

Vacuum Dehydrator Oil Purification Systems

Precision Filtration Products
YOUR ONE STOP FOR FILTERS.

Low Vacuum Industrial Oil Purifiers



LV-600

Features

- Removes up to 1% water in a single pass.
- Removes down to .5 microns in filtration.
- Does not remove costly additives.
- Flow pattern does not agitate the oil.
- Unit is modular.
- Electrical: explosion / weather-proof enclosures.
- Automatic controls designed for unattended operation.
- Heater controls are solid state.

Applications

- Power Plants
- Transformers
- Ammonia Compressors
- Extrusion Plants
- Steel Mills
- Paper and Pulp Mills
- Refineries
- Chemical Plants
- Injection Plants
- Petrochemical Plants
- Machinery Manufacturers
- Aircraft Manufacturers

Description The Lo-Vac's principal function is the removal of water, gases, and light hydrocarbons from oil. The system is operated under vacuum conditions, and the oil is forced by atmospheric pressure through a heating chamber engineered to raise the oil temperature to a desired level. The oil is then drawn into a vacuum chamber where it passes through coalescing elements at a very low flow rate. The flow through the elements is inside out, with the elements also acting as filters to remove solids. Next, the oil is exposed to a vacuum where water (free, dissolved, and emulsified), dissolved gases, air, and other low range volatiles are boiled off by a heat / vacuum process. With this process, the oil is purified and conditioned to a safe operational standard. The gases are pulled off by a water ejector or vacuum pump and pass through a cooling device for condensing. The condensing steam and vaporized contaminants are then ejected automatically as waste. No additives or detergents are removed.

These units dehydrate oil, through the proper application of heat and vacuum while circulating to and from a single reservoir at a specific rate of flow. The units are not sized to purify oil in a single pass. Purity and temperature rise with each pass. The maximum heat rise per pass is 50°F ΔT. The suggested number of passes is normally four (4). A minimum of 140°F oil temperature is required to purify most oils (not to exceed 185°F). Thus, the customers reservoir size, the ambient temperature of the oil and the amount of contaminants will determine the number of required passes to purify the oil.



LV-1200-AW-64-WM/A/B

PRECISION FILTRATION PRODUCTS • P.O. BOX 218 PENNSBURG, PA 18073
PHONE: 215-679-6645 • FAX: 215-679-6648 • www.precisionfiltration.com

SOLUTIONS

to purifying industrial oils



With the higher cost for oils and ever increasing environmental regulation and liability, it is no longer economical to replace your lubricating, turbine and hydraulic oils when they become contaminated with water, gases, particulates and other agents.

Restoring these oils to their original strength through purification is now a necessity.

The Low Vacuum (Lo-Vac) Oil Purification Systems are designed specifically to meet the operational, economic and environmental needs of companies in purifying industrial oils.

Through proven dehydration, degasification and filtration techniques, the Lo-Vac Oil Purification Systems quickly and easily remove:

- Free and emulsified water to less than 50 ppm
- Particulate matter to 0.5 microns nominal (2.8 microns absolute)
- Other contaminants using unique media designs

And operation is a snap. Lo-Vac Systems are easy to use and require very little maintenance.

Lo-Vac Systems can be used as stationary units or manufactured within a variety of trailer configurations to be completely portable.