

### PRODUCT DIGEST

TRANSFORMER OIL REGENERATION • VACUUM OIL PURIFIERS • PCB DECONTAMINATION • OIL DEHYDRATION LUBRICATION SYSTEMS • AIR & GAS DRYERS • MOBILE OIL FILTER CARTS

#### **HIGH VACUUM DEGASIFICATION - Model E865A & EHV**

Enervac's High Vacuum Process is used for the dehydration and degasification of electrical insulating liquids including transformer oils, polybutene and silicone fluids to increase and maintain their dielectric strength. The processing includes the removal of free and soluble water, dissolved air and gases and particulate matter.

The most important applications of high vacuum degasifiers are in the field of extra high voltage transmission and in the manufacture of electrical apparatus. In addition, the high vacuum process is used in the degasification of cable oils including polybutene. Outside of the electrical industry, this process is used for electronic and radar equipment, vacuum pump sealing oils, brake fluids and refrigeration oils - including phosphate esters and silicones.

Mobile and stationary units are available in sizes 50 to 6000 GPH.



### VACUUM OIL DEHYDRATORS - Model E859A Reclaim Oils with Enervac Vacuum Process.

One of the most frequently encountered contaminants in oil is water. Water is detrimental to the performance and life of oil. In view of their high disposal cost, the extension of the service life of oils is of great importance. The Enervac Vacuum Dehydrator, in sizes ranging from 30 GPH to 1800 GPH, uses a low vacuum process and Enervac's exclusive accelerator elements to remove water, light hydrocarbons and solid contaminants and has successfully been performing services in many applications such as:

- Lubricating Oils
- Hydraulic Oils
- Turbine Oils
- Cutting and Cooling Mineral Oils
- Compressor Oils
- Synthetic Fluids
- Insulating Oils
- Quenching Oils



#### TRANSFORMER OIL REGENERATION PLANT- Model 575R

Enervac's Transformer Oil Regeneration Plant provides all the benefits of Fuller's Earth treatment without the associated problems of contaminated clay disposal or the high costs of replacing saturated earth.

At the end of the useful lifetime of the regeneration media, normally 300 times longer than Fuller's Earth, it is simply disposed of in a normal landfill site.

Ideally suited to large throughputs, the plant is available in either a mobile or stationary version, with annual throughputs from 150,000 gal to over a 1,000,000 gals.





### FULLER'S EARTH FILTER - Model E575A Fuller's Earth Treatment Adsorption Columns

Enervac's Fuller's Earth systems are specifically engineered to remove soluble contaminants such as acids, waxes, gums, resins, asphaltenes, sludges, carbon residues and colloidal particles from lubricating, hydraulic, seal, quench and insulating oils.

Surfactants, resins, traces of free water and by-products of oxidation can also be effectively removed from aviation, automotive and diesel fuels.

Stationary and mobile units available with electrically actuated covers. Columns are designed to ASME code.



#### MINI DEHYDRATOR - Model 859C

This lightweight portable oil purifier filtration system dehydrator is the most costeffective way to extend the life of hydraulic and lubrication fluids. This air-cooled unit will dehydrate, filter and de-aerate fluids.

The Mini Dehydrator is ideally suited for small volumes (up to 200 gallons (750 L)) of hydraulic fluids, lubricating oils, lubricating oils, turbine oils, transmission fluids, quenching oils and synthetic fluids.

- Removes 100% of free water
- 60 US Gallons (230 L) per hour flow rate
- Filter to 10 microns
- 3 kW heater
- Custom supply voltages



#### MINI DEGASIFIER - Model E865C

This lightweight Mini Degasifier cart uses the latest vacuum technology to degasify, filter and dehydrate insulating and dielectric fluids.

The unit is ideally suited for pole mounted transformers, bushings, and conservator and similar small fluid volumes.

- Final water content <10 ppm</li>
- Final gas content < 0.25%
- Filter to 0.5 microns
- 3 kW heater
- Custom supply voltages





#### PORTABLE FILTER CART - Models EPF & EFP

The Enervac Pumping and Filtering Modules are completely packaged, compact units for Liquid Filtration. They are available in a variety of sizes and flow rates, stationary or portable. The Enervac pumping and filtering modules provide a most complete and widely applicable line of portable and stationary filter units embodying striking economy, uniformity and inter-changeability of filter media.

Lubricating, hydraulic, quench and insulating oils are maintained to ISO cleanliness standards through the removal of dirt, sludge, carbon and metallic particles as well as water, gums, tars, resin and asphaltenes.



