



CO₂-Membran-System

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Wine Engineering Association
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What is the desired CO₂ content in Wine?

German recommendations:

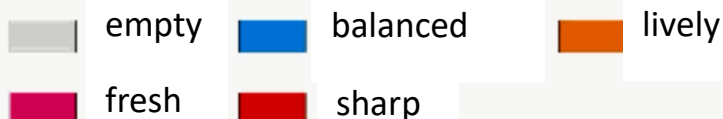
Wine type	Recommended CO ₂
Young White	1.2 – 2.0 g/L
Rosé	1.2 – 2.0 g/L
Red Wine	<0.7 g/L
Semi- Sparkling	5.0 – 6.0 g/L
Full Sparkling	8.5 – 12.0 g/L

CO₂-content 200 mg/L

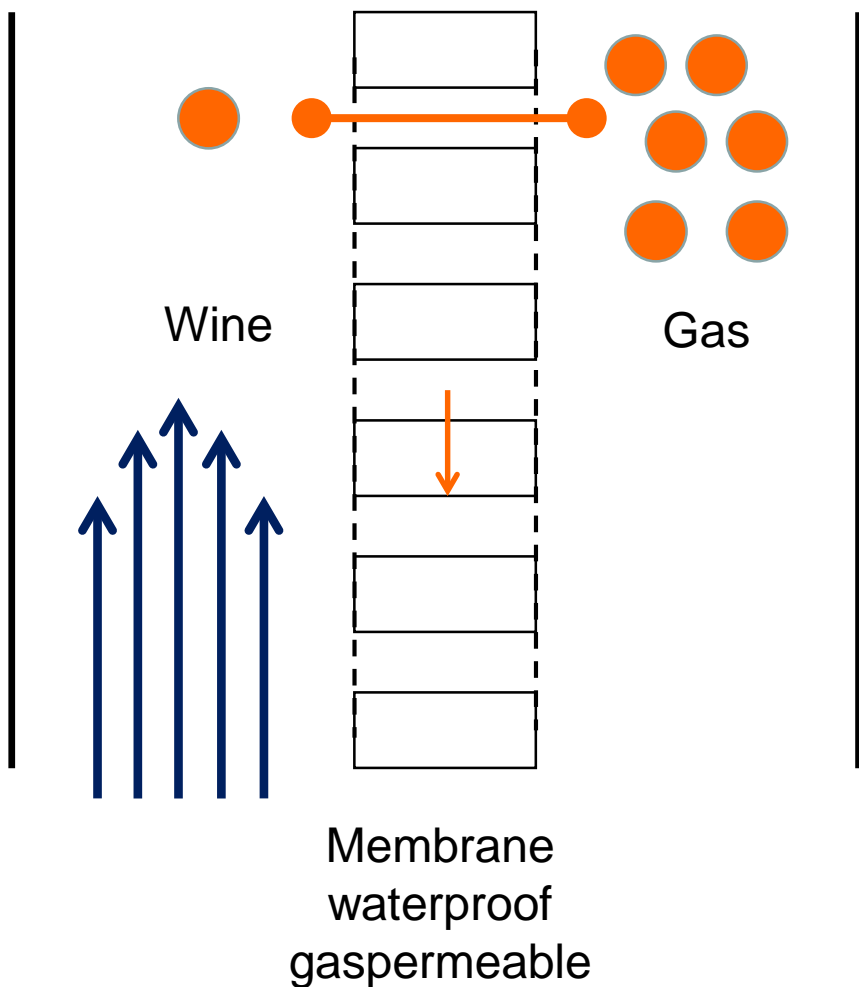


Almost every wine has to be CO₂ adjusted

CO₂-content 1700 mg/L



CO₂-Membran-System



Technology:

- Membrane permeable to gas
- Add or remove CO₂
- Remove O₂ and N₂ in the same pass
- bubbleless

