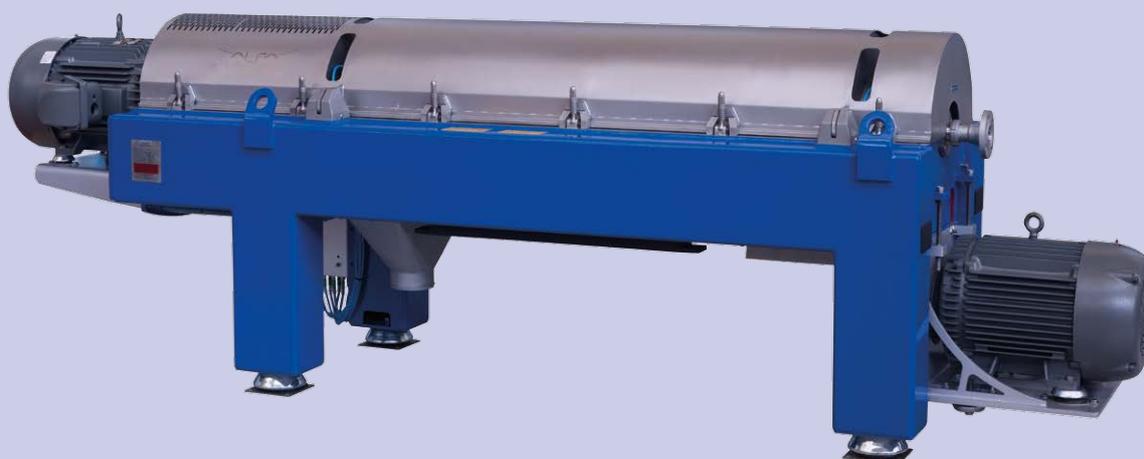




LYNX 430

Decanter centrifuge for cost-effective slop oil treatment



Optimizing slop oil treatment

Alfa Laval decenter centrifuges are designed to withstand challenging industry applications. The three-phase version of the Alfa Laval LYNX decenter centrifuge is ideal for slop oil treatment.

The highly efficient LYNX 430 separates oil, water and dry solids into three separate phases. By using a centrifugal force of more than 3,500 G, the LYNX 430 separates high-density oil from water, delivering liquids of a clarity never before available using decenter centrifuges.

Online interphase adjustment with no need for mechanical components makes it easy to optimize the quality of the separated oil and water phases.

The combination of high G-forces and Alfa Laval's extensive experience in slop oil treatment means the LYNX 430 efficiently removes most of the fine particles, delivering the driest possible solids.

Features and benefits

- Lower power consumption than competing separation-technologies
- High-grade material designed to last in a harsh environment where withstanding abrasive sludge and corrosion is crucial

- A solution that meets your exact requirements, for pure oil, clean water or a dry solid fraction
- Torque control
- Higher G-force
- Greater centrate clarity
- More efficient particle separation
- Specially designed bowl geometry
- 360° solids discharge port
- Online interphase adjustment
- Available in configurations that comply with NEMA and ATEX regulations.

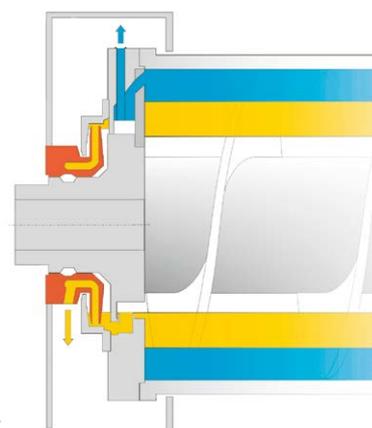
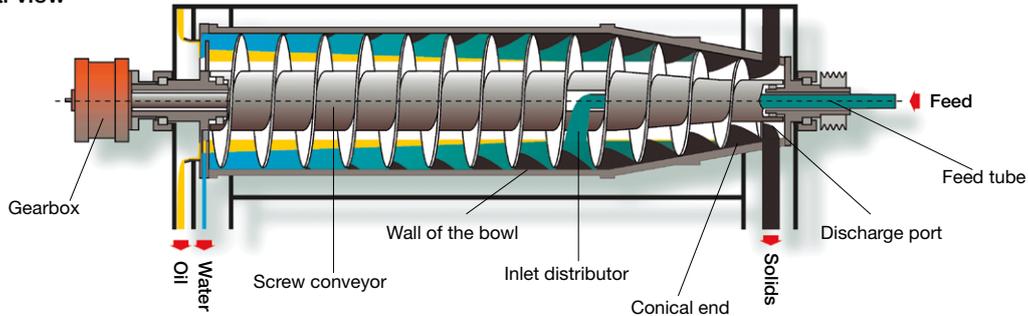


