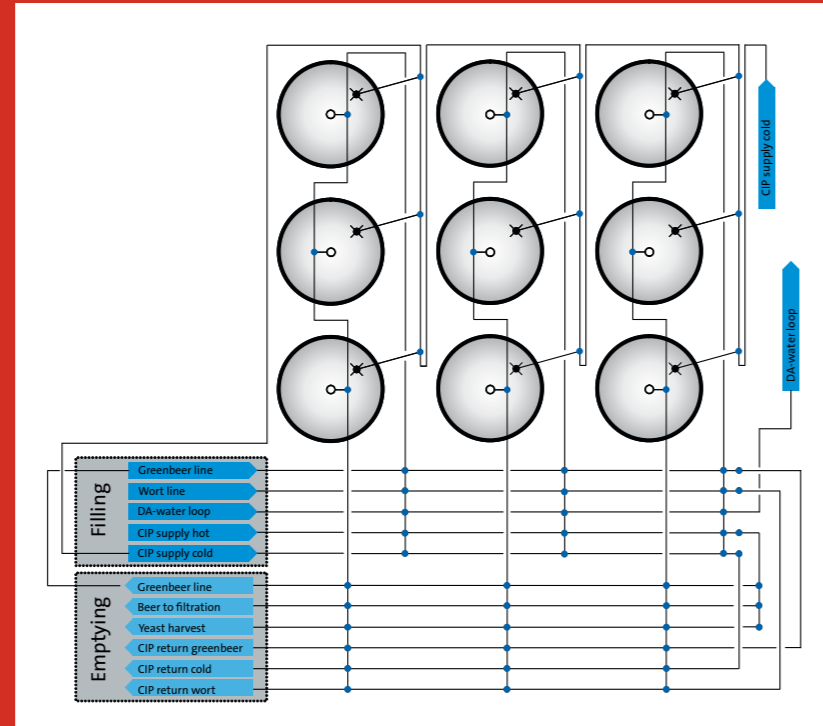
A new feature in the TwinPro concept is the connection between the filling and draining blocks via piping bypasses. "Tank loops" link several tanks together and connect them with both pipe system tracks via valve blocks.

This intelligent pipework delivers a tangible range of benefits:

The system:

