

Batch Carbonator for Larger Pilot Trials

CF310 Carbo-Fill®

Carbonates and mixes specialty beverages & beer

OMVE's CF310 Carbo-Fill® pilot carbonator is built utilizing specialized technology that ensures product quality, stability and process safety. This robust equipment, featuring built-in automation, provides users with several operational benefits such as consistent delivery of well dissolved CO₂.

This system is suitable for mixing (batch preparation), carbonation and dosing of different products in hygienic as well as aseptic environments, using pressurized vessels. Operators can easily fill and close cans, PET or glass bottles using other counter-pressure fillers such as OMVE's FS205.

The CF310 is easy to clean and is manufactured to CE standards and our customers' required specifications.

Features & Benefits

- Easily carbonates beverages with small soft particles or fibers and foamy products
- Ergonomic display with pre-programmed commands to promote efficiency
- Use of multi-processing options to increase output
- CIP program by external CIP-system like to OMVE CIP250
- Built-in sterilization loop that allows for sterilization in-line by UHT system or stand-alone, for production of aseptic beverages

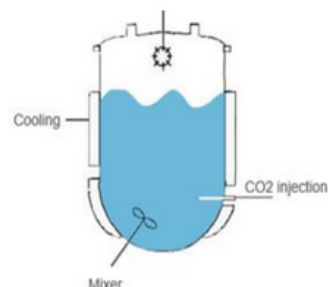
Applications

- Energy drinks
- Spirits
- Specialty teas
- Club soda
- Beer
- Soft drinks
- Seltzer water
- Beverages with fibers
- Beverages with small particles

Working Principle

The CO₂ is injected into the product using a specially designed injector. This achieves excellent absorption of CO₂ with minimum foam. The product is saturated to the desired level by automated pressure and temperature control. Saturation time is approximately one minute per liter, after which the filling process can be started

The batch carbonator requires a counter-pressure filler such as the OMVE Flexi-Fill or an automated counter-pressure filling line.



Optional Accessories

- Up to three supply tanks available on a single skid for carbonation when carbonating at 30L/h and 46L/h
- Availability of a wide range of vessel sizes (from 46L up to 400L) for carbonation
- SIP capability when using in-line with UHT systems to meet aseptic conditions
- Option to connect to a CIP unit for easy cleanability

Specifications

Product Code	CF310-46	CF310-100	CF310-200	CF310-400
Max. pressure	3,5 bar [51psi]			
Cooling temperature	4-6°C [39-43°F], accuracy 0,1°C			
Flow rate	Depends on the connected filler			
CO ₂ content	4-10g/L			
Cleaning temperature	Max. 80°C [176°F]			
Sanitation temp. (optional)	Min. 100°C [212°F]			
Weights & Dimensions				
Vessel size	46L	100L	200L	400L
Weight	245kg [540lbs]	300kg [160lbs]	345kg [760lbs]	450kg [992lbs]
L x W x H	1200 x 1200 x 1700mm [47,2 x 47,2 x 66,9"]	1400 x 1200 x 1700mm [55,1 x 47,2 x 66,9"]	1800 x 1400 x 1900mm [70,9 x 55,1 x 74,8"]	2200 x 1600 x 2100mm [86,6 x 63 x 82,7"]
Required utilities				
Electrical supply	200-240Vac /1ph+N+E /50Hz/ 16A or 200-240Vac /2ph+E /60Hz/16A			
Water supply	2-4 bar(g) [43-59psi]			
Compressed air	6-7 bar(g) [87-101psi]			
CO ₂ supply / nitrogen supply (optional)	4-5 bar(g) [58-72psi]			
Drains	Required			



Production line with Chiller, CF310, Flexi-Fill FS205 and CIP350



CF310 with two carbonation vessels