An IsoLogic™ Success Story

Even though a failure may not have happened yet, water is the second most destructive cause of failure causing rust, corrosion and loss of oil film strength. It can be particularly problematic in hydraulic systems causing sludge and varnish build up that can cause valve stiction as well as cavitation within hydraulic pumps.

A good example of our IsoLogic™ sensor technology supporting precision maintenance occurred with one of the largest sustainable forest products companies in the world. They have a large asset called a Sorter composed of 120 large hydraulic cylinders and various hydraulic valves & pumps. Hydro-cleaning had been conducted in proximity to the hydraulic power unit (HPU) and many of the cylinders attached to the asset. Unfortunately, water had been able to ingress into the HPU system.

Prior to the hydro cleaning taking place, the water levels in the oil were acceptable at under 0.003% (30 ppm). Shortly after the cleaning, an increase in moisture saturation was detected immediately by a Des-Case breather installed with IsoLogic sensor technology.

Without the sensors’ ability to provide immediate and actionable data this failure mode could have gone unchecked for weeks, maybe months, causing potentially extensive damage to the hydraulic pumps, valving and the oil. They immediately filtered the oil to help remove any free and entrained water in the system and also turned the HPU heater on and maintained an average temperature of approximately 130 degrees to help dry out the moisture. Water levels returned to under 0.003% with no undue failure occurring.

Des-Case IsoLogic™ is a patent-pending sensor technology placed inside our trusted VentGuard™ breathers, creating the most accurate and first connected breather on the market.