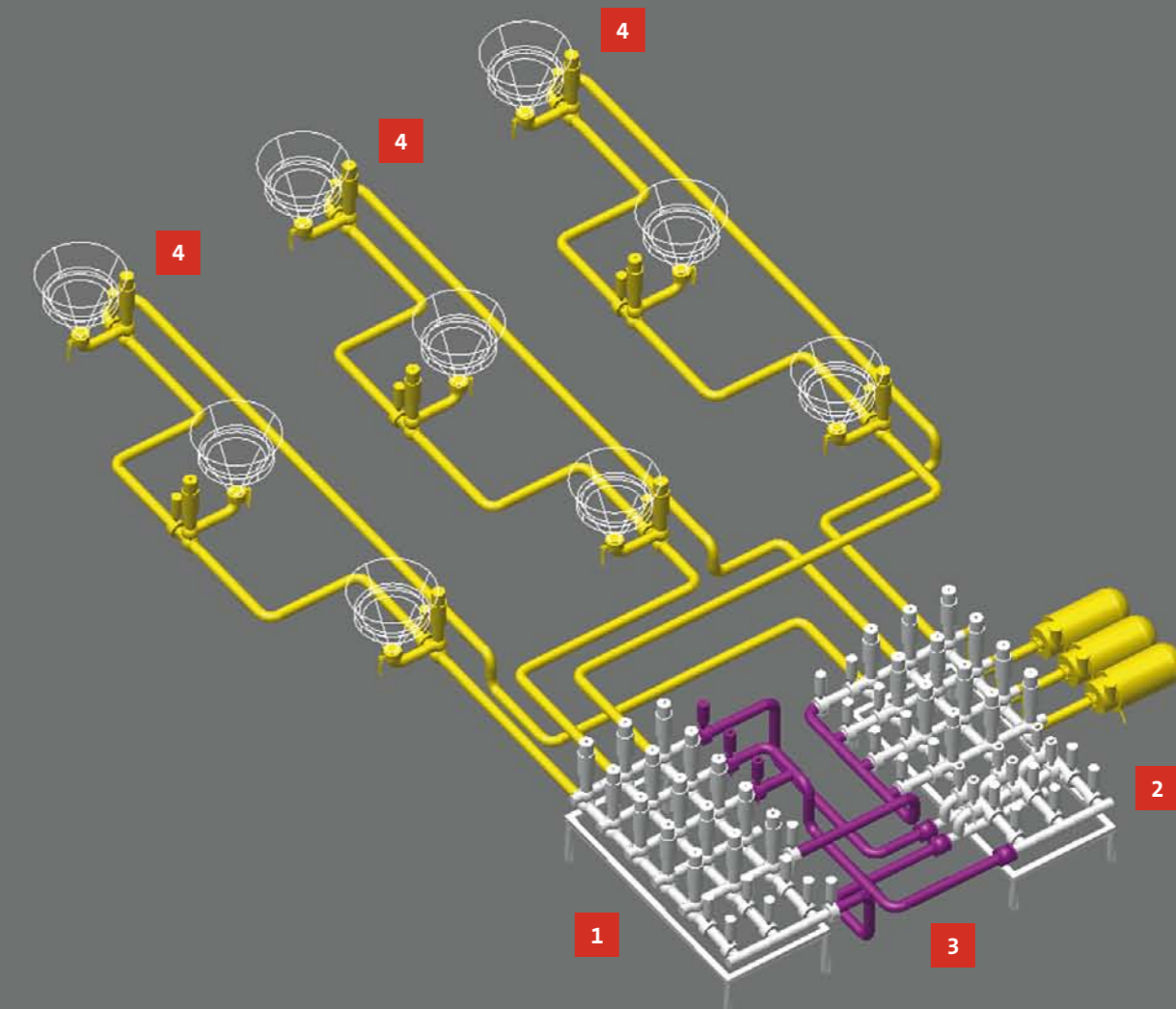
- improves production and cleaning processes
- reduces the number of fittings and piping routes
- minimises pipe resistances
- reduces loss of media
- requires less power to maintain flow rate

The system can be extended with additional tank loops and valve blocks at all times and can be implemented with all standard valve suppliers.



A new feature in the TwinPro concept is the connection of the filling and draining blocks via piping bypasses. An intelligent path position minimises displacement paths and provides for optimised path control.

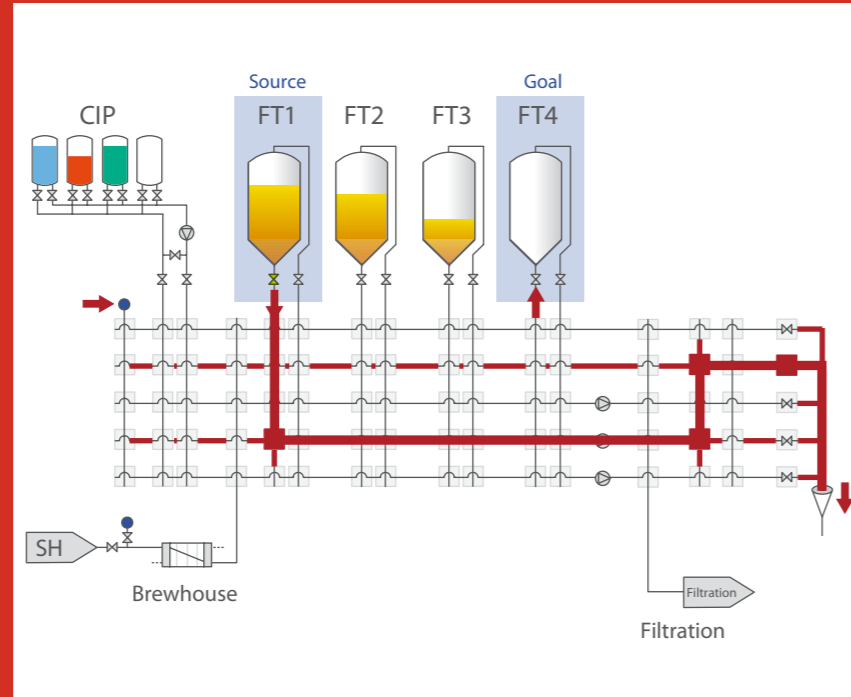
- 1 Filling block
- 2 Draining block
- 3 Bypasses
- 4 Tank loops (@ 3 tanks)



