

CO₂ Purity Tester



CO₂ Purity Tester

General product information

In the beer and beverage industries, the quality of carbon dioxide (CO₂) is a determining factor in the product's quality and taste. A low oxygen (O₂) content is crucial to avoid oxygen pick up in beverages. The CO₂ collected from fermentation is liquified in order to reduce the space needed for storage and to purify the CO₂ from noncondensable gasses – O₂ and nitrogen (N₂).

The CO₂ Purity Tester, type CPT, is used for routine controls of the air content of commercial CO₂ gas and CO₂ gas from fermentation. The principle is based on CO₂ absorption by caustic.

Principle of operation

The measuring burette of the CPT is properly flushed with CO₂ gas. The CO₂ sample is separated in the measuring burette and the connection is made with the caustic burette. The CO₂ is completely absorbed by the caustic and the remaining gas volume is read on the scale of the measuring burette after turning the instrument on its backside.

Two executions are available:

- Type CPT 99-100, measuring burette scale from 99 - 100 % v/v, for measuring the end purity of commercial CO₂ gas or CO₂ gas from fermentation after purification
- Type CPT 50-100, measuring burette scale from 50 - 100 % v/v, for measuring the intake purity of CO₂ gas from fermentation



CPT

Norit

leading in purification

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CO₂ Purity Tester



Benefits

- Perfect product control
- Cost saving
 - less labor intensive – multiple measurements without needing to remove caustic

Application

- Quality Control
 - of gas distribution systems
 - of commercial gas
 - of incoming CO₂ gas from fermentation
 - of CO₂ recovered and purified from fermentation
 - in front of the carbonator to monitor the gas quality dosed
- Optimizing CO₂ Recovery Plants
 - behind the activated carbon filter/dryer
 - in the purge from the CO₂ liquefier to control the blow-off quantity automatically, preventing CO₂ loss as well as high concentrations of O₂ from dissolving CO₂
 - behind the CO₂ evaporator to monitor O₂ in the CO₂ distribution system

Technical Data

	CPT 99 - 100%	CPT 50 - 100%
Measuring range	99.0 - 100.0% v/v CO ₂	50.0 - 100.0% v/v CO ₂
Graduated scale		
99 - 100%	0.02% v/v foreign gas	
94 - 99.8%		0.1% v/v foreign gas
55 - 85%		2.0% v/v foreign gas
Accuracy		
99 - 100%	0.01%	
94 - 99.8%		0.05 %
55 - 85%		1.0 %
Volume	170 ml caustic solution	
Caustic concentration	30% g/l NaOH with approx. 1% ethanol 30% g/l KOH with approx. 1% ethanol	
Dimensions	430 x 110 x 330 (LxWxH mm)	
Weight	ca. 1 kg	

Scope of Supply

- CO₂ Purity Tester
 - Type CPT 99-100 or
 - Type CPT 50-100
- Instruction manual

Options

- Certificate of measurement

Haffmans BV reserves the right to make changes in the technical specifications at any time.



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