



fast | accurate | flexible

# CO<sub>2</sub> Membrane System

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The professional way of  
**CO<sub>2</sub> and O<sub>2</sub> adjusting** in beverages





System 250

## FEATURE

The CO<sub>2</sub> Membrane System is the best available technology of adjusting O<sub>2</sub> and CO<sub>2</sub> content in your wine. The system runs

- accurately
- finely effervescent
- in-line

The system is a state-of-the-art method using a membrane contactor with hydrophobic membrane.

The membrane, which is impermeable to water, but permeable to gas, allows dissolved gases, such as CO<sub>2</sub> or O<sub>2</sub>, to be adjusted in liquids. CO<sub>2</sub> is immediately fully dissolved:

- solution section not required
- gas bubbles not visible
- carrier gases such as O<sub>2</sub> and N<sub>2</sub> will be removed in one step

## CAPABILITIES

The CO<sub>2</sub> Membrane System offers practical functionality and versatile applications:

- accurate and repeatable CO<sub>2</sub> adjustment and O<sub>2</sub> reduction at the same time
- bubble-free gassing
- bubble-free CO<sub>2</sub> removal
- O<sub>2</sub> adjustment in red wines
- degasification of water
- reduction of alcohol content

## FITTINGS

- control via 15" touch screen industrial computer
- fully automatic CO<sub>2</sub> adjustment and O<sub>2</sub> removal
- CO<sub>2</sub> sensor Anton Paar Carbo 510 for process control
- optical O<sub>2</sub> sensor
- automatic membrane drying and preservation
- automatic membrane index
- all valves pneumatically driven and monitored

### Options:

- integrated pressure and delivery pump with frequency converter
- integrated data logger
- automatic and integrated fresh water rinse
- fully automatic O<sub>2</sub> adjustment
- remote control display
- remote control via field bus



System 100

## SIZES AND SPECIFICATIONS

CO <sub>2</sub> Membrane System	Max. flow rate	CO <sub>2</sub> dosage	Membrane surface	Dimensions (length/width/height)
<b>System 50</b>	5,000 l/h	7 kg/h	20 m <sup>2</sup>	1000x600x1900 mm
<b>System 100</b>	10,000 l/h	24 kg/h	2 x 20 m <sup>2</sup>	1000x760x1900 mm
<b>System 250</b>	25,000 l/h	70 kg/h	140 m <sup>2</sup>	1000x760x1900 mm
<b>System 350</b>	35,000 l/h	140 kg/h	2 x 140 m <sup>2</sup>	1500x900x1900 mm

## PERFORMANCE

Program	Max. flow rate (l/h)				Recommended Temperature	CO <sub>2</sub>	Oxygen
	System 50	System 100	System 250	System 350			
CO <sub>2</sub> adjustment wine	5,000	10,000	25,000	35,000	5–25°C	adjustment 0–3 g/l	removal* 50–99%
Carbonation sparkling wine	1,500	5,000	12,000	20,000	5–15°C	adjustment 3–9 g/l 1–5 bar	removal* 50–90%
Degasification	2,500	5,000	12,000	20,000	15–25°C	removal* 50–90%	removal* 50–90%
O <sub>2</sub> adjustment (optional)	5,000	10,000	25,000	35,000	10–2°C	removal* 50–90%	adjustment 0.5–10 mg/l

\*Gas removal rate is an approximate value. Gas removal is depending on temperature, flow rate and membrane integrity. Gassing is limited by the maximum CO<sub>2</sub> dosage rate.



Kunzmann Holding GmbH

K+H Armaturen GmbH

K+H vessel tec GmbH

K+H process tec GmbH

An der Hessel 5 | D-75038 Oberderdingen | Germany  
Phone +49 (0) 7045/980-0 | Fax +49 (0) 7045/980-27 | [info@kh-tec.de](mailto:info@kh-tec.de)