Innovation in Separation Technology

Beer Clarification

Mod. RE50BR

REDA SEPARATION

REDA self-cleaning clarifiers

A modern end effective solution for fast solids separation of beer

REDA clarifier **RE50BR** is a modern and efficient separator designed with the purpose of beer clarification by directly and efficiency **separating and ejecting the heavier solids** accumulated in the sludge chamber.

Thanks to its automated control the process of **clarification comes in continuous**, solids are expulsed outside without the need of intermediate stops for cleanings, even with high flows. This process results in a **clarified and cleaned beer.**

Standard design of REDA clarifier is its **large operational surface** and the capability of automatic ejection of solids, with very high separation efficiency.

Its design, therefore, allows to obtain the best results in terms of clarification through the direct separation of the elements retained in the product (e.g., yeasts, solid hop residues, tank bottoms) during its passage, without the need for recirculation.

Operating principles

- High separation and clarification efficiency
- Hermetic working through liquid ring (no mechanical seals)
- Soft inflow system
- Product outlet under pressure
- CO_2 injection system to prevent oxidation
- Possibility to determine quantity of discharged sludge
- Periodically discharged at presetted intervals
- Possibility to perform manual discharge
- Possibility to CIP cleaning at the end of production

Why choosing RE50BR?

- Large operational surface guarantees very high separation efficiency
- Solids expulsion in a fast and continuous way
- Widely proven technology and devices guarantee **uncompromising respect of raw material**
- Faster brewing with **time and labor saving** and quality preservation
- Beer will preserve its original flavor, as well as taste and **organoleptic characteristics** for a long time

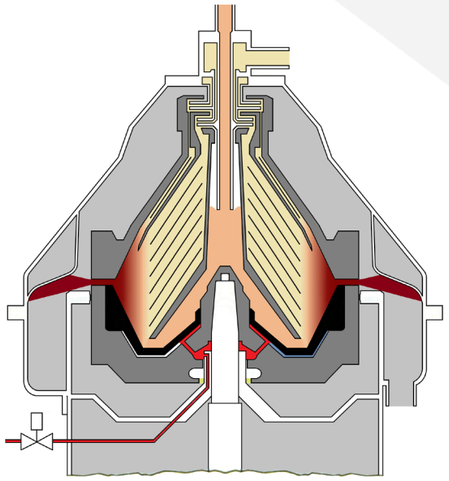
Automatic solids expulsion system

Once separator has started and the maximum rotation speed has been reached, water enters under a mobile piston. The pressure generated by centrifugal force makes piston rise, up to the closing of some parts on the perimeter of the drum.

Then, water goes to bowl valve to consent discharge: centrifugal force moves a small piston which frees a drainage hole. Water under the moving piston comes out and the piston lowers, discharging deposits through the openings in the drum perimeter.

As the entry of water in the valve is stopped, the little piston turns back to the closed valve position and that drainage hole will be closed.

By introducing new water under the piston, it is possible to close again the drain holes of the sludge room.



More advantages

- Noiseless operation
- Fully hermetic separator
- Less than 0.05 ppm Oxygen intake
- Physical clarification without additives
- Longer production cycles
- Low maintenance cost
- Minimum number of service seals
- Optimization of power consumption
- Easy to install and manage

Data Sheet RE50BR

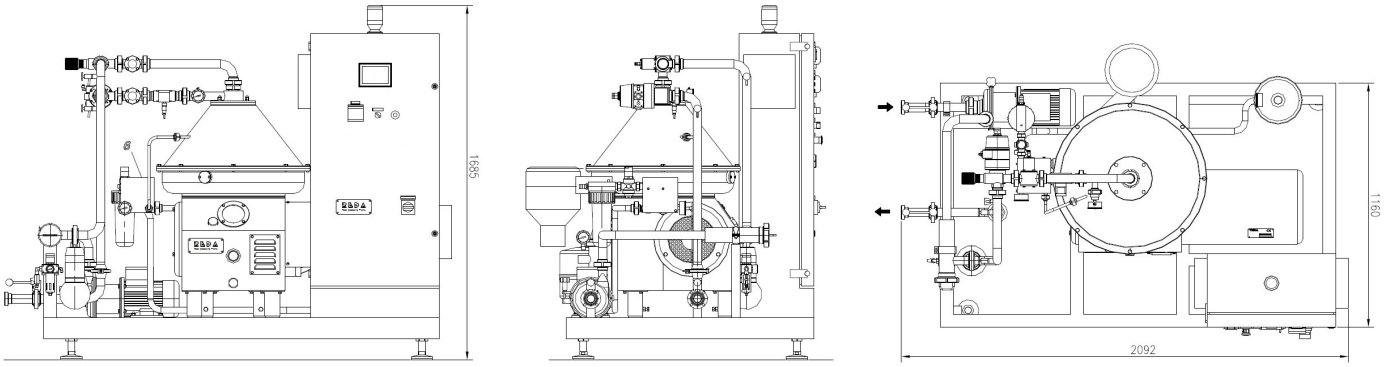
Capacity

Before final cartridge clarification	5,000-6,000 l/h
Before final diatomite clarification	6,000-9,000 l/h
Clarification for high fermentation	7,000-12,000 l/h

Other features

Feed temperature	-2°C/+25°C
Product inlet/outlet	DIN 11851 DN50
Water need	1500 l/h a 2 bar
Sludge discharge	Ø 85 mm

Motor	15 kW
Power supply	300 V / 50 Hz/ 3 phase
Separator net weight	950 Kg



Standard supply

- 100% stainless steel
- Product inlet/outlet DIN 11851
- Flow rate regulation valve
- Stainless steel skid with adjustable feet
- Automatic back pressure valve
- Lighted sight glass at the inlet/outlet
- Sampling taps
- Automatic By-pass at discharge
- High pressure sealing system with CO_2 injection (anti-oxidation)
- Direct gear type transmission
- St.st. electric control panel with inverter and power section
- PLC Automation with touch screen control
- Super Duplex stainless steel bowl
- Nitrogen injection device at discharge

Optional

- In-line turbidity meter (measures outlet turbidity level)
- In-line turbidity meter with flow rate control system
- Automatic rotating filter with brushes (FS serie)
- Hydrocyclone (HC serie)
- Stainless steel sludge/solids vat
- Sludge extraction pump

Remark:
The technical data contained in this brochure are indicative and not binding.
REDA reserves the right to change specifications of the product contained into this presentation, without prior notice or liability to third parties.

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