GEA ECO-FLASH® FLASH PASTEURIZER

Technical data sheet





The GEA ECO-FLASH® flash pasteurization system enables the efficient heat treatment and stabilization of carbonated liquid products, such as beer, beer mix, cider, hard seltzer, etc., by eliminating spoilage micro-organisms. Focusing on microbiological safety, quality and flavor stability, beverages are processed in a controlled, continuous flow and subjected to the required temperature for a defined time.

Accommodating flow requirements of 2,000 to 90,000 L/h, the GEA ECO-FLASH[®] is a fully automated, modular, skid mounted system that's capable of handling a wide range of pasteurization loads.

Fully adjustable and operating within tight tolerances, various options are available to further increase sustainability and minimize total cost of ownership.

Features

- Precise control of the Pasteurization Units (PU) as an essential safety factor
- Level-dependent flow control increases buffer capacity and reduces product losses
- Consistent pressure regime ensures a positive pressure gradient and prevents outgassing
- Elaborated handling of interruptions and errors ensures high levels of process safety and minimizes product losses
- Completely integrated cleaning concept for highest hygiene standards
- Design based on proven EHEDG principles
- GEA VARIVENT® D-Force special valve ensures maximum hygiene

The GEA ECO-FLASH® system comprises the following components:

- Flash pasteurizer module
 - High head feed pump
 - Booster pump
 - External holding tube
 - Recirculating hot water set including pump and heat exchanger
 - Panel-mounted control system for automatic operation
- Triple stage plate heat exchanger with regeneration, heating and cooling sections
- Optional buffer tank module, including integrated vacuum rated buffer tank for pasteurized product





Available options

Flash pasteurizer options:

- 1.1: Feed pressure monitoring
- 1.2: Controlled pasteurization pressure
- 1.3: Monitoring the positive pressure gradient
- 1.4: Controlled positive pressure gradient
- 1.5: Dual measurement of pasteurization temperature
- 1.6: Additional inline sample point for pasteurized product
- 1.7: Freeze protection for product
- 1.8: Seat lifting of mixproof double seat valves
- 1.9: Bypass of GEA ECO-FLASH® system
- 1.10: Splash guards for plate heat exchanger
- 1.11: Automated product changeover

Buffer tank options:

- 2.1: CO₂/air purge of the buffer tank
- 2.2: Automated compatible steam sterilization of the gas pipes for the buffer tank
- 2.3: Controlled product filler inlet pressure
- 2.4: Thermal insulation of buffer tank

Technical Data

Nominal capacity [hl/h]	Design size [DN]	Dimensions and net (empty) weight			
		Flash pasteurizer module ¹		Buffer tank module ²	
		L x W x H ³ [mm]	[kg]	L x W x H [mm]	[kg]
20 - 40	25				
40 - 80	40	2,400 × 2,000 × 2,600	1,100	2,000 × 1,200 × 2,150	500
80 - 150	50		1,200	2,400 × 1,200 × 2,150	700
150 - 250	65				
250 - 400	80				
400 - 600	100	2,800 × 2,200 × 2,800	1,400	2,500 × 1,300 × 2,150	900
600 - 900	125	On inquiry	1,500	On inquiry	1,000
	1 Excl. plate hea	t exchanger ² Excl. buffer tank ³ Holding tube u	nit demountable for shipping, to	fit a standard container size	
Saturated steam	max. 6 bar				
Glycol	min. 3 bar, -31 °C				
CO2	6 - 8 bar, purity min. 99.995 %				
Control air	6 - 8 bar, dust and oil-free, dew point -30 °C				



GEA Brewery Systems GmbH

Heinrich-Huppmann-Str. 1 97318 Kitzingen, Germany Tel.: +49 321 303 0 Am Industriepark 2 - 10 21514 Büchen, Germany Tel.: +49 4155 49 0

gea.com/contact gea.com/brewing