

# DOSAGE OF LIQUID HOP PRODUCTS



# PRECISE DOSING OF HOP EXTRACT AND HOP OILS

## Precise dosing for consistent beer quality

Liquid hop products ensure optimum beer quality: hop extracts provide balanced bitterness, hop oils ensure characteristic aroma. Precise, reliable dosing is crucial. At the same time, all components must meet the highest hygiene standards and be food-grade compliant.

## Challenges in precise hop dosing

- Inaccurate or fluctuating dosing of liquid hop products impairs beer quality and leads to batch deviations.
- Different recipes require customized dosing settings.
- Dead spaces and rough surfaces make cleaning and disinfecting components difficult.
- Dosing pumps that come into contact with food must be able to reliably withstand cleaning and disinfection temperatures.
- All components that come into contact with media must be food-compliant and meet legal requirements.
- The wide range of hop products places different demands on dosing. Density, viscosity, and rheological properties vary depending on the product.

## The solution from sera

- **Recipe adjustment:** Large adjustment ranges enable recipe-dependent dosing quantities.
- **Hygienic design:** Dead space-optimized design for easy and residue-free cleaning.
- **Surface finish:** Smooth, electropolished stainless steel components prevent adhesion and facilitate cleaning.
- **Material compliance:** Food-grade materials in accordance with Regulation (EC) 1935/2004, Regulation (EC) 10/2011, and FDA.
- **Secure process connection:** Choice between Tri-Clamp connections or milk pipe screw connections for maximum hygiene.
- **High viscosities:** With peristaltic pumps as an alternative, even highly viscous media can be conveyed.
- **Process integration:** Flexible connections and secure process connection facilitate integration into existing production facilities.



## Your contact persons



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