Alfa Laval Alfie 500

Separator system for cleaning of coolants

Introduction

Using high-speed centrifugal separation makes it possible to extend the life of your service fluids. Alfa Laval's disc-stack separators provide fast, efficient, simultaneous three-phase separation of oil and sludge.

Alfie 500 removes contaminating oil, grease and solid particles from coolants. The result is lower costs due to reduced fluid consumption, lower disposal costs and improvements in both product quality and working environment.

Alfie 500 is a complete compact system, including separator, feed pump and control system. The control panel makes it easy to operate. The Alfie 500 has a high capacity-to-size ratio. Handling tanks have volumes of up to 15 m3. Alfie 500 is installed in a bypass system and operates continuously.

Application

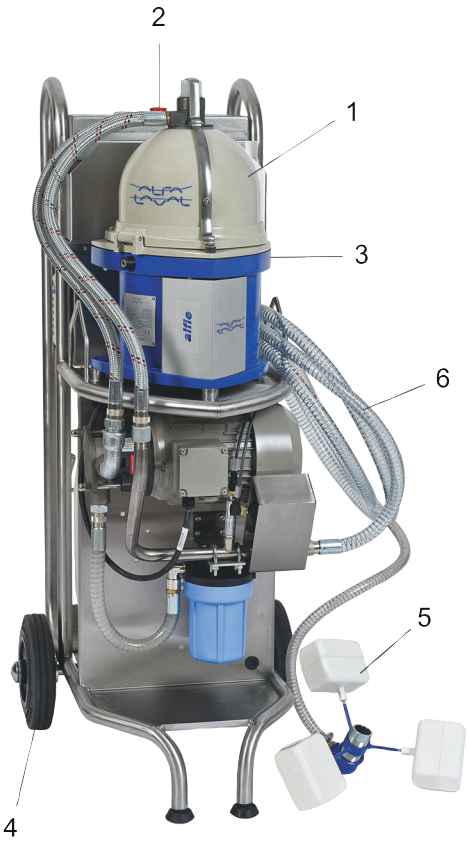
The Alfie 500 module can be used for example for:

- Industrial fluids
  - Coolants
  - Wash liquids
  - Water de-oiling

Benefits

- Easy to operate
- Easy to install
- Compact design
- Easy to move
- Easy to maintain
- High separation efficiency

Design



With its compact and ergonomic design, Alfie 500 is easy to move across the workshop floor. and you can use it to serve several tanks or just one.

1. Solid partilcles accumulate inside the rotating bowl. When the bowl requires cleaning, it can be opened with a few simple operations.
2. When the tramp oil has reached a certain level in the collecting tank, a microswitch is activated, stopping the cleaning process and turning on an indicator light.
3. The surface of the rotating bowl is coated with a material that is 12 times harder than steel.
4. Large wheels make it easy to move Alfie 500 even when the floor is not entirely smooth.
5. Suction hose with surface suction device.
6. Hose for turn of clean liquid.

Scope of supply

Alfie 500 is delivered complete with stand, collection tank for tramp oil, surface suction device, hoses, service tool kit and instruction book.

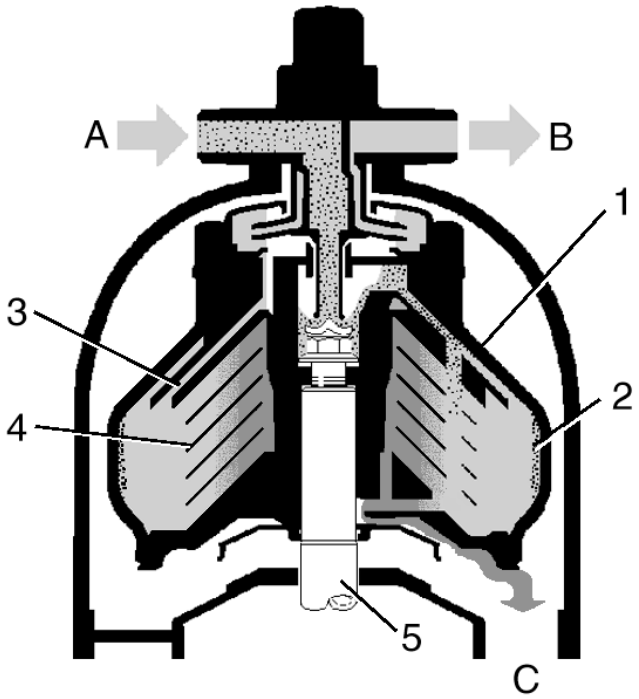
Options

Bellow type suction device.

