

Electrostatic Oil Cleaner

Model D2

The electrostatic oil cleaner model D2 removes particles, sludge and varnish from hydraulic oil

Advantages

- Precise operation of your hydraulic system
- Less cost for maintenance, repairs and oil changes
- Up to 95% less consumption of hydraulic oil
- Up to 70% less downtime
- Improved availability of your machine and service life up to 100,000 hours and more for your hydraulic oil



Technical Data

| | |
|---------------------------------|--|
| Pump capacity | approx. 2,5 l / min |
| Volume of cleaning cell | approx. 330 g |
| Work temperatur | max. 80 °C |
| Water content in the oil | max. 500 ppm |
| Power consumption | max. 350 W |
| Voltage | 230 V |
| Weight | 85 Kg |
| Dimenstions L x W x H | 450 x 400 x 940 mm |
| Yearly cleaning capacity | HLP 32 - 4500 l / HLP 46 - 3400 l HLP 68 - 2300 l |

1. Hydraulic Systems

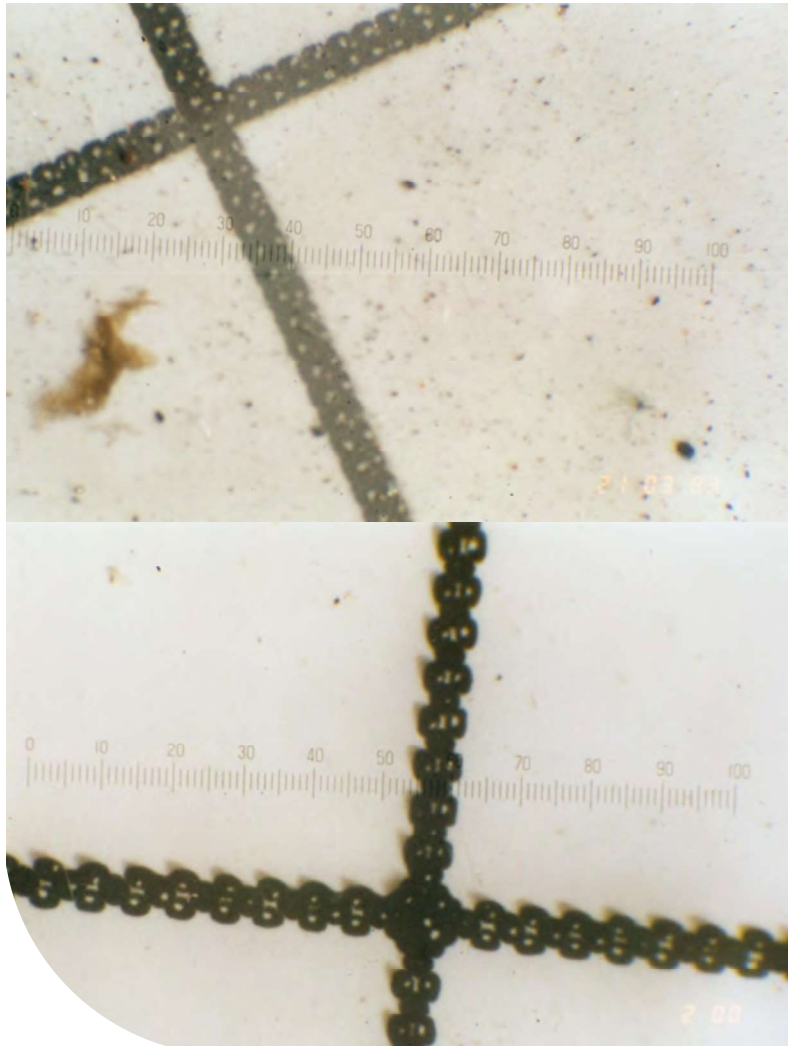
In order to operate hydraulic systems without failure and to increase process reliability and machine precision, modern hydraulic systems are equipped with precise high-tech components. However, the advantages of these modern hydraulic systems can only be exploited if hydraulic oil of the appropriate quality and purity is also used. Sludge, resin, varnish and particles can accumulate in the oil and the hydraulic system. This increases friction and wear and leads to a wide variety of malfunctions or failures of the hydraulic system.

2. Improved Precision

In order to continuously produce with the precision required, the hydraulic system must be operated with clean oil and be free of sludge deposits. Friess EFC technology removes dirt particles and sludge from the hydraulic oil whether hard or soft, small or large. Existing sludge deposits from valves or pumps are removed by electrostatic oil cleaning.

3. Operating Principle

The Friess EFC electrostatic oil cleaning system model D2 is connected in a bypass to the hydraulic system. Independent from production the hydraulic oil passes through an electrostatic field between the electrodes of the oil cleaning unit. The electrostatic field force draws the dirt particles onto special cleaning elements between the electrodes, where they are deposited. The special shape of the Friess cleaning elements creates a uniform turbulent flow in the hydraulic oil during the cleaning process. This deflects the dirt particles towards the electrodes and results in a particularly effective removal. This unique design removes particles of all sizes from 0.05 μm to well over 100 μm from the hydraulic oil. Liquid additives contained in the oil are not affected by the electrostatic field forces and remain in the oil. Due to the electrostatic operating principle, particles of all sizes are removed from the oil rather than only particles above a certain minimum size, as is the case of filters. Due to the extreme oil purity achieved in this way existing sludge and varnish deposit are slowly broken down and removed, and new deposits are prohibited.



Filter membran pore size 0.8 μm

1) Dirt particles and varnish in used oil

2) After filtration of electrostatic cleaned oil

4. User Friendly

The simple and safe operation of the model D2 oil cleaner is ensured by the bespoke control system. A display shows the respective operating status in plain text. A single pushbutton is all that is needed to switch the system on or off. All further operations are carried out automatically by the control system. For safe continuous operation, the system is equipped with an oil sump. All functions are constantly monitored with safety switches and sensors.



Cleaning elements before and after usage

For more information, consultation and ordering:

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