



## ICB<sup>®</sup> ION-EXCHANGE FILTER

Industry-leading patented ion-exchange technology offering unmatched performance in industrial lubricants and fluids

### OVERVIEW

Patented ICB<sup>®</sup> ion-exchange filters are manufactured with one goal in mind: to remove the dissolved oxidation molecules that accumulate and cause mechanical problems in bearings, seals and servo valves. These filters are engineered workhorses, combining best-in-class chemistry and materials with precision robotic welding to provide the most robust and highest performing filter available on the market. ICB filters offer a step-change in oil performance, protecting system reliability and production with many benefits beyond acid and particulate removal.

### ICB ION-EXCHANGE FILTER FEATURES AND BENEFITS

- Industry-leading ion-exchange filters that offer unmatched performance in the removal of acids, varnish and dissolved oxidation molecules responsible for:
  - + slow or sticking servo valves
  - + bearing deposits
  - + bearing failures
  - + other mechanical issues that would otherwise result in production losses
- Removes the underlying cause of varnish and removes existing deposits by restoring fluid solubility, shifting chemical equilibrium back towards the original fluid condition
- 100% effective under normal turbine operating conditions when varnish is dissolved in the oil
- Restores fluid's electrical properties protecting mechanical components
- Creates stability within lubricant and fluid systems, mitigating premature deterioration
- Complete stainless-steel construction featuring robotic, spiral welding which provides maximum filter integrity
  - + Filter pressure tested to 150 psid
- Compatible with phosphate ester fluid (FRF), aeroderivative turbine oil, rust and oxidation turbine oil and anti-wear hydraulic oil



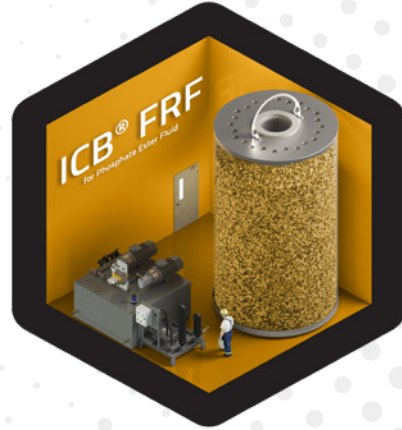
## ICB ION-EXCHANGE FILTER BY LUBRICANT TYPE

While originally developed for phosphate ester fluid back in 1992, EPT Clean Oil has expanded the capabilities of ICB filters to accommodate a wide range of lubricants, fluids and additive types.



### Meet ICB RO - for Rust & Oxidation Turbine Oil

ICB RO removes varnish precursors and dissolved breakdown products on a continuous basis, breaking the accumulation cycle and eliminating the root cause of varnish formation.



### Meet ICB FRF - for Phosphate Ester Fluid

ICB FRF is designed to address phosphate ester chemistry, removing acids, phenols and varnish while simultaneously improving resistivity, preventing EHC failures.



### Meet ICB JET - for Aeroderivative Turbine Oil

ICB JET removes acids, oil coking precursors and dissolved by-products on a continuous basis breaking the accumulation cycle and eliminating the root cause of deposit formation.



### Meet ICB AW - for Anti-Wear Hydraulic Oil

ICB AW selectively removes varnish and varnish feedstocks continuously breaking the accumulation cycle, and preventing varnish problems all together.

## PACKAGING

Available in standard sized filter cartridges or as part of a complete lubricant or fluid treatment system.

