Why settle for less?

Boost productivity and reduce losses with compact, ready-to-use BREW separation modules for craft brewing

The modular path to boosting your brewery productivity, using Alfa Laval BREW separator modules

Alfa Laval has been working closely with craft brewers for many years to help them produce more high-value, quality beer with only limited investment. This is done by steps that include reducing the need to invest in settling tanks by using centrifugal separators and optimizing filtration, in addition to designing special craft brewery modules for yeast, deaerated water, high-gravity brewing and beer cooling.

Alfa Laval is an established brewery market leader in the field of disc stack centrifuges and decanters for effective separation, with more than 125 years of proven separation experience.

Craft brewers can choose between four Alfa Laval BREW disc stack centrifugal separator modules:

- **BREW 20** clarifier module for smaller capacities up to 40 hl/hour
- **BREW 80** clarifier module for capacities up to 90 hl/hour – also suitable for near-bright beer styles
- **BREW 250** polisher module for capacities up to 250 hl/hour
- **BREW 301** clarifier module for capacities up to 250 hl/hour
- **BREW 350** polisher and clarifier module for capacities up to 300 hl/hour.

BREW 250 – the only hermetic bottom-feed solution for effective craft brewing

Beer clarification and polishing using the compact, ready-to-use Alfa Laval BREW 250 polisher module provides numerous operating benefits:

- Up to 30% higher filtration and fermentation capacity
- Beer output increased by 1% because of reductions in beer losses
- 20+% lower investment costs compared to an equivalent-capacity settling tank installation
- Clarification 6–12 times faster than in tanks
- Up to 35% savings on energy consumption
- Gentler beer treatment with bottom feed
- High beer quality – fully-hermetic design ensures no oxidation, CO_2 or aroma losses.

Settling tanks or centrifugal separation? Complete, ready-to-use Alfa Laval BREW separation modules make it an easy choice

Regardless of the size or capacity of your brewery, investing in settling tanks to clarify beer requires significant capital and results in high product losses. One attractive alternative to settling tanks is using a modular centrifugal separation system with the functionality needed to get you started on the path to cost-effective clarification of beer – a solution designed to grow with your brewery.

Alfa Laval BREW beer polishers and classic-style clarifiers are specially designed to satisfy craft brewers' particular needs. They are compact, energy-efficient and easy-to-operate modules featuring a hermetic design. All the necessary equipment is mounted onto one single skid, providing big plug'n'play advantages with easy installation, rapid commissioning and quick integration into your production set-up.

For breweries with larger capacities, other BREW separator models are available with capacities of up to 750 hl/hour, featuring a bottom feed arrangement, and outfitted with either eDrive or conventional motors.

Other specialist systems for use in craft brewing

To supplement these centrifugal separator modules, Alfa Laval provides a wide selection of other solutions, as described on the back page.

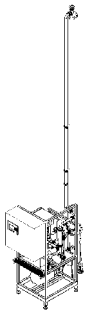
Alfa Laval BREW 250 separator module for beer polishing

Selection guide for Alfa Laval disc stack centrifuge separator modules for craft brewers with small to medium output

										
	BREW 20		**BREW 80**		**BREW 250**		**BREW 301**		**BREW 350**	
Applications	**Clarifier**		**Clarifier**		**Polisher**		**Clarifier**		**Polisher**	
Beer after fermentation	Yes		Yes		Yes		Yes		Yes	
Beer after maturation	Yes		Yes		Yes		Yes		Yes	
Near-bright styles	Yes		Yes		Yes		Yes		Yes	
Dry-hopped beer	Yes		Yes		Yes		Yes		Yes	
Capacity (Typical)										
Hydraulic capacity	Up to 40 hl/h (18 US gpm)		Up to 90 hl/h (40 US gpm)		Up to 250 hl/h (110 US gpm)		Up to 250 hl/h (110 US gpm)		Up to 300 hl/h (132 US gpm)	
Working capacity (range)	4-22 hl/h (3-19 bbl/h)		10-50 hl/h (8-40 bbl/h)		40-140 hl/h (35-120 bbl/h)		50-180 hl/h (40-150 bbl/h)		50–300 hl/h (40–250 bbl/h)	
Beer capacity for 20 MCells/ml feed (0.5 % v/v solids)	22 hl/h (19 bbl/h)		50 hl/h (43 bbl/h)		140 hl/h (120 bbl/h)		180 hl/h (154 bbl/h)		270 hl/h (230 bbl/h)	
Beer capacity for 40 MCells/ml feed (1% v/v solids)	15 hl/h (13 bbl/h)		35 hl/h (30 bbl/h)		100 hl/h (86 bbl/h)		120 hl/h (103 bbl/h)		200 hl/h (170 bbl/h)	
Design Features										
O2 pick-up	< 0.02 ppm Axial-hermetic		< 0.02 ppm Axial-hermetic		0 ppm Fully hermetic		< 0.02 ppm Hydro-hermetic		0 ppm Fully hermetic	
Feed inlet	Top feed		Top feed		Bottom feed		Top feed		Bottom feed	
Power Consumption										
Installed	3.7 kW		15 kW		21 kW		40 kW		22 kW	
Operating	2.2 kW max		8 kW max		12.5 kW max		28 kW max		18 kW max	
Installation Set-up										
Mechanical	Pre-assembled		Pre-assembled		Pre-assembled		Pre-assembled		Pre-assembled	
Electrical	Pre-wired		Pre-wired		Pre-wired		Pre-wired		Pre-wired	
Discharge triggering mechanism										
Timer	Standard		Standard		Standard		Standard		Standard	
Outlet turbidity	Optional		Optional		Standard		Standard		Standard	
Feed										
Inlet turbidity	Optional		Optional		Optional		Optional		Optional	
Automation										
Standard supply	PLC with HMI		PLC with HMI		PLC with HMI		PLC with HMI		PLC with HMI	
Module accessories										
Feed pump	Optional		Optional		Optional		Optional		Optional	
Solids pump	Option at 0.86 kw (1 hp)		Option at 0.86 kw (1 hp)		4 kW (5 hP)		4 kW (5 hP)		3 kW (4 hP)	
Service										
1 service kit	Standard		Standard		Standard		Standard		Standard	
General specifications										
Bowl weight	37 kg	(81 lbs)	134 kg	(295 lbs)	310 kg	(685 lbs)	300 kg	(662 lbs)	650 kg	(1,433 lbs)
Complete module including bowl and motor	375 kg	(827 lbs)	1,025 kg	(2,260 lbs)	2,200 kg	(4850 lbs)	2,380 kg	(5247 lbs)	2,900 kg	(6,380 lbs)
Dimensions (width)	800 mm	(31 ½ in.)	975 mm	(38 ½ in.)	2,020 mm	(79 ½ in.)	1,850 mm	(72 7/8 in.)	1,950 mm	(76 3/4 in.)
Dimensions (length)	1,500 mm	(59 1/16 in.)	1,815 mm	(71 ½ in.)	1,764 mm	(69 ½ in.)	2,160 mm	(85 in.)	2,300 mm	(90 ½ in.)
Dimensions (height)	1,450 mm	(57 1/8 in.)	1,545 mm	(61 in.)	2,030 mm	(80 in.)	2,100 mm	(82 5/8 in.)	2,203 mm	(86 3/4 in.)