#### **MOBILE OIL FILTER CART - Model E858M**

The Enervac Mobile Oil Filter Cart is ideal for extending oil life by the removal of moisture, particulate and carbon from dielectric fluids and oils used in Transformers, Circuit Breakers, Voltage Regulators and Switch Gear. The cart is completely mobile and certified for highway travel. The Mobile Oil Filter Cart can be used to retrieve the fluid, flush and refill the breakers. Each unit is designed to be easily operated and maintained. Save on the disposal cost of carbon contaminated oil by restoring it with Enervac's Mobile Oil Filter Cart. Available in several sizes and specialized designs to suit your application.

- Robust compact design
- Year round operations
- Filtration to 1/2 micron
- Removes free water
- Suitable for highway travel
- ASME registered filter cases
- Positive displacement pumps
- All welded piping
- Flow rate up to 60 USGPM
- Single operator operation



#### **INDUSTRIAL FILTERS - Model E858A**

The Enervac Model E858A Filter is ASME code designed and labelled for 150 psi operating pressure. The all-steel case has multiple spindles to accommodate a wide variety and number of interchangeable elements, absorptive, adsorptive and mechanical type. The selection of the proper element for specific application depends upon the customer's micronic selectivity and flow requirements.

- · Rolling oils
- Aviation fuels
- Turbine oils
- Full flow lube oil
- Engine oils
- Hydraulic oils
- Insulating oils
- Quench oils
- Diesel fuels
- Fuel oils





#### REPLACEMENT ELEMENTS

Enervac offers one of the most complete lines of filtration replacement media available to industry today. Enervac performance rated filtration elements for contamination removal by absorption, adsorption, coalescing, separating, mechanical filtration of air, gas, oils, fuels, water and fluids in general.

Pleated

• Fuller's earth

• Roll tube

Carbon

Depth

Disc-Pac

Separator

Coalescer

Enervac's elements are made from the highest quality materials, carefully manufactured, inspected and backed by a full warranty. We have an element just right for your application.



### INDUSTRIAL OIL HEATERS - Model E873A Electric Heating - Low Watt Density

Enervac specializes in the design and manufacture of low watt density electric heating for industrial oils.

The Enervac Model E873A Oil Heater System assures less than 12 watts per square inch Uniform low watt density oil heating. The electric heating coils are mounted inside heating tubes. The coils heat the air in the tube which uniformly heats the tube walls. The heating coils do not come in direct contact with the oils, eliminating the natural hot spots in resistance heaters and preventing any burning of oil. Isolating the heating element from the oil permits service removal without disturbing the oil process.

Present us with your oil heating problems, no matter how unique, and our staff of experienced professionals will be pleased to make recommendations.



### POLYCHLORINATED BIPHENYL (PCB) DECONTAMINATION - MODEL MPU

PCB decontamination equipment is designed for the decontamination of electrical insulating oils that have been contaminated with low levels of polychlorinated biphenyls (PCB's). Oil containing up to 7000 PPM of P.C.B.'s can be processed lowering the PCB level to below the detectable level (2 PPM).

The chemical process reverses the process by which PCB's were originally developed. A small amount of molten metallic sodium dispersion is added to dehydrated and degasified insulating oil in a mixing tank. A reaction takes place converting the PCB's into harmless compounds, common salt and a few hydrocarbon residues. These are removed from the oil as a sludge by a centrifuge. The sludge is non-PCB and can be disposed of in any industrial waste disposal facility.

The reclaimed insulating oil has excellent electrical properties, comparable to that of new Insulating Oil meeting the A.S.T.M. standard and can be used again in electrical equipment.





# **LUBRICATION EQUIPMENT - Model E831B Circulating Oil Systems**

Adapted and ideally suited where it is desirable to provide a complete lubricating system for individual mill stands or drives and for the lubrication of light-duty equipment, (or wherever a smaller capacity system is desired).

Extensively used in many fields, including the paper, rubber, textile, machine tool, metal rolling, blower, fan, and associated industries.



## TURBINE OIL PURIFIER - Model E855T Coalescing Principle

The Enervac Model E855T is ideal for extending turbine oil life by removing free moisture and particulates. Skid-mounted and self-contained, the unit is designed for unattended operation. It removes free and emulsified water to 150 ppm, restores oil to ISO 14/11 cleanliness. Flow rates up to 100 GPM are available. ASME coded filter vessels are an Enervac standard. The unit features little maintenance, ease of operation, low operating cost and quick, easy installation. The benefits of this system are numerous, including:

- Longer Turbine Life
- Reduced Bearing Failures
- Reduced Power Outages
- Reduction in Turbine Overhauls
- Precise Hydraulic Valve Operation
- Quicker Oil Flush Cycles

