

### Requirements and Solutions

The KHS ECOSTAB C system in container format (Plug & Produce) is ideal for the continuous polyphenol stabilization of beer. A batch tank for the PVPP suspension and a regeneration module (CIP pump, CIP batch tank, and heat exchanger) are already integrated into the fully automatic, independent system. Following stabilization, the regeneration process is initiated within the module fully automatically, with the PVPP suspension being discharged into the PVPP batch tank at the end of the process. There is thus always a sufficient quantity of regenerated PVPP suspension available for haze and proportional dosage into the beer flow. The modular design of the system with its small tanks achieves PVPP utilization levels that are considerably higher than for conventional systems. This has enabled the PVPP load to be cut by approx. 70% – and the amount of capital bound by the quantity of PVPP used in the process to thus be considerably reduced.

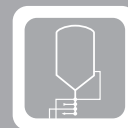
### Key Features

- Continuous PVPP dosage in the main flow – no bypass control
- 24/7 – fully automatic production
- Excellent product separation – extremely low mixing phases
- Hose pump and turbidity meter for precise dosage of the PVPP suspension
- Use of leak-proof valve equipment to keep product and CIP media separated
- Touch panel for process and system visualization
- Fully automatic system – can be perfectly integrated into existing filter lines
- Compact design enables the system to be packed and shipped as one unit in two standard overseas container

### Standard Equipment

- Frame accommodating all process-relevant system components
- PVPP tank for the PVPP suspension
- Hose pump for PVPP suspension dosage
- Regeneration module, including a CIP pump, CIP batch tank, and plate heat exchanger
- All components needed for operating the system, such as pumps, valves, heaters, and media tanks, etc., are compactly mounted on a stainless steel framework and come ready for operation
- Material for tanks and piping, etc., made of 1.4301 stainless steel (AISI 304)
- Automation system, including a touch panel for operation of the stabilizing system
- Skid-mounted, compact, stainless steel design (AISI 304)





## Benefits

- 24/7 – fully automatic production
- Excellent product separation – extremely low mixing phases
- Up to 70% less PVPP in the process
- Up to 25% lower cost of investment
- Utilization of PVPP up to five times higher
- Easy-to-maintain, long-lasting stainless steel system (AISI 304)
- Machines that can be packed into one container ensure fast, cost-saving installation and commissioning Plug & Produce
- Perfect also in combination with crossflow filtration



### Service

- Worldwide service and fast spare parts supply
- Customized machine layout
- Turnkey projects worldwide
- Full system planning

### Technical Data

#### Stabilizing capacity

200–900 hl/h

#### Main modules dimensions

Supply-Unit: Width 4.2 m x height 2.1 m x depth 4.2 m

Stabilisation Unit: Width 3.8 m x height 3.1 m x depth 1,7 m

#### PVPP tank dimensions

Width 1.4 m x height 2.8 m x depth 1.4 m

#### PVPP suspension batch tanks

1

#### CIP media tanks

1

#### Degree of automation

Fully automatic