

Dewatering Unit OPS 550



Dewatering Unit OPS 010

Why OPS ?

In times of increased demand on hydraulic and lubrication systems with respect to the lifetime and availability, the importance of the fluid being used is constantly growing.

The smallest amount of free water can cause acidification in oils and corrode components surfaces.

An increase in water content can dramatically alter the characteristics of the oil. The consequences include reduced load capacity, lower temperature resistance and, ultimately, rapid oil oxidation (aging), which all results in economic damage.

Some of the causes of water in hydraulic and lubricating oil are: Ambient moisture, splash water, cooler breakage.

With the new OPS mobile dewatering unit large quantities of free water can be removed economically. The oil is heated and channelled into a vacuum chamber.

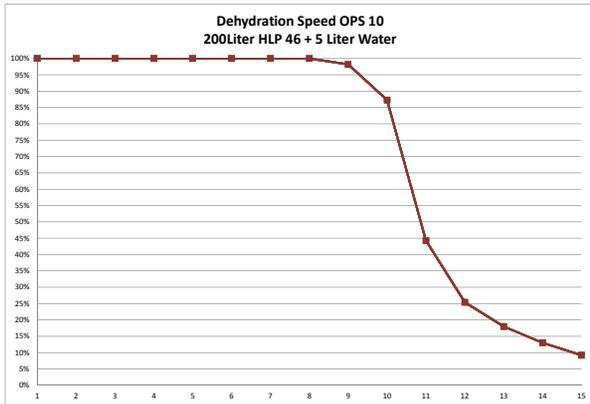
The water is reduced quickly, long before the saturation limit is reached, thanks to the reduced steam pressure.

A fine filter is installed downstream from the drying process to ensure that the oil is dry and filtered when it flows back into the machine or tank.

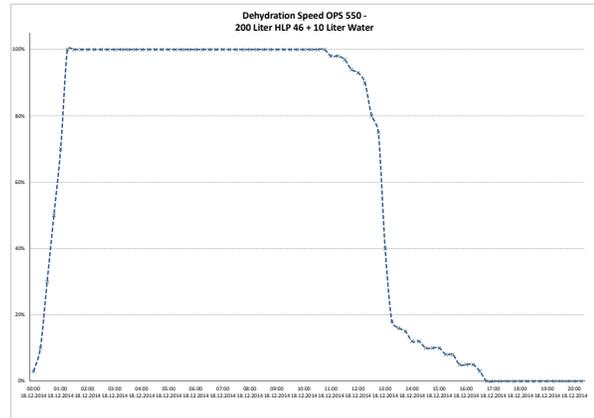
Water content is constantly monitored with the ARGO-HYTOS LubCos H₂O water sensor. Thus the user is always up to date.

Thanks to the available combinations of the device, the OPS is always perfectly equipped.

OPS 010



OPS 550

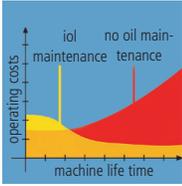


Functionality

The unit separates free and dissolved water from hydraulic and lubricating oils. By means of a vacuum pump low pressure is produced within the reactor and oil is sucked in via the oil inlet. A heater warms up the oil to the adjusted temperature.

Inside the reactor the water evaporates far below the saturation limit. The steam is cooled down and condensed. The condensed water conglomerates in a collection tray. The dried oil conglomerates within the reactor. Herein level switches are found for switching on and off the outlet pump. As soon as the filling level is reached, the outlet pump operates and delivers the dewatered oil to the oil outlet.

On site the cooled oil sample can be evaluated optically. As long as the cooled oil is clouded, the water content is impermissible high. In case the cooled oil sample seems to be clear, the water content lies within the permitted range. An exact examination of the water content is carried out by an oil sample analysis in the laboratory (e. g. determination of the water after the Karl-Fischer-Method according to DIN 51777).



Economical

Efficiency through ARGO-HYTOS Fluid Management systems. Fast return on investment by extended service intervals and increased machine availability.



Easy handling

The operating panel is clearly and easily arranged. All operating elements and indications can be realized at a glance.



User-friendly filter element change

The filter element can be pulled out of the housing together with the cover. By means of the dirt retention valve sedimented solid particles are removed together with the filter element which is flown through from the centre outwards. Extensive flushing of the filter housing is not necessary.



Efficient dewatering

The vacuum chamber and tempering of the oil allow dewatering far below the saturation limit.



Monitored dewatering

With the water sensor LubCos H₂O the relative humidity is monitored during the dewatering process.

Technical data

	OPS 010	OPS 550
Nominal flow rate	10 /min	50 l/min
Filter fineness	5µm	5µm
Operating voltage	3 ~ 400 V	3 ~ 400 V
Operating frequency	50 / 60 HZ	50 / 60 HZ
Nominal current	16 A	32 A
Power	max. 7,4 kW	max. 13 kW
Viscosity min.	10 mm ² /s	15 mm ² /s
Viscosity max.	700 mm ² /s	500 mm ² /s
Dewatering rate	0,9 l/h*	1,65 l/h*
Connection A	3/4" BSP	1 1/4" BSP
Connection B	1" BSP	1" BSP
Replacement filter element	V7.1230-53	V7.1560-03
Dirt-holding capacity	220 g	600 g
Weight	160 kg (without accessories)	730 kg (without accessories)
Dimensions (LxBxH)	600 x 565 x 1200 mm	1500 x 1000 x 1780 mm

* typical dewatering rate with 200 liters of oil at > 10.000 ppm water content

** with test dust ISO MTD determined by ISO 16889

Dimensions

