

Oil separator *Skimmtelligent*

Bypass-system for separation of oil from process fluids



The oil separator *Skimmtelligent* removes tramp oil from process liquids like coolant, cooling water, washing water, waste water and other

How does it work

Floating oil and process fluid is pumped by the air driven diaphragm pump into the separator. Because of the low specific weight oil droplets will float on the surface of the process liquid. The built-in coalescing media accelerates the separation of the oil and hydrocarbons to the surface. The floating oil will be removed by an oil skimmer while the clean water or coolant will flow by gravity back into the main tank.

Your advantages

- Short payback time because of longer lifetime of coolant or degreasing bath
- Low maintenance because of corrosive resistant material.
- Changing water levels in main tank have no influence to the separation result. Because of different floating skimmer the separator *Skimmtelligent* can be used for all kind of application.
- Simple installation

Technical data

Dimensions:

	length	width	height
model 10	600 mm	440 mm	1200 mm
model 20	900 mm	440 mm	1280 mm
model 40	1660 mm	510 mm	1230 mm

approx. flow:

model 10	300 l/h
model 20	600 l/h
model 40	1200 l/h

volume of separation tank approx.

model 10	100l
model 20	200l
model 40	400l

max. volume:

model 10	7500l
model 20	15000l
model 40	30000l

working temperature:

max. 40/70 °C

pH-value:

5 - 14

max. capacity of oil skimmer

30l oil/h

Working Principle Skimmtelligent 10

Working principle

The built-in diaphragm pump pumps mixture of oil and process liquid into the separation chamber. The working principle of the pump avoids emulsifying of small oil droplets with the process liquids.

In the first part of the separation chamber sludge and heavy particles will settle on the bottom. The mixture of oil and process liquid flows through coalescent media. Small oil droplets will stick to the coalescent media. Many small droplets will combine to bigger drops. Because of gravity the bigger drops have the possibility to float to the surface of the liquid. The additional built-in aeration accelerates the separation of oil and liquid. The oxygen in the air prevents growth of anaerobic bacteria in the liquid.

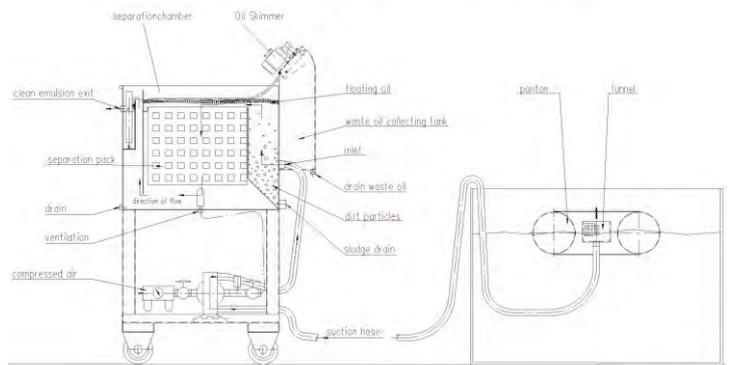
The oil layer, that floats on the surface of the coalescing tank, will be removed from time to time by an oil skimmer model 1U. The removal of the thin oil layer avoids growth of anaerobic bacteria. The clean liquid flows by gravity back into the main tank. All functions are controlled by a small PLC. The system operates as bypass system independent from the production.

Typical application

The decanter *Skimmtelligent* is specially designed for industrial applications like

- coolant tanks
- part washer
- cooling water systems
- pretreatment of waste water

In many industrial applications oil gets into the water or coolant. Because of small storage tanks and continuous operation the small oil droplets in the water will not settle on the surface of the tank but remains mixed with the liquid and the liquid has to be changed. The decanter *Skimmtelligent* is able to separate the tramp oil without disturbing the production process. The lifetime of the coolant or washing water will be improved and bacteria growth will be reduced.



Skimmtelligent 10



Skimmtelligent 40