Oil Dewatering

VOD

Friess vacuum oil dewatering units quickly and easily remove water, gases and dirt particles from hydraulic oils, turbine oils and other mineral oils

Advantages

- Fast ROI due to extended service life of the oil
- Less wear on pumps, valves, cylinders and seals
- Dewatering down to a residual water content of less than 50 ppm water
- Efficient removal of water, gases and particles
- Requires no machine downtime and requires little monitoring. Due to bypass installation, there is no pressure drop.

Technical data	VOD 16	VOD 80
Max. flow rate	1,6 l / min	8,0 l / min
Electrical connection	2,6 kW 400V 50Hz	5,2 kW 400V 50Hz
Max. operating pressure	1 bar	1 bar
Inlet / outlet connection	1" BSP / 1/2" BSP	3/4" BSP / 34" BSP
Filtration	3 µm	3 µm
Drainage	50 ppm or better	50 ppm or better
Weight	130 Kg	275 Kg
Dimensions L x B x H	740 x 450 x 1100 mm	750 x 650 x 1600 mm

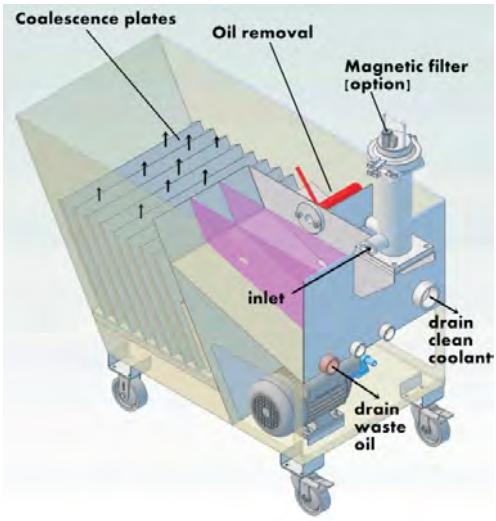
1. Why Remove Oil?

In the case of cooling lubricants, the lubricating and cooling performance of the cooling lubricant is reduced by the constant introduction of oil. A closed oil layer on the emulsion surface reduces the oxygen input and leads to bacteria and fungus formation in the emulsion. In the case of washing and degreasing agents, the cleaning performance is reduced by the increased oil concentration. The service life of the fluid can be increased many times over by constant separation of the tramp oil carried in and consistent maintenance of the cooling lubricants and degreasing agents. Significant savings result from reduced disposal costs and optimized process procedures.

Suction float removes oil from emulsion

2. Operating Principle

A positive displacement pump is used to draw the contaminated liquid from the working tank. Coarse particles and chips are removed in a coarse screen upstream of the pump. In the optional magnetic filter, ferritic particles down to about 1 µm are filtered out of the liquid. The liquid pre-cleaned in this way is then pumped into the separator tank of the FRIESS Skimmtelligent Mini oil separator. The liquid mixed with tramp oil flows through inclined coalescing plates. Even the slight buoyancy of small oil droplets is sufficient to cause the oil droplets to rise to the bottom of the next inclined plate. There, a few large oil droplets form from many small oil droplets, which then rise to the liquid surface with high buoyancy. The oil layer thus formed flows over a height-adjustable overflow into a separator tank. The oil fluid concentrated lows via a further separation stage into the used oil collection chamber. The cleaned liquid flows back into the working tank by gravity. The separated waste oil can be drained manually from time to time.



Operating principle Skimmtelligent Mini

For more information, consultation and ordering:

- Phone +49 21 73 / 520 11
- Internet at www.friess.eu
- E-Mail at post@friess.eu