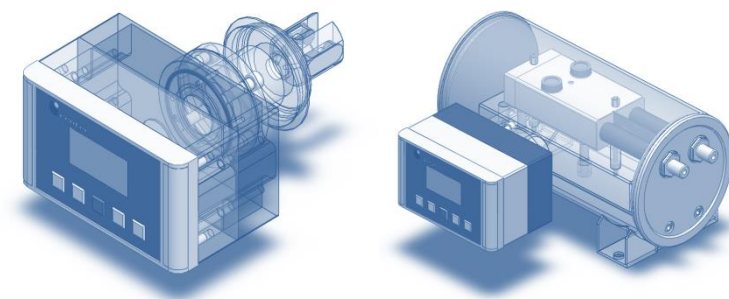


## The Centec Group

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, O<sub>2</sub> and CO<sub>2</sub>. The largest brewery groups in the world are among our key customers.



**Accuracy. Reliability. Centec.**

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**EASYOMER**

## Hops Pre-Isomerization

## Centec Brewery Systems



Automated  
process skids  
and high precision  
sensors from a  
single source.  
**Centec.**

# EASYOMER

## The Principle

The Centec pre-isomerization system EASYOMER allows an economically optimized use of hops (natural hops, pellets, extract) resulting from a significantly increased yield of bitter substances. This optimized yield of bitter acids is achieved by a very innovative process. A new, scientifically proven technique and certain hops specific parameters (temperature, pressure, pH, concentration, time, etc.) support the solubility of the iso-alpha acids resulting from the hops product. To a particularly high degree they remain dissolved up to the finished beer. Since the pre-isomerization is separated from the brewing process (wort boiling), this highly efficient processing method complies with the German Purity Law ("Reinheitsgebot") and has no impact on the aroma profile of the beer. By using existing process equipment, CIP systems and dosing pumps for the addition of hop bitters, the investment costs can be reduced to a minimum. Significant raw material savings and low capital costs result in a very short amortization period. With the Centec EASYOMER skid a hops reduction of up to 30 % can be achieved.

## Technical Data

Capacity	2 - 50 hl per brew
Type of Hops	natural hops, pellets, extract
Hops Savings	10 - 30 %
Time per Batch	20 - 60 min.
Temperature of CIP	up to 100 °C
Material	1.4301/1.4404 AISI 304/316L
PLC	SIMATIC S7
Options	in-line measurement of O <sub>2</sub> /pH/conductivity/...



The Centec production is certified according to ISO 9001.

- **Application Specific and Energy Efficient**  
hops reduction by up to 30 %  
applicable for all types of hops
- **Modular Design with Standard PLC**  
skid mounted for easy installation and start-up
- **Hygienic Execution and Full CIP Capability**
- **In Compliance with the German Purity Law**
- **Outstanding Price-Performance-Ratio**

## Experience. Expertise. Centec.

*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 · Dealcoholization*

