

Dewatering Units**OPS 010 · OPS 550**

Dewatering Unit OPS 010



Dewatering Unit OPS 550

Why OPS?

Due to increased demands placed on hydraulic and lubrication systems with respect to lifetime and availability, the importance of the fluid being used, is constantly growing.

Even the smallest amount of free water in oil can cause acidification and thus lead to corrosion of component surfaces.

An increased 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 equipment damage and costly repairs.

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

With the new OPS mobile dewatering unit, large quantities of free water can be removed efficiently. The oil is heated, if necessary, and channeled into a vacuum chamber.

The water is removed, 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.

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

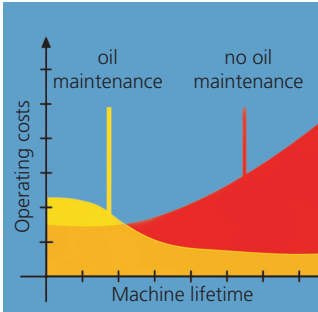
Thanks to the available combinations of the device, the OPS is always perfectly equipped.

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 has been reached, the outlet pump will operate and deliver the dewatered oil to the oil outlet.

On site, the cooled oil sample can be inspected visually. As long as the cooled oil is clouded, the water content is inadmissible high. If the cooled oil sample appears 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 using the Karl-Fischer-Method according to DIN 51777).



Economical

The OPS 10 · OPS 550 Dewatering Units offer protection that can extend the lifetime of machinery. This protection gives a direct return on investment through 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 removed from the housing together with the cover. The dirt retention valve ensures that solid particle sediment is completely removed with the filter element.



Efficient dewatering

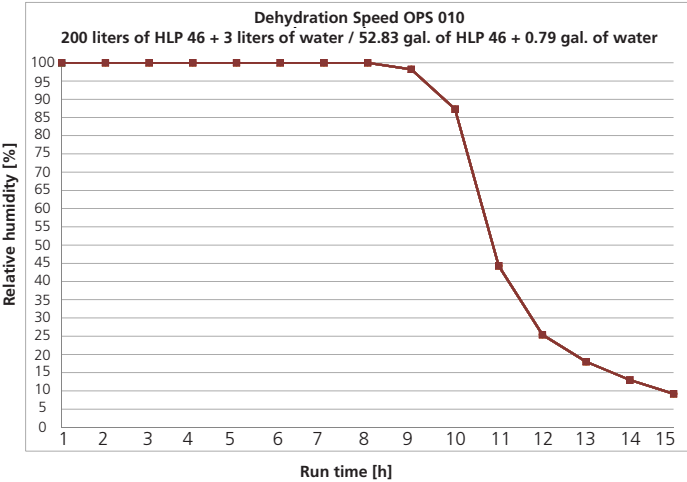
The vacuum chamber and tempering of the oil allow dewatering far below the saturation limit.



Monitored dewatering

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

OPS 010

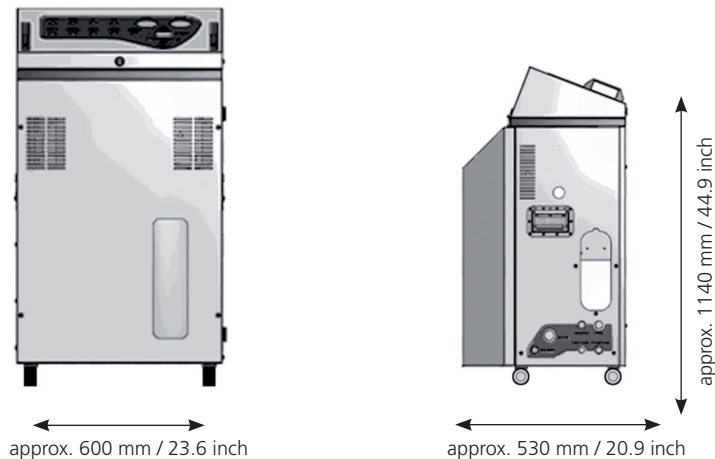


Technical data

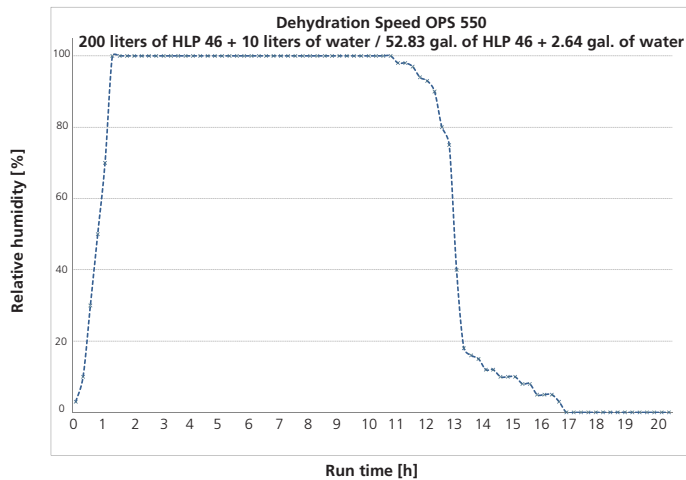
	OPS 010
Nominal flow rate	10 l/min / 2.6 gpm
Filter fineness	5 µm
Operating voltage	3 ~ 400 V
Operating frequency	50 / 60 HZ
Nominal current	16 A
Power	max. 7.4 kW
Viscosity min.	10 mm²/s / 46 SUS
Viscosity max.	700 mm²/s / 3244 SUS
Dewatering rate	0.9 l/h* / 0.2 gal/h*
Connection A	¾" BSP
Connection B	1" BSP
Replacement filter element	V7.1230-53
Dirt-holding capacity	220 g
Weight	160 kg / 353 lbs (without accessories)
Dimensions (length x width x height)	600 x 565 x 1200 mm / 23.6 x 22.2 x 47.2 inch

* typical dewatering rate with
200 liters /
52.83 gallons of oil
at > 10,000 ppm water content

Dimensions



OPS 550



Technical data

	OPS 550
Nominal flow rate	50 l/min / 13.2 gpm
Filter fineness	5 µm
Operating voltage	3 ~ 400 V
Operating frequency	50 / 60 HZ
Nominal current	32 A
Power	max. 13 kW
Viscosity min.	15 mm²/s / 69 SUS
Viscosity max.	500 mm²/s / 2317 SUS
Dewatering rate	1.65 l/h* / 0.4 gal/h*
Connection A	1¼" BSP
Connection B	1" BSP
Replacement filter element	V7.1560-03
Dirt-holding capacity	600 g
Weight	730 kg / 1609 lbs (without accessories)
Dimensions (length x width x height)	1500 x 1000 x 1780 mm / 59.1 x 39.4 x 70.1 inch

* typical dewatering rate with
200 liters /
52.83 gallons of oil
at > 10,000 ppm water content

Dimensions