Fig. 1: Liquid discharge with online interphase adjustment

Cross-sectional view



Principle of operation

The three-phase LYNX 430 decenter centrifuge features a slender cylindrical bowl with a relatively large length/diameter ratio, and a conical end. This bowl rotates at speeds of up to 3800 rpm, producing centrifugal force of anywhere from 300 to 3551 G. A screw conveyor fitted inside the bowl ensures the continuous removal of the separated solids.

The feed is led into the bowl through a stationary inlet tube and then smoothly accelerated by an inlet rotor. Centrifugal force causes instant sedimentation of these solids on the wall of the bowl. The screw conveyor rotates in the same direction as the bowl, but at a different speed, and transports the solid phase of the slop oil to the conical end. These solids are lifted clear of the liquid, and the capillary liquid is drained centrifugally before being discharged into the casing through the solids discharge port.

Separation into two liquid phases takes place over the entire length of the cylindrical part of the bowl, and the clarified heavy and light liquid phases are discharged from the bowl by flowing over two sets of level tubes.

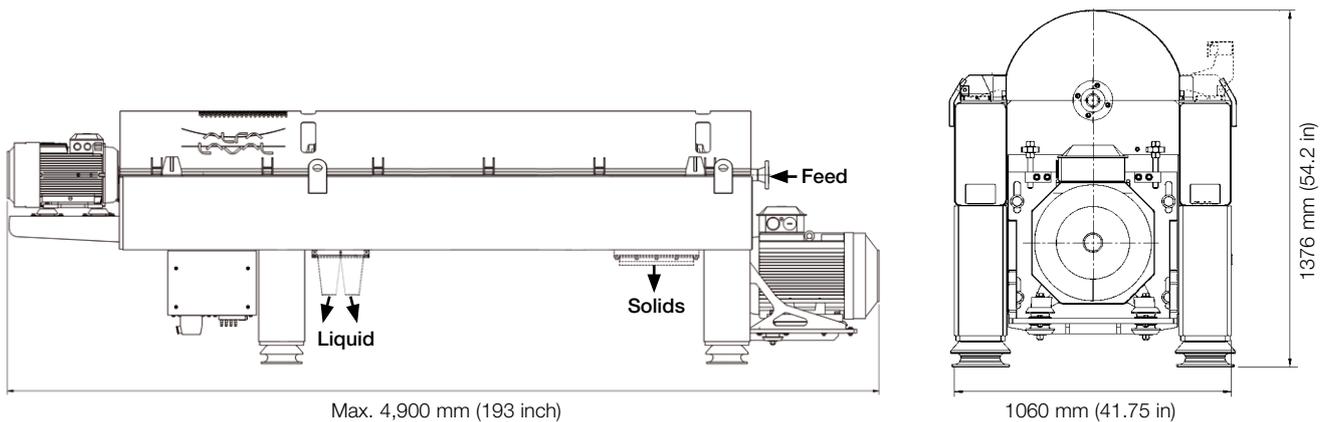
Technical data

Water flow*	1 – 10 m ³ /h (4-36 GPM)
Oil flow*	1 – 7 m ³ /h (3-31 GPM)
Sludge flow*	1 – 4 m ³ /h (3-17 GPM)
Maximum speed	3,800 rpm
Centrifugal force	up to 3,551 G
Differential speed range	2-55 rpm
Solids capacity	up to 9 tonnes/h (19,800 lbs)
Main drive power	37 kW (50 Hp)
Back drive power	22 kW (30 Hp)
Dry weight of decenter unit	3,200 kg (7,055 lbs)

*Typical values, contact Alfa Laval for details.

Maintenance and service

Our worldwide network of sales companies, service organization and field service engineers are ready to provide assistance, rapid support and ongoing optimization. Our close cooperation with customers in nearly 100 countries is a source of valuable feedback for our research and development team, giving us an edge in the development of market-leading technology.



Compact design and small installation area.

Alfa Laval reserves the right to change specifications without prior notification.

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