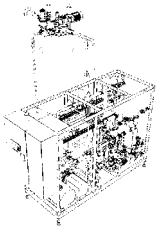
Comprehensive range of other proven, ready-to-use modular solutions for craft brewing

Each process module is pre-engineered, fully automatic, self-contained, pre-assembled and tested. Customized solutions are available on request.



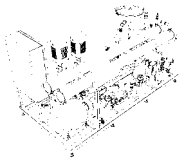
Aldox
Module for producing high-quality deaerated water for breweries. Use deaerated water in your brewing process to maximize beer flavor stability and shelf life, increase yield by pushing out all beer lines, and adjust/correct the final beer Plato. Capacities from 10 hl/h (4.4 gpm), with oxygen level below 5 ppb. Compact footprint.

Flexitherm
Automatic pasteurization module designed to preserve your beer's quality. Inactivates all bacteria and remaining yeast cells that risk spoiling your beer. No CO_2 breakup throughout the treatment phase. Hygienic and compact design with stand alone PLC. Store several recipes in the unit with individual settings for different beers. Regulates and pasteurizes variable flows from 5 hl/h (2.2 gpm).



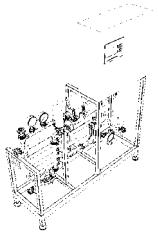
3-in-1 Yeast Propagation Module
Yeast handling system that lets you rehydrate, propagate, store and re-use yeast strains. The system is based on our extensive experience from yeast management and can be fully tailored to your needs. Sizes available from 5 hl (4.3 bbl) batches.

Scandi Brew Tank Safety Unit
Compact, all-in-one protection and cleaning unit for brewing tanks of up to 500 hl (426 bbl) in capacity – available in 2-inch and 3-inch sizes. Specially designed for safety protection and cleaning of pressure vessels such as fermenting, bright beer, DAW and buffer tanks.

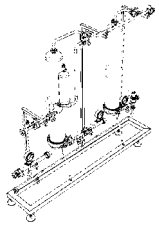


Lowal De-alcoholizer
Module for dealcoholization of beer and generation of reverse osmosis (RO) water. Removes alcohol and water from your beer with a minimum loss of flavors. Makes low-alcohol (below 0.5% v/v) beer with ease. Cold process, suitable for RO water generation, so you get full control of your brewing water. 5/20/40 hl (4.3/17/34 bbl) batch modes.

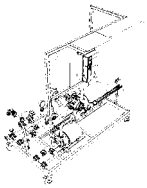
IWS (Intelligent Whirlpool System)
Whirlpool optimization system where trub is dried in a decanter centrifuge. Recovers 99% of wort lost with the trub, cuts energy and water consumption, minimizes fouling/clogging in the wort cooler, reduces the amount of trub in fermenters and cuts whirlpool time by 10% to 20%. Suitable for brew sizes larger than 50 hl (43 bbl).



Carboset
Automatic inline carbonation module for precise CO_2 injection in your beers. Equalizes CO_2 concentration in your batches. N_2 available on request. Efficient, sanitary system that is easy to clean. Carboblend option: adjust your alcohol/Plato content with deaerated water. Store several recipes in the unit with individual settings for different beers. Flow rates from 5 hl/h (2.2 gpm).



BSF (Beer Sterile Filtration)
Beer sterile filtration module that retains 100% of beer-type spoiling microorganisms without thermal degradation. The gentle treatment guarantees taste is not affected in any way. For maximum safety, each membrane cartridge is certified and the system performs an integrity check before processing a batch. There is no need for a buffer tank, meaning the footprint is small. An extra, standalone CIP module is available. The smallest BSF has a capacity of up to 30 hl/h (13.2 gpm).



Iso-Mix
Rotary jet mixer for fermentation tanks (up to 40% faster fermentation; tank homogenization) or fast blending of liquid, powder and gas (ideal for adjustment in BBT or soft drink preparation). Mobile unit that can be moved between tanks.

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How to contact Alfa Laval
Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com