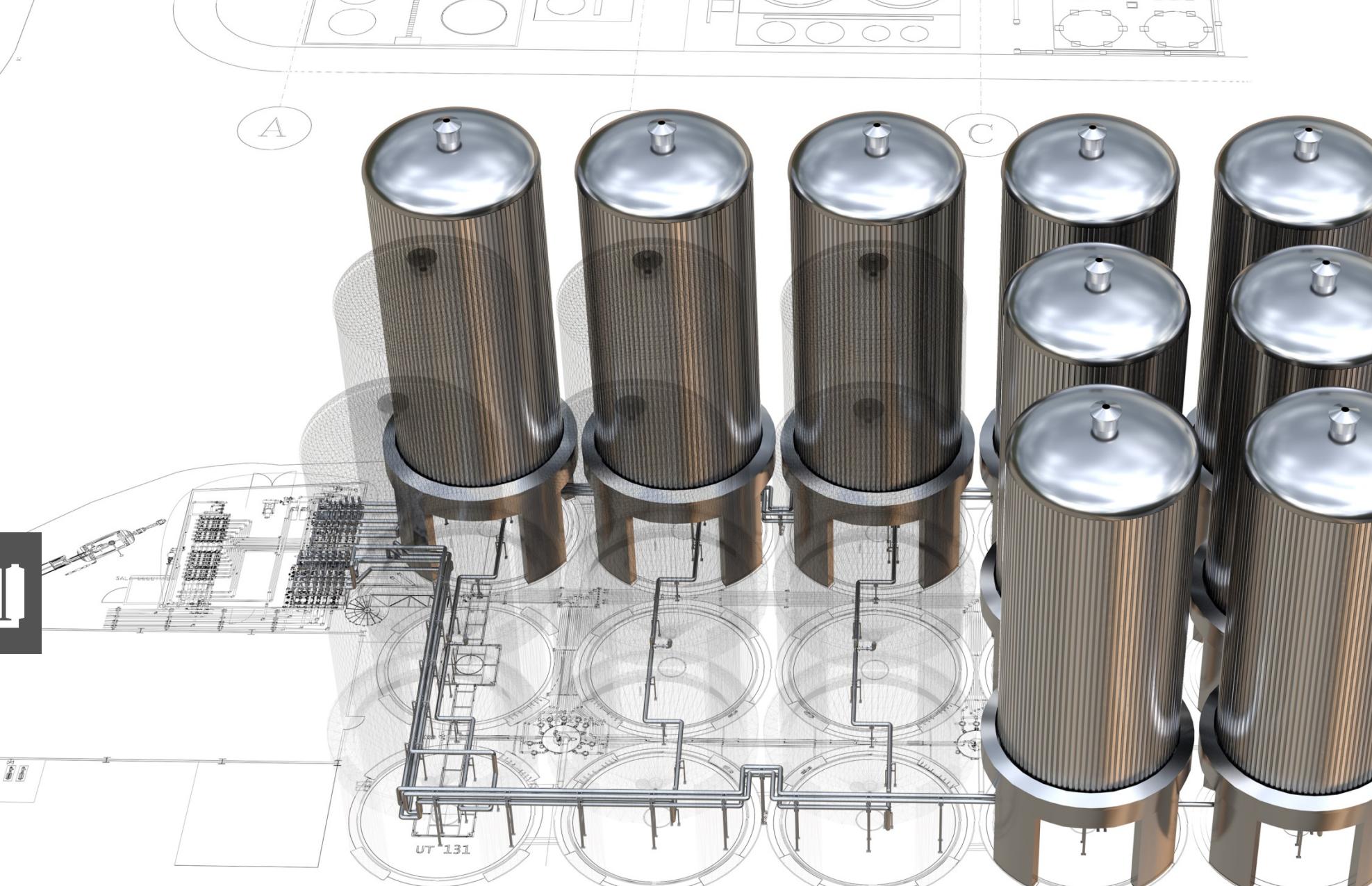
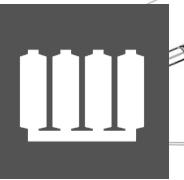


STEINECKER TwinPro

A systematic cellar concept





Intelligent pipe system in the brewery

Perfectly combined product routes contribute to efficiency: An elaborate concept for connecting the pipe system in the fermenting cellar reduces the total investment as well as the amount of media displaced during production and cleaning processes.

