

Stealth_{EHC}

Dry Gas Blanketing System

Moisture Removal Technology Specifically Designed for EHC Systems

“The Cost of Excluding Contamination from your Oil is about 10% of the Cost of Removing it once it gets into your Oil.” -Noria Corporation

Fluitec offers a simple, yet advanced solution to exclude moisture and contaminants from your fluid systems. Our Stealth_{EHC} system blankets your reservoir headspace with super-dry, 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.

The ultimate solution for keeping moisture and contamination out of your EHC System



Fluitec Stealth_{EHC} Features

- Uses economical plant air at an inlet pressure of 80-120 psi.
- There are no mechanical parts, no electrical connections – the system includes only a purposely sized orifice and an inlet filter.
- Patented technology works by:
 - Self-draining high-efficiency coalescing filter removes oil, water aerosols and other particulate contaminants from the air.
 - Patented membrane air dryer uses an induced pressure differential across unique plastic tubes to remove water vapor to a dew point of -60°C.
- Fixed sonic orifice releases dry air to the reservoir at a rate specific designed for EHC systems, creating a slight positive pressure that prevents the ingress of ambient air.
- The flow of dry air continually removes water from the system, changing the equilibrium of the fluid to achieve very low moisture levels.
- Air leaves the system through the desiccant breathers, which compensates for infrequent fluctuations in fluid level.

Stealth_{EHC} Benefits

- Prevents atmospheric contamination from reaching the reservoir.
- Removes water not only from the headspace but also from the fluid itself as the fluid reaches equilibrium with the very dry air flowing across it.
- Prevents acid formation and contamination in the fluid.
- The exhausting air is dry enough to continually regenerate the desiccant breather, eliminating the time and labor associated for breather maintenance.
- A fraction of the price of any other water removal technology – provides extremely rapid ROI.



Performance in an EHC System

The phosphate esters (PE) in EHC fluids act like a sponge; they readily absorb large amounts of water from the air. Although OEMs typically allow water limits of 2000 ppm, but this is too high. Research shows that phosphate ester fluids hydrolyze to form acids and deposits at levels as low as 500 ppm.

EHC users are well aware of the damage to their systems caused by elevated water levels. Many plants have purchased vacuum dehydration systems to maintain acceptable moisture levels in their fluids. Vacuum dehydration systems are expensive to purchase, (\$40,000+) operate and maintain.

Installing a Stealth_{EHC} system has been demonstrated to reduce moisture levels below 250ppm at a small fraction of the cost competing technologies.

This graph below shows the immediate impact of installing a Stealth_{EHC} Dry Gas Blanketing System on an EHC reservoir. In addition to lower water levels, this plant realized improved resistivity values, lower oxidation rates and less frequent change-outs of their acid scavenging filters. It was the largest ROI asset the plant has purchased.

