SÜDMO WDS
WATER DEAERATION SYSTEM

PRODUCT INFORMATION

CHALLENGE

The influence of oxygen in beverages has always played an important role. Unwanted foaming in the filling process, poor carbonation results but also a negative sensory change are caused by inadequately deaerated water. In high gravity brewing, beer with a high original wort content is diluted to the desired strength with deaerated water before filling. The influence of oxygen on the beverage is minimized by reducing the residual oxygen levels in the deaerated water as much as possible. Deaerated water is also used in the brewing process when adding diatomaceous earth, to flush out or clear pipes. Increased quality requirements are placing higher and higher demands on the residual oxygen content in beverages.

SOLUTION

The WDS type water deaeration system is based on our many years' experience in gas/liquid separation (stripping). EcoDS is made up of tried and tested components, has a hygienic design and is a fully-automated system which uses stripping technology based on CO_2.

The water to be deaerated is fed in at the top of the stripping column, passes through special stainless steel seals and meets the counterflow CO_2. Adjusting the partial pressure enables theCO_2 to dissolve the oxygen out of the water more efficiently and helps remove the oxygen from the deaeration tank.

Two designs are available: WDS Hot (stripping at > 70°C) and WDS Cold (stripping at room temperature).

CUSTOMER BENEFITS

- Lowest O_2 levels
- Long-lasting stainless steel seals
- Completely pre-tested equipment
- Plug & play interface incl. piping, cabling
- Hygienic low-maintenance design
- Fully automatic CIP-capable
- No reinforced tanks or vacuum pumps required
- CIP/SIP-capable

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TECHNICAL SPECIFICATION

Performance ranges	1 – 50m³/h
Heat recovery	91- 95%
EcoDS Hot residual O_2*	~ 0.005 ppm
CO_2 content*	~ 0.5 g/l
EcoDS Cold residual O_2*	~ 0.01 ppm
CO_2 content*	~ 1.2 - 2.5 g/l

* Depends on capacity, purity of stripping gas and input conditions:

OPTIONS

- O_2 measurement
- UV sterilization
- Cool and Control setting
- CO_2 injection after stripping column

MATERIALS

Components in contact with product
1.4404 (AISI 316L)

Components not in contact with product
1.4301 (AISI 304)

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