

# SÜDMO WDS

## WATER DEAERATION SYSTEM

### PRODUCT INFORMATION

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#### CHALLENGE

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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

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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<sub>2</sub>.

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<sub>2</sub>. Adjusting the partial pressure enables the CO<sub>2</sub> 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

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- Lowest O<sub>2</sub> 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 – 50m <sup>3</sup> /h
Heat recovery	91- 95%
EcoDS Hot residualO <sub>2</sub> *	~ 0.005 ppm
CO <sub>2</sub> content*	~ 0.5 g/l
EcoDS Cold residualO <sub>2</sub> *	~ 0.01 ppm
CO <sub>2</sub> content*	~ 1.2 - 2.5 g/l

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

#### MATERIALS

##### Components in contact with product

1.4404 (AISI 316L)

##### Components not in contact with product

1.4301 (AISI 304)

#### OPTIONS

- O<sub>2</sub> measurement
- UV sterilization
- Cool and Control setting
- CO<sub>2</sub> injection after stripping column



#### SÜDMO PROJECTS GMBH

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