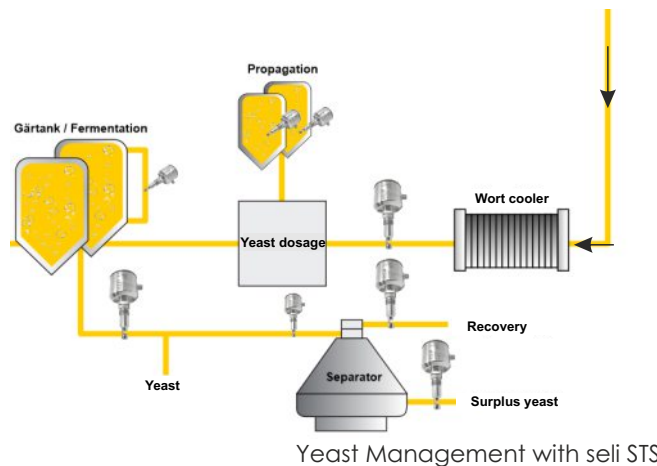


Analytical measurement

Yeast Management



From yeast dosage to phase separation



Products – Manufacturer
Precision and perfection.

Innovative Automation

Do you have a vision, from that should become more?
We are looking forward to the Challenge!

Hygienic measurement technology

Our measurement technology for the food industry is characterized by a very high measuring dynamics. The robust Hygienic design ensures an increased lifespan.

They usually have aseptic measuring points and are typically on the device or programmable on PC.

Application and process description

Yeast management refers to the management and control of yeast in a brewing process. This includes selecting the right type of yeast, calculating yeast dosage, monitoring yeast activity during fermentation and beer/yeast separation.

Yeast dosage

Yeast dosage refers to the amount of yeast added to a brew batch. The correct dosage is important to achieve optimal fermentation and the desired flavor profiles. The absorption sensors of the seli STS series are used for the precise and cost-effective possibility of dosing. Two sensors are required for this. The first sensor measures the turbidity of the incoming wort, independent of the color, the second sensor measures the total turbidity of the wort and yeast inline after yeast dosing. The yeast concentration can be determined by calculating the difference between the two signals.

Yeast fermentation

Yeast fermentation refers to the process by which yeast converts sugars into alcohol and carbon dioxide. During fermentation, the yeast also produces various aromas and flavors that give the beer its distinctive taste. This takes place in the fermentation tank. During this process, various impurities and particles can appear in the fermentation mixture, which can affect the quality of the end product. This is where the turbidity measurement technology is used in the form of the seli STS sensors, which are installed in the yeast tank

or in the pipeline. The STS devices reliably detect yeast cells, protein residues, hop residue and other particles that can float in the beer during yeast fermentation.

Beer-/Yeast-phase separation

During the yeast phase separation, the beer is separated from the solid components, including yeast cells and other residues. In this process it is important to monitor the turbidity of the beer to ensure that the separated solids have been adequately removed and that the beer has the desired clarity. This can be done in a number of ways, such as draining the beer from below or centrifugation. The use of the seli STS devices directly at the tank outlet or the yeast return line helps with the optical control and the control of the phase transition from yeast to beer. This reliably avoids product contamination and minimizes product losses.

Advantages of using the seli STS

1. The easy handling of the STS devices enables a quick and cost-effective implementation.
2. Efficiency: Yeast management is optimized, resulting in more efficient use of time and resources.
3. Quality improvement: Impurities can be detected early, resulting in better overall product quality.
4. Time savings: Automated adjustments save brewing staff manual intervention and monitoring, all in real time
5. Data Analysis: The collected turbidity data can be used for later analysis and process optimization.