STEINECKER TwinPro provides the optimum solution for these two concerns in the fermenting cellar of a brewery. The piping concept with tank loop and valve blocks provides the shortest possible connection between all tanks.

At a glance

- Optimised connection of tanks with fully automatic valve block technology
- Individually planned closed loops for optimal capacity utilisation of the fermenting tanks
- Saved costs due to a reduced need for pipes and valves, as well as a reduced quantity of displacement media and loss of beer



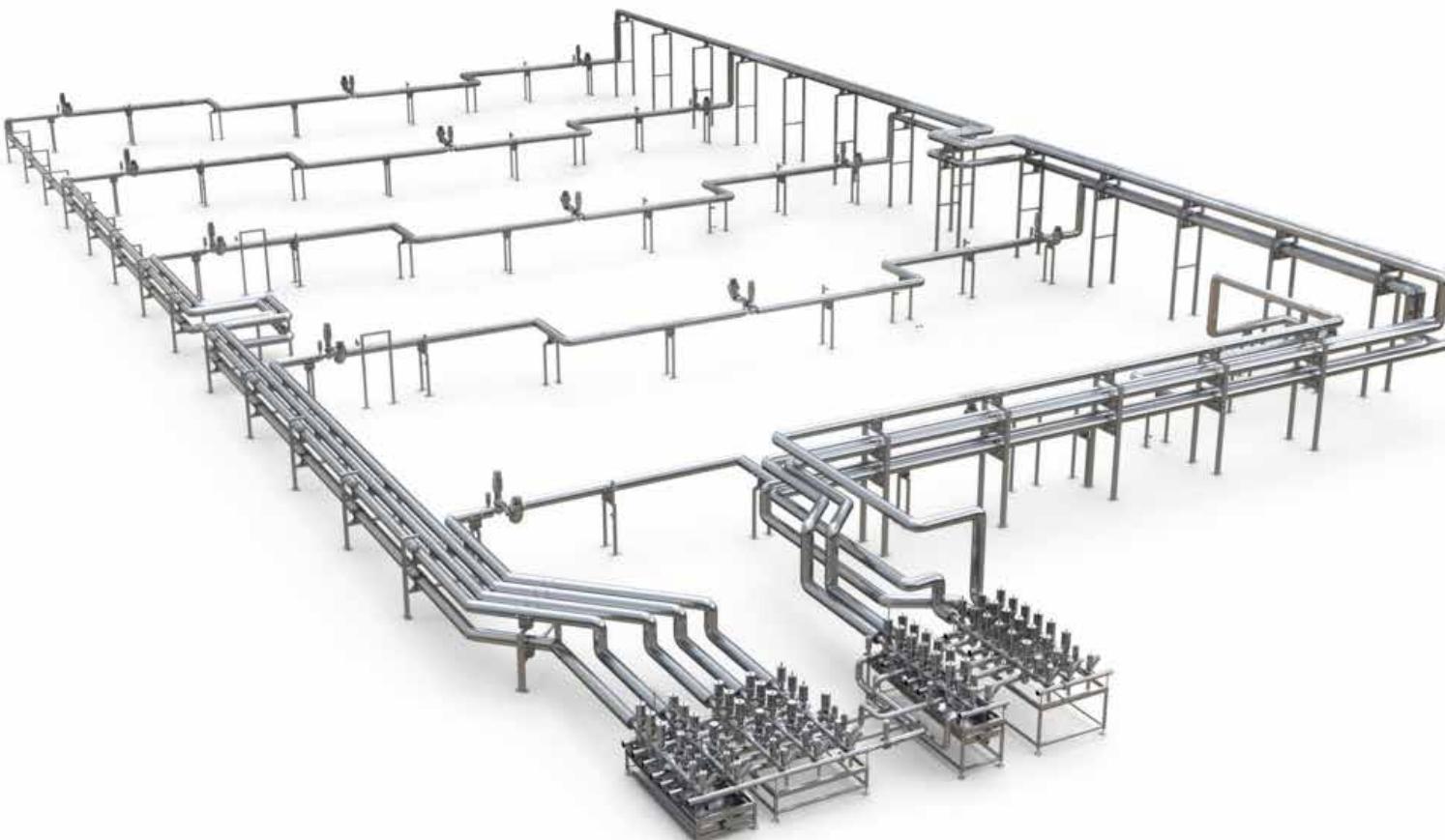


Pipe system concept

