

CF200-range: R&D and Pilot Carbonators: Carbo-Fill®

Carbonates, fills and seals with great accuracy and reproducibility



Introduction of the OMVE CF200 Carbo-Fill® range

The OMVE CF200 Carbo-Fill range of miniature-scale carbonators and fillers offers the ability to establish precise, repeatable parameters when carbonating in the laboratory. This can dramatically improve the speed at which new products can be developed.

Pre-mix carbonation with a finished product and post-mix carbonation of water (with or without a syrup in the bottle) both belong to the possibilities of the Carbo-Fill.

The laboratory / pilot carbonators are easy to install, set up and use. They are touch-screen operated and allow different carbonation and filling scenarios to be set and stored. They also include a semi-automatic cleaning program enabling the unit to be prepared for another product or formulation with minimum intervention.

Features

- Accurate control of carbonation and filling levels
- Automatic pressure control
- Throughputs of up to 60 l/h [15.9 gph]
- CO₂ content of up to 10 g/l
- Touch screen control
- Optional integrated different closures
- Different type of can or bottle can be filled
- Pre-mix and post-mix capability
- Automatic cleaning programs
- Fills non-carbonated drinks
- Two-stage cooling

Benefits

- Highly flexible and accurate. Even extreme foamy products
- Stable CO₂ level
- Fast filling
- Reproduces any CO₂ containing product
- User friendly
- Increases accuracy of the CO₂ level
- Fills a wide range of different containers
- Increased flexibility
- Time saving
- Can also be used as a filler/ closer
- No CO₂ loss during filling



Carbonation

The Carbonator / Filler is available as a batch (**CF210**) or continuous (**CF220**) carbonation unit. The Carbo-Fill is designed to carbonate pre-mix/post-mix product batches and depending on the options used, handles any type of drink including iced coffee, alcoholic beverages and highly foamy products, such as beer. For higher output the Carbonator / Filler is available as CF212: Carbo-Fill Twin®. This carbonator filler has two filling and sealing stations.

The gas is injected into the product using a special designed injector. This achieves excellent absorption of CO₂ without inducing foam. The product is saturated to the desired level by an automatic pressure and temperature control.

The container filling sequence consists of:

1. Creating a vacuum in the container (optional)
2. Flushing CO₂ to remove air from container
3. Dosing syrup in the container (optional)
4. Pressurising the container
5. Filling the container
6. De-pressurizing the container
7. Sealing the container (optional)

Optional accessories

- 15-litre [*~4 gal*] or 46-litre [*~12.2 gal*] process vessel
- Continuous operations with product (CF220)
- Continuous operations water (CF210)
- Dual filling heads (CF212)
- Capper for crown corks
- Capper for screw caps
- Combined capper for crown cork and screw caps
- Filling heads for cans and wide neck bottles
- Hot fill for non-carbonated drinks or post mix connection
- Syrup pump
- Nitrogen connection
- Vacuum system
- Automatic emptying / filling cooling bath for hot cleaning

Specifications

Process parameters	
Max. operational pressure	3 bar [<i>43.5 psi</i>]
Cooling temperature	4°C, accuracy ± 0.1°C [<i>39.2°F, accuracy ± 0.18°F</i>]
CO ₂ level	Up to 10 g/l
Utilities	
Electrical requirements	CF200-A: 230V / 1ph / 50Hz / 16A
	CF200-C: 230V / 1ph / 60Hz / 16A
	Other electrical requirements available on request

Applications

- Beer
- (Non) Alcoholic drinks
- Milk
- Juices and cordials
- Coffee and Tea
- Water
- Health and nutritional products

Also used for all kinds of tests related to:

- Can testing
- Crown seal testing
- Saturation with unusual gases
- Application of vacuum to lower retained O₂