Properties CO₂ Membran System

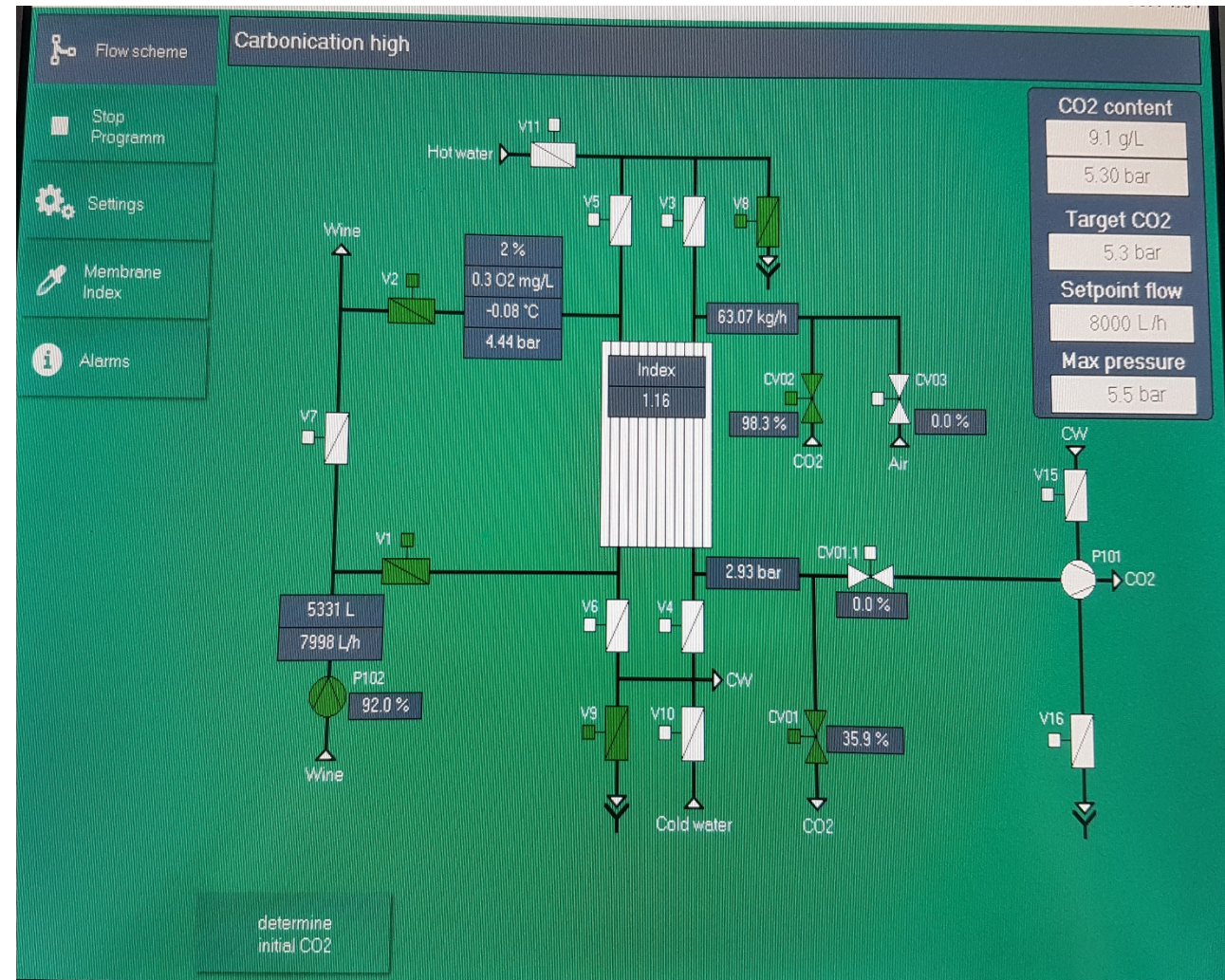
CO₂ adjustment and carbonation

- Bubbleless CO₂ adjustment based on diffusion
- Carbonation and removal of other gases in one pass
- Higher filling speed due to less bubble formation
- Adjustment on target value, not simple addition!
- Oxygen and Nitrogen removal in the same pass
- Integrated physical control model
- Inline, directly serving the bottling line

