

# REMOVE DEGRADATION PRODUCTS & EXTEND THE LIFE OF YOUR FLUID

#### FILL4LIFE PHOSPATE ESTER

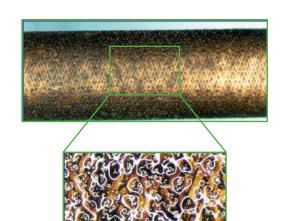
Keep your fluid clean and dry

Filtration is a critical step in phosphate ester maintenance. **Endure IX**<sup>TM</sup> is a proprietary technology that removes all forms of phosphate ester degradation products. In addition to all types of acids, the absorption media removes phenolic alcohols which are responsible for varnish formation in EHC systems.



#### **ENDURE IX BENEFITS**

- · Removes **ALL** acids (stronger and weaker)
- · Removes varnish forming byproducts
- · Highest acid capacity
  - · 10x the performance of Fuller's Earth
  - 2x the performance of other IX filters
- · Increases resistivity
- · Removes all dissolved metals
- · Longest filter life on the market
- Enables a **Fill4Life™** Phosphate Ester Fluid
- · Measure phenolic acid reduction with RULER™

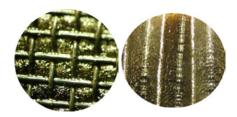


Servo-Valve Deposits

#### THE RESULTS ARE CLEAR...

Endure IX performance versus other technologies:

	In-Service Fluid	Fuller's Earth	Competitive IX Media	ENDURE IX
Tan	1.29	1.12	0.39	0.01
MPC	59	51	33	14
Resistivity	0.5	0.3	0.36	12.9
Ca	10	17	6	0
Mg	3	3	2	0
Na	12	23	0	0



Premature Filter Clogging



#### PHOSPHATE ESTERS

# Fill4Life<sup>™</sup>

#### Endure IX + Stealth EHC

System cleanliness is restored with no outage requirements. Fluitec provides **Endure IX** to bring the fluid acidity back to ideal conditions, **Stealth EHC™** to remove existing moisture and prevent any further water contamination.

#### **HOW IT WORKS**

Fluitec provides the optimum blend of media to target specific contaminants. There are media that specifically remove stronger acids, ones that remove weak acids (phenolic alcohols and varnishforming molecules) and media that removes dissolved metals from the fluid. As the fluid makes contact with the blended **Endure IX** media the process of physisorption removes the contaminants. It is recommended to install **Stealth EHC** along with the Endure IX for optimum performance.

#### **STEALTH EHC**

Our **Stealth EHC** system blankets your reservoir headspace with our superdry clean air. A low pressure air purge in the headspace accomplishes two important tasks simultaneously: It extracts moisture from the fluid while excluding other contaminants from getting in the system. The result is exceptionally clean, dry oil. The system is inexpensive to install, has no moving parts or electrical connections, and requires no maintenance. Quite simply, the **Stealth EHC** is the highest value contamination control technology you will install at your plant.

#### Endure IX media at work



Acid levels lowered, Resistivity increased, metals and varnish molecules removed



Stealth EHC

#### **ENDURE IX CAN BE USED IN THE VITA ESP II & III**





### **ENDURE IX SPECIFICATIONS**

## PHOSPHATE ESTER ELEMENT SELECTION GUIDE

Endure IX Element P/N	Outer Diameter	Length	Inner Diameter	Media Weight (lbs)	Quantity / Case
7X18	7"	18"	2.4"	11	4
6X32	6"	32"	1.55"	15	1
6X18	6"	18"	2.875"	9	4

<sup>\*</sup>Endure IX Elements fit all Hiliard-Hilco 7x18 filters ZXCO, CN and CRN

#### **ENDURE IX APPLICATIONS**

- · Power Plant EHC systems
- · Phosphate Ester lubricating oil
- · Naval Hydraulic Equipment
- · Aircraft Hydraulic Systems

PHOSTPHATE ESTER CONDITION & SOLUTION TABLE				
Condition	Endure Solution			
High Asid	Endure IX restore to rapidly reduce Acids			
High Acid	Endure IX to maintain low acid levels			
Low Resistivity	Endure IX to reduce phenolic alcohols, metals and ionic contaminants			
High Particle counts	Endure IX filtration solutions to remove varnish  Endure IX filtration solutions to return systems to servo quality particle counts			
High Metals	Endure IX adsorbs metals leached due to traditional technologies			
High water levels	Stealth EHC to rapidly and cost effectively eliminate moisture			











<sup>\*\*</sup>Endure IX Elements fit all Nugent phosphate ester 6x32 filter