Alfa Laval Brew 80 Separationsmodul 10 – 50 hl/h

Anwendungsbereich

- **Vorklärung**
- **Jungbierklärung**
- **Heißwürzeklärung**
- **Bierrückgewinnung**

Funktionsprinzip

- Zufuhr von oben in die rotierende Zentrifugentrommel
- Beschleunigung in einem Verteiler
- Einleitung in ein Tellerpaket
- Klärung findet zwischen den Tellern statt
- Das Produkt klärt sich auf dem Weg in Richtung Mitte der Trommel, wo es unter Druck mittels einer eingebauten Schälscheibe hinausgepumpt wird
- Der schwerere Feststoffabschnitt wird am Rand der Trommel in Intervallen abgelassen

Technische Daten

Durchsatz:	15 – 50 hl/h
Separator Motorgröße:	11 kW
Anschluss:	DN-32

Ausstattung und Service

- Automatische Schussauslösung über Trübungsmessgerät im Auslauf
- Einlaufregelventil
- Minor und Major Service Kit
- 5 Tage Servicetechniker für die Inbetriebnahme inkl. Reisezeit und -kosten in Deutschland

Alfa Laval Brew 80

Disc stack separation system for brewery applications

Introduction

The use of separators in different brewery applications goes back to the beginning of the 1900's. Based on the long-term cooperation with the brewery industry, Alfa Laval separators are specially designed for the requirements and demands of this industry.

Application

The Brew 80 is designed and optimized for green-beer, beer pre-clarificarion and polishing, with the target to clarify beer with the best performance and yield.

Benefits

- High separation efficiency
- Minimized oxygen pick-up
- Gentle treatment of the product
- Complete system handling both process and utility requirements
- Robust and reliable design

Design

The system consists of a separator, a valve module with valves and components for routing of product and utilities in and out from the separator, as well as control and starter cabinet. All components are mounted on a common skid to enable plug-and-play installation.

All metallic parts in contact with the process liquid are made of stainless steel. Gaskets and seals in contact with the product are made of FDA approved material and are approved according to food regulations (EC1935/2004).

The separation system is designed for completely automated Cleaning in Place (CIP).

Scope of supply

Skid-mounted disc stack separator with valve module and control system, including:

- Main process valves
- Manual flow regulating and counter pressure valves
- Flow meter of magnetic type
- Main motor starter with VFD from Danfoss
- Control panel with EPC 60 PLC and HMI
- Sight glasses for outlet
- Samples valves for in- and outlet

Options

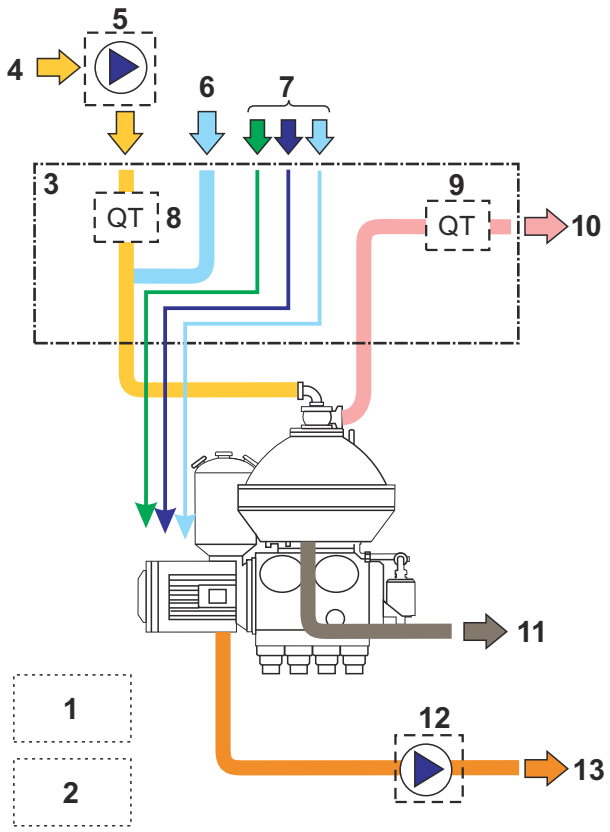
- Feed pump
- Turbidity monitor for discharge triggering
- Solids receiving unit: Consists of a collection device and a pump to remove discharged solids

Working principle

The product enters and leaves the separator via the valve module. The flow rate and the counter pressure in the outlet of the separator are controlled by the process liquid module.

Discharge of solids from the separator bowl is triggered by a timer or by a turbidity meter, placed in the outlet of the system. The discharged solids are pumped away by the optional solids receiving unit.