The pipe system of the fermenting cellar stands out for its low investment and operating costs as compared to the conventional tank connection via a pipe fence.

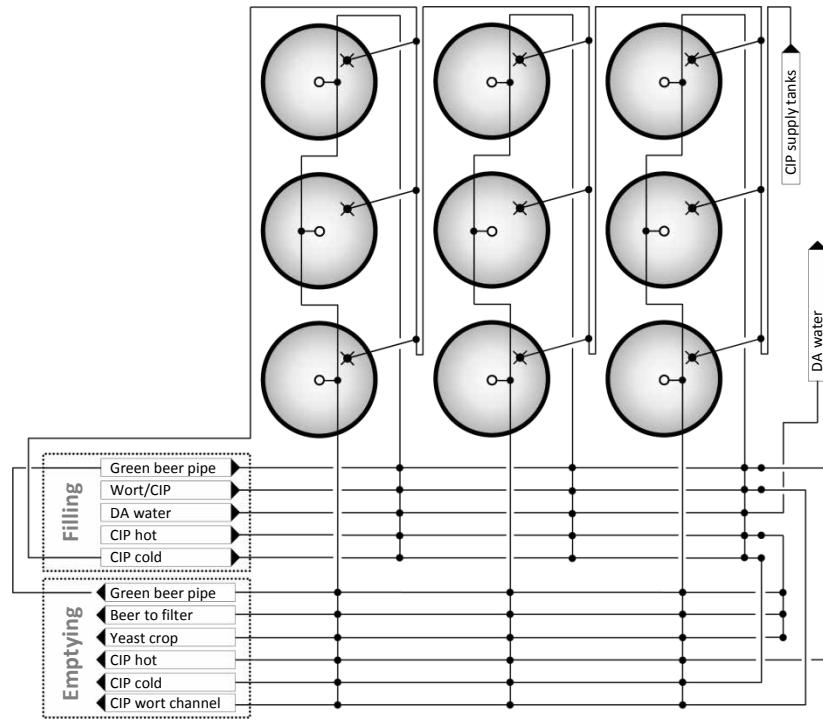
Concept

- One valve block each for the filling and emptying processes in the tanks
- Closed loop with up to four tanks
- Valve blocks with double-seat technology for connecting the tanks to the main pipes
- Up to 30% less demand for pipe systems and valve technology
- Required volume of water for displacement and cleaning agents reduced by up to 35% due to minimized pipe lengths
- Simply expandable without high installation costs and work
- Top flexibility