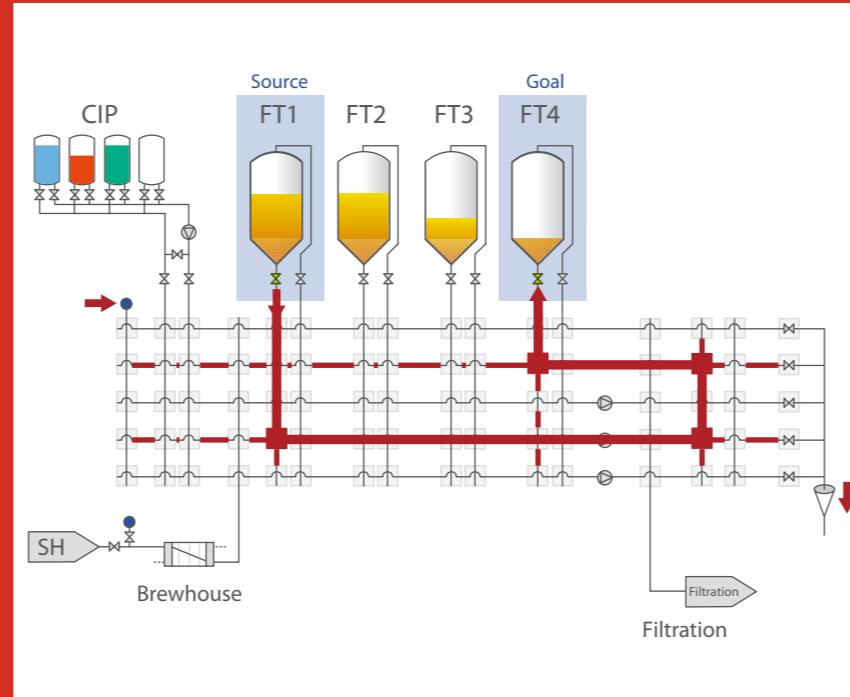
Specific route identification and control

In order to optimise production and cleaning routes in the fermentation and storage cellar, KRONES has developed DynaRoute, a route management system that brings perfection to automated tank storage through its intelligent control and regulation features. The system automatically searches for a connection between vessels for a given product through a network of pipes and at the same time accounts for the status of the line, takes over the control and records the entire process. The key to route management is closely linking the actual transfer of the respective product through the pipe network with a series of other technology steps that are responsible for the necessary discharges. The routes for these steps are likewise automatically calculated and activated.

