



LRB 710

Separator for concentration of field latex

The Alfa Laval LRB 710 is a solids-retaining disc-stack separator used for the concentration of field latex. It is specially designed for the tough process environments at modern latex production facilities today.

Latex concentration generally takes place at flow rates of between 300 to 550 litres/hour. At a flow rate of 500 litres/hour, the Alfa Laval LRB 710 latex separator consistently provides a separation efficiency above 90%¹⁾ during the entire operating cycle.

1) Actual efficiency depends on DRC content of field latex, desired DRC content of concentrate, harvesting conditions etc.

Applications

The LRB 710 is an excellent choice to handle the concentration of field latex.

Standard design

The machine consists of a frame with a base that contains a horizontal drive shaft, worm gear, lubricating oil bath and a vertical spindle. The bowl is affixed to the top of the vertical spindle just below the frame top and regulating and collecting covers. The electric motor is of a standard type, suitable for variable frequency drive (VFD). The regulating cover feeds the field latex to the machine; the collecting covers transport the concentrate and the skim away from the machine.

All metallic parts that come in contact with the process liquid are made of high-grade stainless steel. The design of the LRB 710 conforms to EC directives, including the general directives for machinery and centrifuges.

Special features

- Variable frequency drive system. Low starting current and short start-up time are two of the many benefits of the LRB 710's specially designed variable frequency drive (VFD) system. Each machine is provided with a dedicated VFD to ensure that the operation of one machine does not affect any other machines.
- Centrilock™ lock ring. This patented non-threaded lock ring snaps easily into place, minimizing downtime and facilitating the bowl cleaning process. It is far superior to the traditional lock ring, which requires force to open and close the bowl.
- Integrated overflow protection. To prevent contamination of the concentrate with field latex, the Alfa Laval LRB 710 is equipped with integrated overflow protection.
- Innovative feed cup. The Alfa Laval LRB 710 feed cup is specially designed to minimize field latex wastage during stoppages.

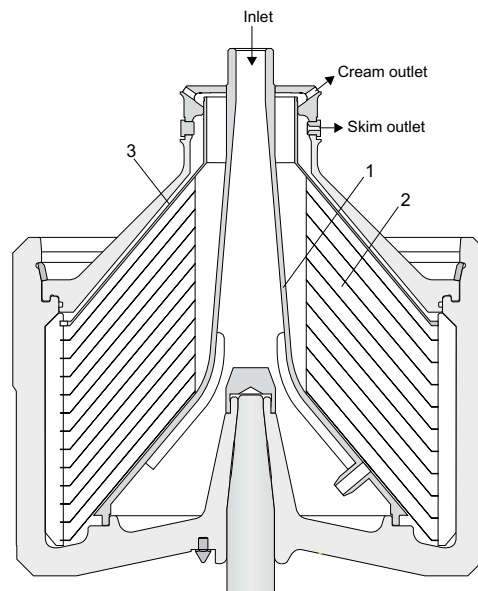


LRB 710 complete with motor

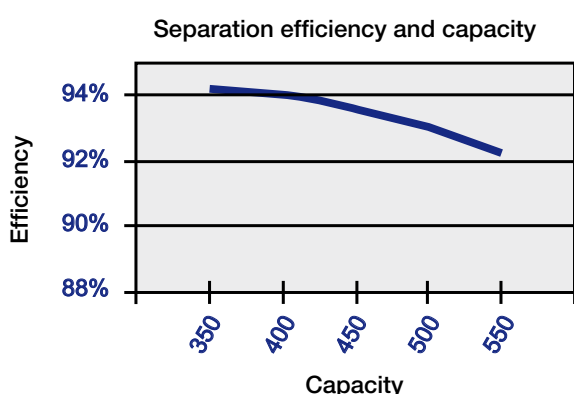
Operating principles

Field latex enters the separator bowl through the regulating cover and the regulator tube. A distributor (1) gently accelerates the field latex into the disc stack (2) where separation takes place between the discs.

The field latex is split into two fractions; the heavy phase, or skim, and the light phase, or cream. The light phase moves towards the centre of the bowl. The heavy phase moves towards the bowl periphery and then along the upper side of the top disc (3). The two liquid phases leave the separator bowl through separate outlets. Sludge settles at the inner surfaces of the bowl and distributor where it can be manually removed during cleaning.



Typical bowl drawing for a solids-retaining centrifuge. The details illustrated do not necessarily correspond to the centrifuge described.



Technical specification

Motor power installed	11 kW (14.8 hp)
Bowl speed	7,300 rpm
Sound pressure	78 dB(A) ¹⁾
Overhead hoist lifting capacity	min.700 kg (1,544 lbs)

¹⁾ According to EN ISO 3744

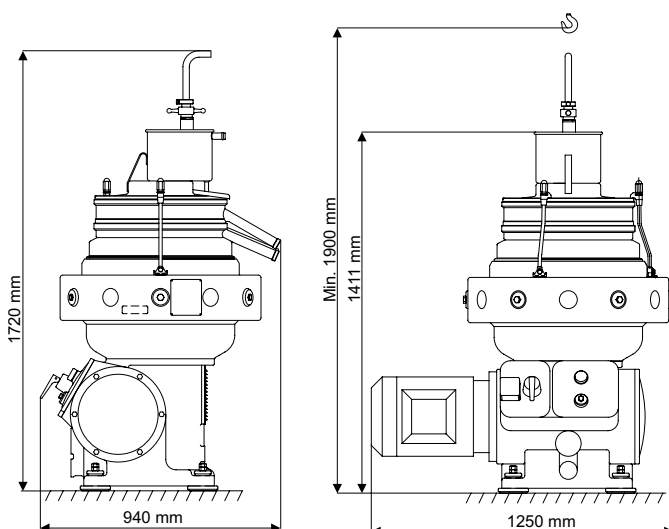
Material data

Bowl body	EN 1.4418
Bowl hood	EN 1.4462
Lock ring	EN 1.4501
Distributor	EN 1.4401 UNS 31600
Frame parts	Cast iron
Gaskets and O-rings	Nitrile rubber

Shipping data (approximate)

Centrifuge incl. bowl and motor	955 kg (2,105 lbs)
Bowl weight	280 kg (618 lbs)
Gross weight	1,510 kg (3,330 lbs)
Volume	3-4 m ³ (106-142ft ³)

Dimensions



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