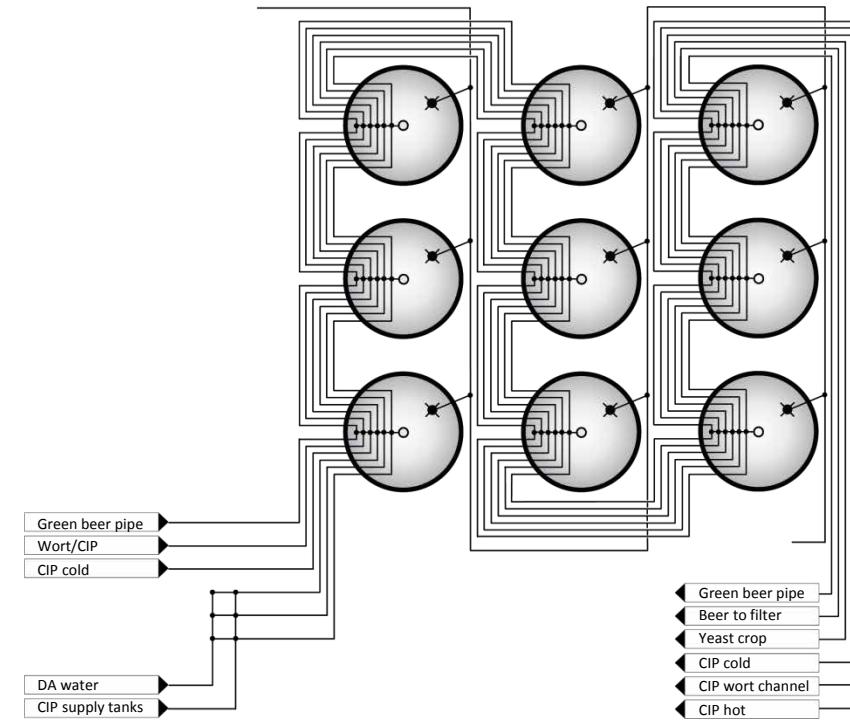


The pipe system with TwinPro as compared to the linear pipe system



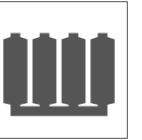
Decentralised TwinPro pipe system

- The short connection between the two valve blocks allows for savings as regards pipes, valves, cleaning media and water for displacement.

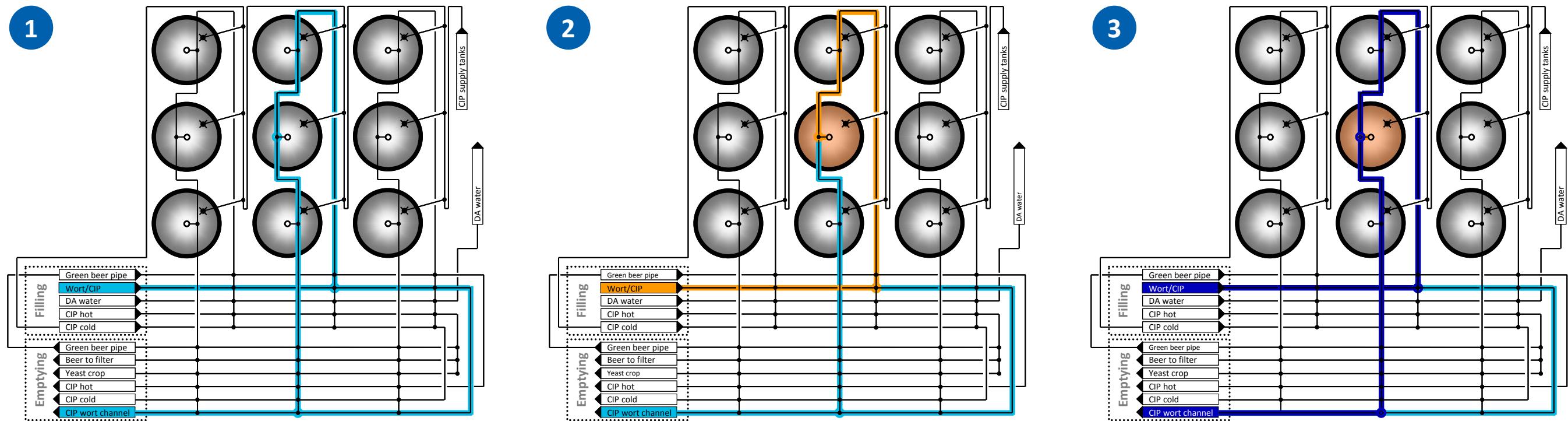


Linear pipe system

- All pipes must be guided past all tanks. The amount of potential extra cost and work increases the greater the number of tanks.