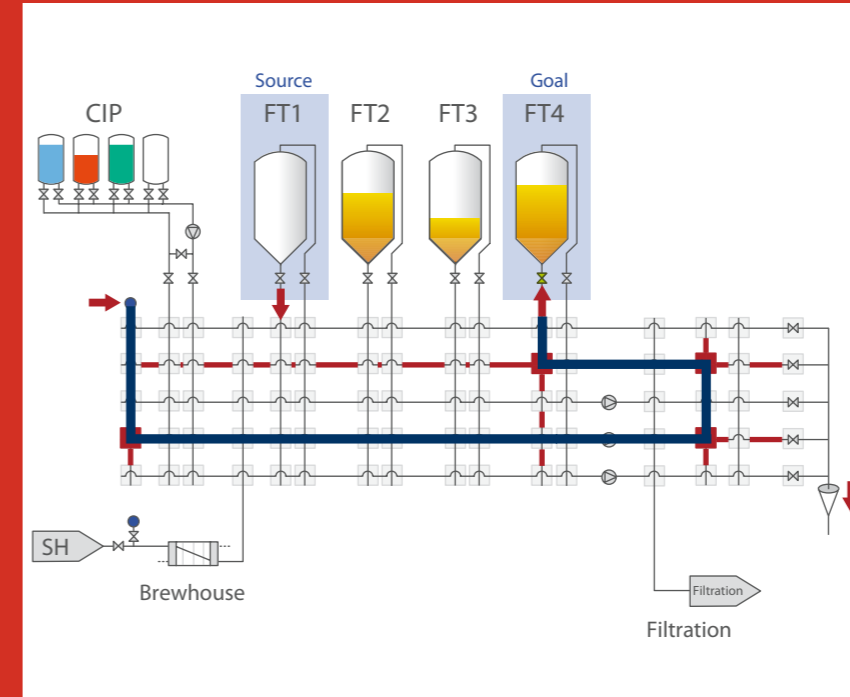
The size and complexity of the tank farm is of no significance in route management, and it can be applied in just the same way with smaller lines as for large fermentation and storage cellars.



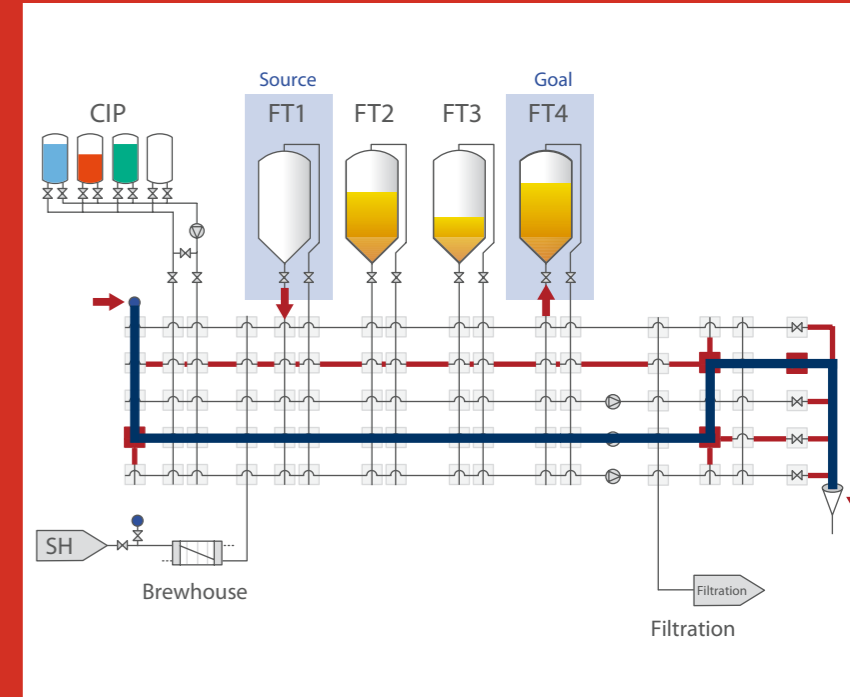
Pipe with product discharges to gully



Product is pumped round



Pipe with water feeds into tank



Pipe with water rinses gully

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Your benefits

Lower operating costs

The intelligent piping system with innovative tank loops significantly reduces the operating costs of the cellar system.

Strategic control

The newly developed DynaRoute control and regulation system puts the finishing touch to automated tank storage.



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