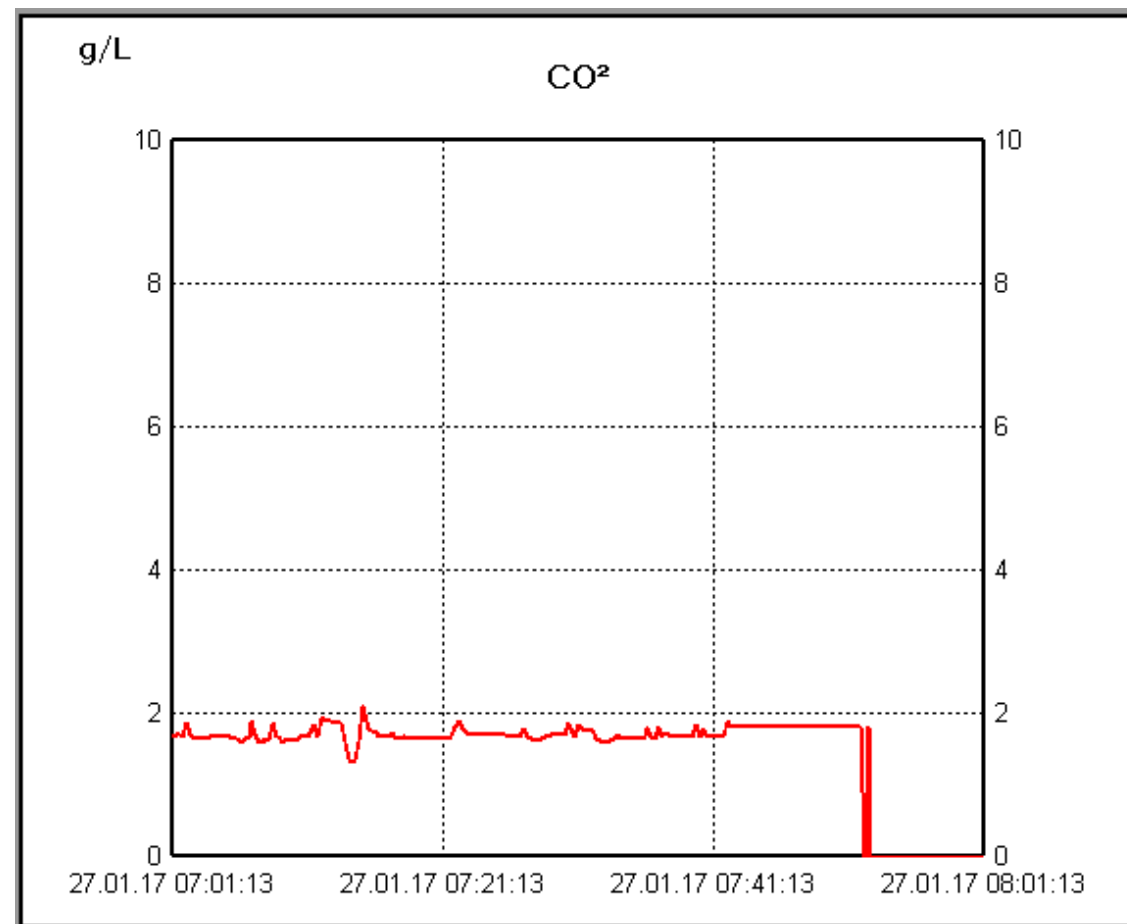
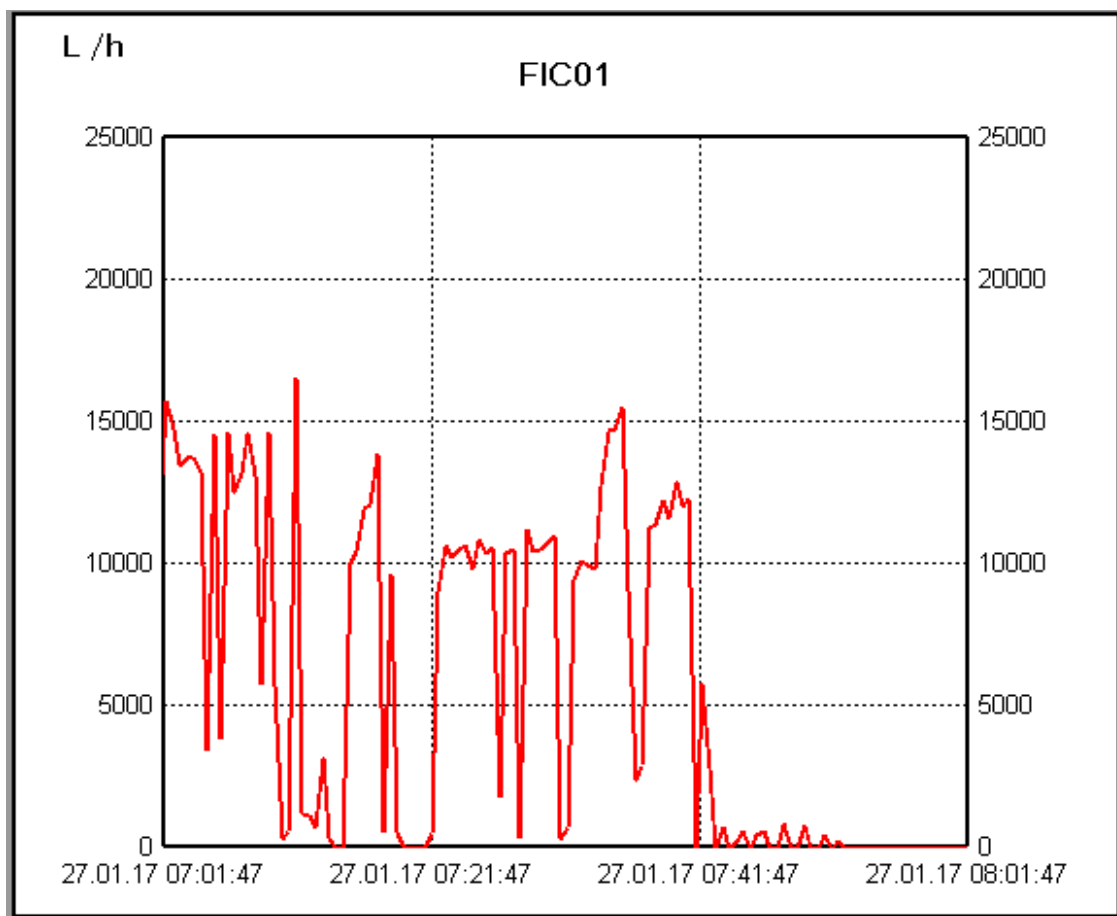


Case Study EDEKA Rheinberg

- Bottling facility with 50 Mio. bottles/year
- 2 bottling lines
 - Vacuum @ 10.000 L/h
 - Isobaric @ 18.000 L/h
- Installation in both lines increased average daily output by 10%.
 - Less foam
 - More precise CO₂ control
 - Less TPO → better shelf live
- Every bottle is CO₂ adjusted and O₂ removed



Precision of adjustment in white wine during filling



Thank you

CO₂ Membrane System

Contact

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New technology to perform automated
CO₂ and O₂ adjustment in wines

- Improved bottling performance
- Easy to operate
- 50+ References in european bottling facilities
- Established technology in Europe
- Now available in Australia!