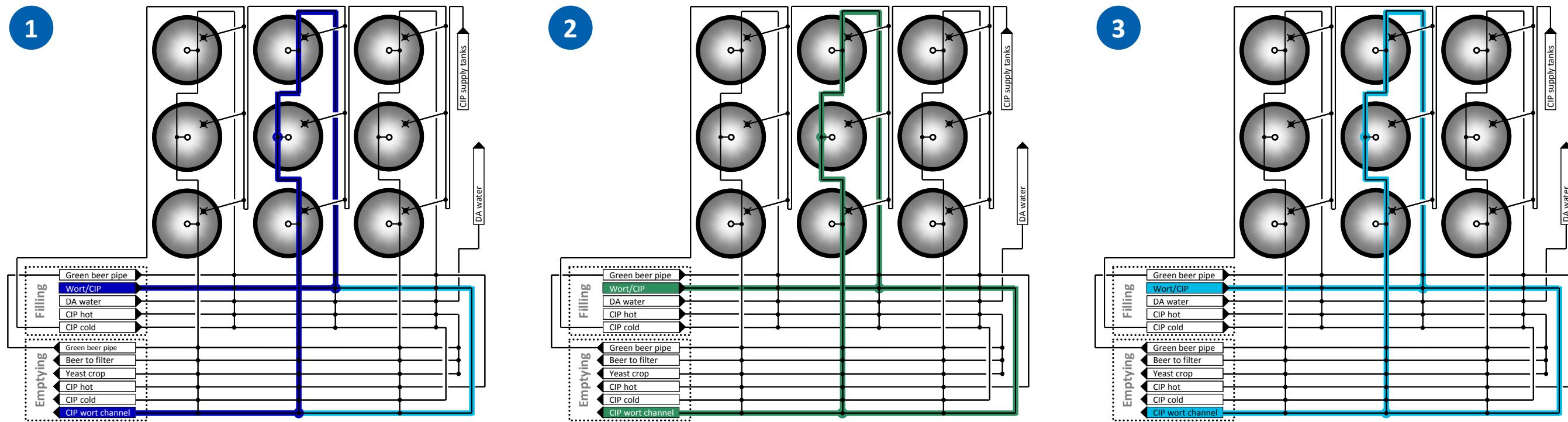


Method of operation



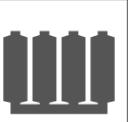
1. The filling pipe has been cleaned
2. Wort displaces water and the tank is filled
3. Water displaces wort and the pipe is flushed