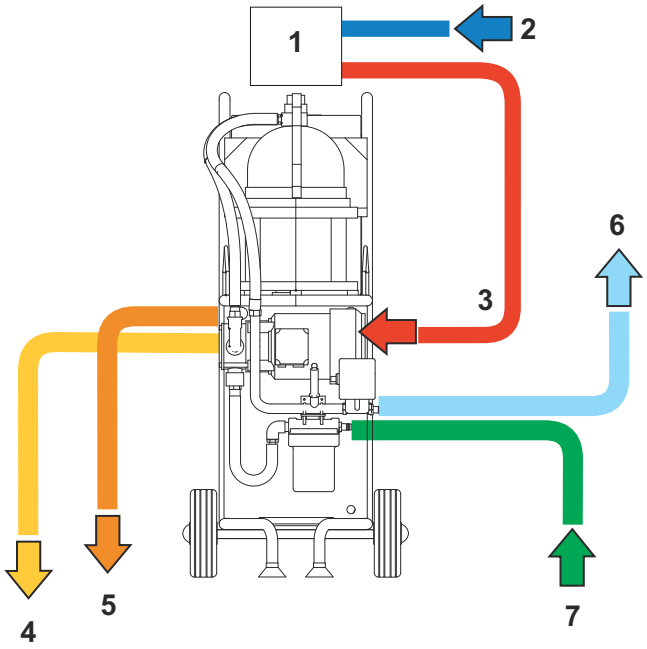
Working principle

Dirty liquid continuously enters at (A) and flows into the bowl (1). The bowl rotates at high speed generating powerful centrifugal forces. As the liquid rotates with the bowl, the liquid (heavy phase) and solid particles moves towards the periphery of the bowl. The particles (2) are deposited on the bowl wall, while the cleaned liquid enters the channels (3) and leaves the bowl at (B) at a constant pressure. The discs (4) in the bowl improves the cleaning efficiency during the separation process.

The oil (light phase) is forced towards the centre of the bowl and then leaves through the underside of the bowl at (C).



1. Control cabinet
2. Power supply
3. Motor
4. Bowl drain outlet
5. Outlet for light phase
6. Outlet for heavy phase
7. Inlet for process liquid



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Technical data

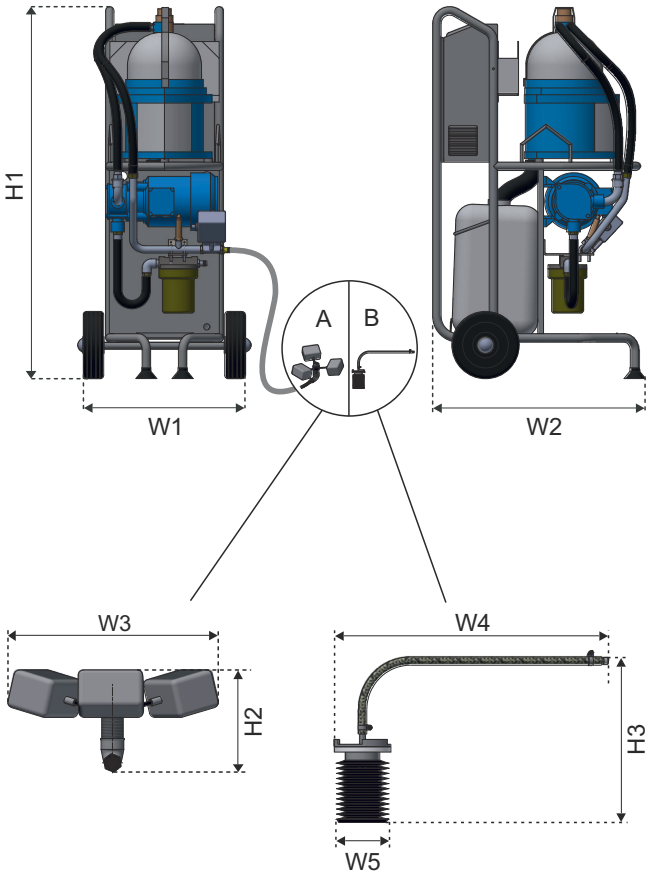
Capacity	
Max. flow, 50/60 Hz	500 l/h (2.2 gpm)
Sludge space	0.6 l (0.16 gal)

Fluid requirements	
Max. temperature	70°C (160°F)
pH value	6–9

Electrical data	
Voltage	230 V or 100–230 V single-phase (±5%)
Frequency	50/60 Hz
Amperage	10 A

Weight	
Total weight, incl. stand	60 kg (135 lbs)

Dimensional drawing



A - Suction device: Floats type

B - Suction device: Bellow type

Dimensions	
H1	1106 mm
H2	158 mm
H3	339 mm
W1	480 mm
W2	631 mm
W3	325.6 mm
W4	560 mm
W5	109,3 mm

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