

PHOENIXTM MEMBRANE PURIFIER IMPACT STORIES

PORTABLE CRANE HYDRAULIC SYSTEM

A local road machinery company had a portable crane which was contaminated with over 2500 ppm of water. This water was from rain that had leaked into the system through a leaky hydraulic access hatch.

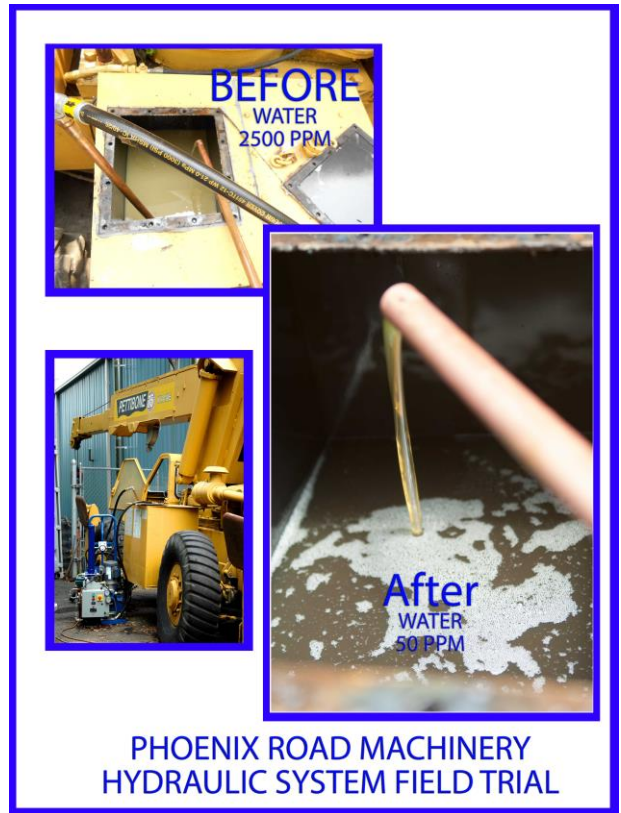
Water ingress problems had become so problematic that during the winter the hydraulic system on the crane sometimes froze up.

A PHoenixTM 1 gpm prototype cart was installed on the cranes hydraulic system to condition the oil and remove water. Suction and return to the hydraulic system was done by removing the access hatch cover and dropping wands into the oil reservoir.

After a few weeks of running water was reduced from above 2500 ppm down below 50 ppm.

Results of the trial can be seen in figure 1.

Because of its portability and set and forget design the PHoenixTM is an ideal way to handle water ingress into road machineries hydraulic systems in the field. It is portable and easy to install and runs on single phase voltage.



PHOENIX ROAD MACHINERY HYDRAULIC SYSTEM FIELD TRIAL

Figure 1: Crane Hydraulic System

PHX-HEATER

For faster water removal on stagnant cold oil an optional portable single phase 110/220 V oil heater can be used in series to the inlet of the PHoenixTM to add heat. For every 20°F increase in oil temperature over 80°F water removal rate through the PHoenixTM doubles and so can speed up equipment recovery times

The portable heater allows for modularity when dealing with water removal and thus maintains portability of two skids rather than one heavy skid with heater and purifier attached.

PHOENIXTM
OPTIONAL ACCESSORY

PORTABLE IN-LINE OIL HEATER
Increases water dehydration and removal from cold oils!

Your Hookup Hydraulic System Lube Oil Inlet

SOMETIMES OIL DEHYDRATION NEEDS A LITTLE HELP!

The Phoenix Membrane Oil Dehydrator and Purifier exclusively built by MSC Filtration Technologies is designed to remove 100% free, 100% emulsified and dissolved water contamination below 50 ppm in oils with viscosities of as high as 3000 cSt. In most cases the heat generated by the gearbox, hydraulic or lube oil system while it is operating is enough to maximize water removal. However cold stagnant oils can use a little help to increase the water removal rate of the Phoenix and insure maximum efficiency.

The PHX-110/220HEATER is an optional accessory that can be connected in series with the Phoenix Purifier to almost double water dehydration for every 20°F the oil temperature is increased above 80°F. Since it is set and forget and modular it maintains the simplicity and portability of the Phoenix Technology.

This is especially helpful in applications such as

- Road Machinery Hydraulic Oil Reclaim
- Stagnant Oil Drum or Tote Reclaim and Purification
- Gear Boxes or Hydraulic Systems in Cold Climates
- Off-line Gearboxes, Hydraulic or Lube Oil Systems
- Hydro Liftgate Gear Boxes



PHX-110/220HEATER



PHX-110/220HEATER and Phoenix Purifier Typical Hook UP

INCLUDES

- 110V or 220V 1KW Oil Heater
- Insulated Steel Sheeth
- Powdercoated Cart or Stand
- No Flat Tires
- Manual Thermostat: 50-250F
- Nema 4 Control Box w 15A Breaker
- Green Light Indicator Power On Button
- Electric Cord with 15A Plug
- Auto High Temp Cutoff - 285F
- Auto High Temp Alarm Light
- Visual Oil Thermometer
- Heater Drain Valve

MSC FILTRATION

Simple Safe Reliable Efficient

Figure 2: Portable Oil Heater