Method of operation

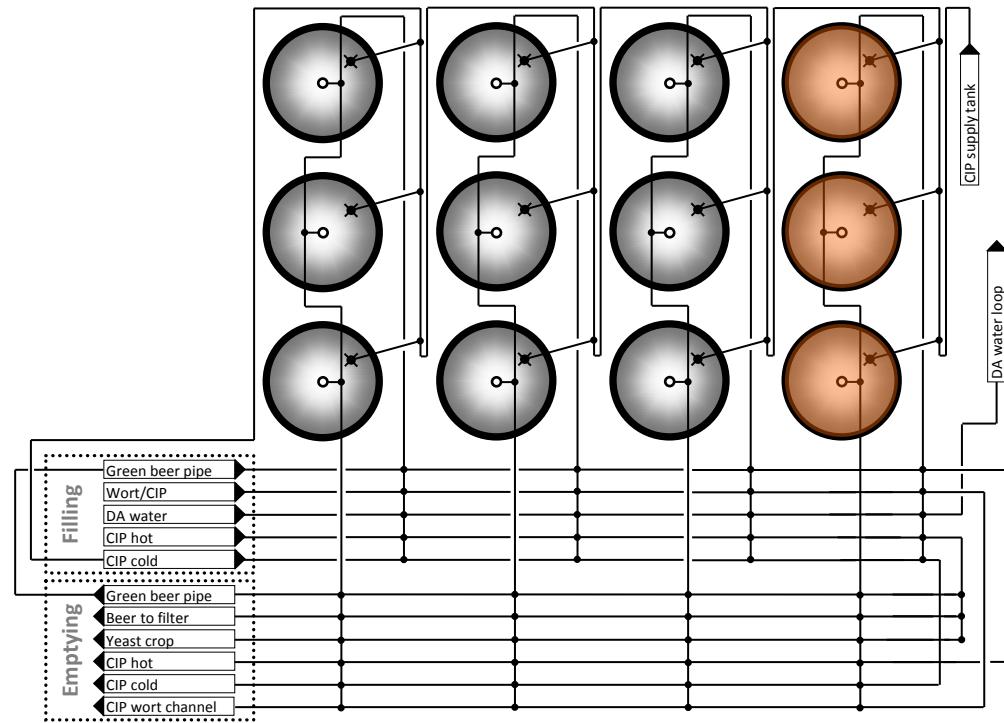
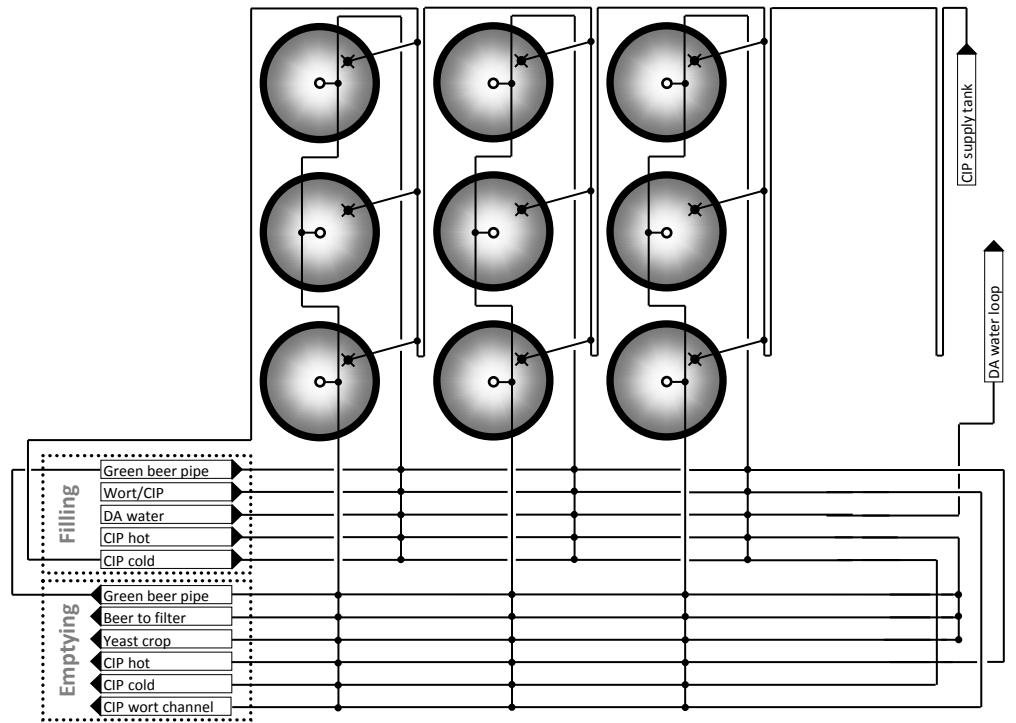


1. Filling pipe ready for cleaning
2. Caustic displaces water and flushes the filling pipe and the bypass system
3. Water displaces caustic and flushes the filling pipe and the bypass system





