The Centec Group

Centec is a privately owned group of companies. We design and manufacture automated process skids for efficient and reliable production of beers and beer based mixed drinks. Our systems are applied in all steps of the brewing process, e.g. for water purification and deaeration, for wort cooling and aeration, for yeast dosing and management, for blending and carbonation as well as for flash pasteurization. Centec technology includes a range of high precision process sensors for accurately measuring brewery critical product properties such as extract, alcohol, O₂ and CO₂. The largest brewery groups in the world are among our key customers.

The Principle

The Centec yeast pitching system YeastPitch is used for adding (pitching) yeast into the aerated wort prior to fermentation. First the yeast cells use up all of the oxygen in the wort for growth and reproduction. Then, during fermentation, they convert the sugars in the wort into alcohol, carbon dioxide and flavor components. The yeast pitching unit is a fully automated system that measures and controls the amount of added yeast with extreme precision. The process skid is equipped with accurate flow meters and an intelligent frequency controlled pump. Dose rate control is achieved by using reliable turbidity sensors, or alternatively a live yeast cell monitor. The mass flow of yeast is adjusted, either according to the measured flow rates of wort and yeast, according to the difference of turbidity before and after pitching or according to the live cell concentration measurement. Through a specific mixing nozzle, wort and yeast are blended. The cells are homogenously distributed into the wort by a pump or static mixer. Due to its compact and modular design, the skid can easily be combined with a wort aeration system.

Technical Data

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<table>
<thead>
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<tbody>
<tr>
<td>Capacity</td>
<td>10 - 3,000 hl/h</td>
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<tr>
<td>Range of Yeast Cells</td>
<td>0 - 100 Mio./ml</td>
</tr>
<tr>
<td>Temperature of CIP</td>
<td>up to 85 °C</td>
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<tr>
<td>Material</td>
<td>1.4301/1.4404 AISI 304/316L</td>
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<tr>
<td>PLC</td>
<td>SIMATIC S7</td>
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<tr>
<td>Options</td>
<td>in-line O2 measurement booster pump wort aeration</td>
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</tbody>
</table>

The Centec production is certified according to ISO 9001.

- Application Specific and Energy Efficient
  exceptional accuracy with high precision sensor technology
  specifically designed injection nozzle for yeast pitching
  expandable for automated wort aeration
- Modular Design with Standard PLC
  skid mounted for easy installation and start-up
- Hygienic Execution and Full CIP Capability
- Outstanding Price-Performance-Ratio


- Ion Exchange · Reverse Osmosis · Membrane Deaeration · Column Deaeration · Hops Pre-Isomerization
- Wort Aeration · Yeast Pitching · Nitrogenation · Carbonation · Carboblending · High Gravity Blending
- Multi Component Mixing · Additive Dosing · Flash Pasteurization · Cleaning-in-Place · De-alcoholization