The valve module also controls the utility liquids for the separator's discharge system and for flushing and CIP.



General flow chart of a separator system. The details may differ slightly between different systems.

1. Control cabinet
2. Main motor starter and VFD
3. Process liquid module
4. Product inlet
5. Feed pump (optional)
6. Standby/Safety water
7. Utilities
8. Turbidity meter for capacity control (optional)
9. Turbidity meter for discharge triggering
10. Outlet for clarified product
11. Drain for separator
12. Solids receiving unit
13. Outlet of discharged solids

Technical data

Performance data	
Capacity[1]	80 hl/h (29,3 US gpm)
Max. motor power	11 kW (14,8 HP)

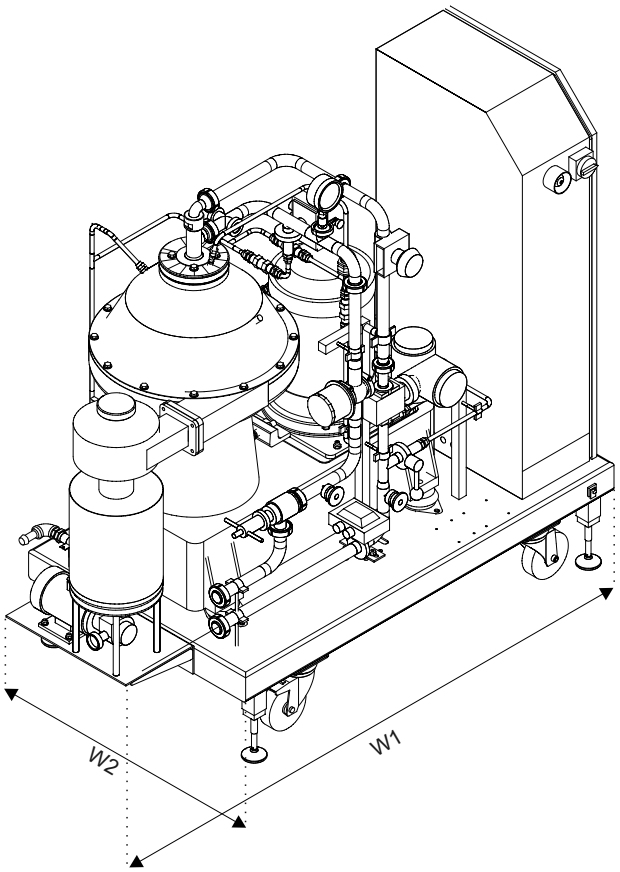
[1] Actual capacities depend on operating conditions

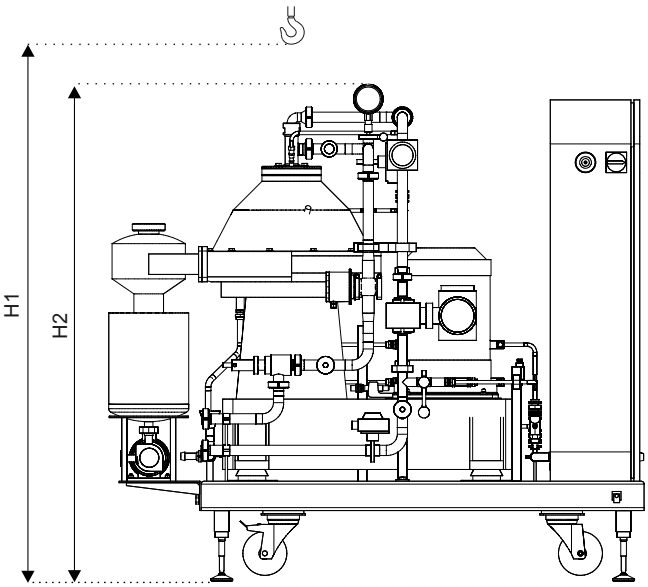
Connections		
Inlet	DN32:	DIN 11851 Union
Outlet	DN32:	DIN 11851 Union

Material data	
Piping	EN 1.4404
Customer connection	EN 1.4404
Gaskets in system	EPDM
Pipe frame	EN 1.4301
Cabinets	EN 1.4301

Weights (approximate)	
System weight incl. separator, bowl and motor	900 kg (1985 lbs)
Bowl weight	135 kg (297 lbs)

Dimensional drawing





Dimensions	
H1	Min. 2150 mm (7 ft 5/8 inch)
H2	1695 mm (5 ft 6 3/4 inch)
W1	1825 mm (5 ft 11 7/8 inch)
W2	890 mm (2 ft 11 1/6 inch)

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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