The TwinPro technology



Tank expansions

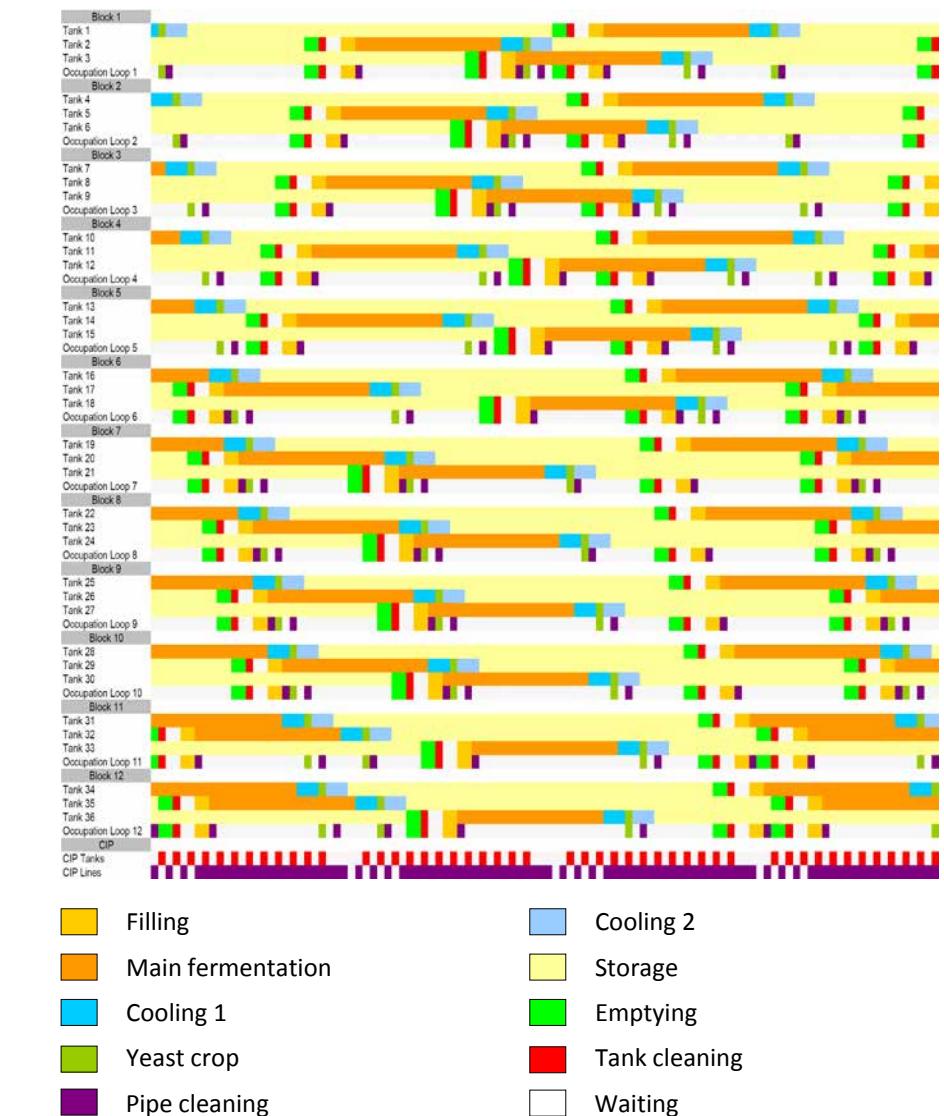
- Simple expansion of closed loops
- Only very brief production stop needed to integrate it



Configuration of TwinPro

The production sequence is simulated to ensure a high flexibility of the tank occupancy.

- The result of this simulation enables the individual determination of the number of tanks per closed loop.
- The tank system is designed to suit the required flexibility in individual cases.





Benefits to you

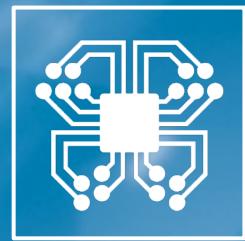
Cost-efficient acquisition and maintenance

- Low investment costs as a result of up to 30% fewer pipes and valve technology
- Reduced operating costs thanks to a 35% reduction in water consumption during displacement and for cleaning media
- Reduced servicing and maintenance thanks to reduced need for valves

Exact configuration

- Simple expandability of the fermenting cellar due to the decentralised pipe system
- Individually planned closed loops provide high flexibility
- Tank construction and piping concept from a single source

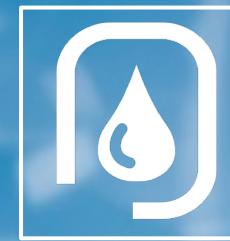




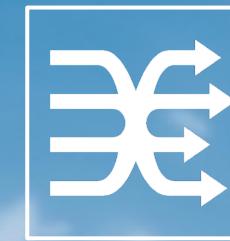
Digitalisation



Process
technology



Bottling and
packaging equipment



Intralogistics



Lifecycle
Service



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 KRONES