Des-Case Reimagines the Oil Sight Glass

Des-Case Corporation, a global manufacturer of specialty filtration products that improve process equipment reliability and extend lubricant life, recently launched an entirely redesigned oil sight glass (OSG) that pushes the boundaries of what oil sight glasses can do.

"We challenged our engineers to reimagine how an oil sight glass can increase the visibility, durability, and versatility of the process of visual oil analysis." said Brian Gleason, CEO of Des-Case. "Working closely with our customers, manufacturing team, and other industry experts, they have designed what is truly the next generation of the oil sight glass."

A clear cylinder that installs in the drain port of the oil reservoir of pumps, gearboxes, bearing housings, and other pieces of equipment, the sight glass provides continuous fluid monitoring of the clarity, color, sediment, and water contamination of the equipment's oil. An oil sight glass plays a critical role in early detection of contamination and allows for constant monitoring of what's happening inside equipment that might degrade both oil and equipment life.

The most important improvement in the new Des-Case oil sight glass is the improved visibility in detecting machine wear and contamination.

Most OSGs have clear bottoms making it more difficult to visually detect the presence of sediment in oil. Des-Case's new OSG has a white bottom that makes detection easier and more reliable. The redesigned device also has a dual-mount versatility for use in both horizontal and vertical applications, eliminating the need to buy two single-orientation OSGs. And the sight glass' polyamide casing not only provides a crystal-clear view of the oil, but it is strong enough to withstand the toughest environments.

Other improvements include a sloped floor for better sediment drainage, indication marks to easily monitor accumulation of water, and improved UV resistance and compatibility with all gear and mineral oils, most synthetic oils, and diesel.

"By using OSGs in combination with a desiccant breather and proper filtration, reliability and maintenance professionals can provide the ultimate protection and long life for machinery," Gleason said. "And by using Des-Case's reimagined OSG, they'll have the latest generation of engineering and technology that will ensure greater reliability for their plants and equipment."

Source: Des-Case Corporation

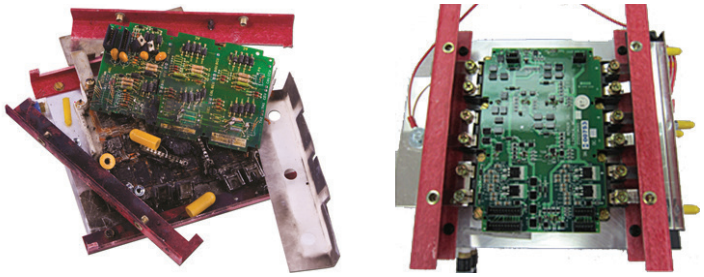
For more information, go to www.descase.com

A vertical close up of the redesigned oil sight glass. (Courtesy: Des-Case Corporation)

Contamination particulates can be more easily seen against the OSG's white background. (Courtesy: Des-Case Corporation)

PSI Repair Services Repairs Its 30,000th Turbine Part

PSI Repair Services Inc., a subsidiary of Phillips Service Industries and leading independent service provider to the wind-energy industry, announced it recently shipped its 30,000th repaired wind-turbine part to a prominent wind-energy company. Since 2009, PSI has provided economical repairs, as well as industry-leading engineering services, for the largest wind farms in the United States.



An IGBT before and after repair. (Courtesy: PSI Repair Services Inc.)

PSI's repair services cover all the leading wind-turbine manufacturers, such as GE, Vestas, Suzlon, Gamesa, Siemens, RePower, and Clipper. Commonly repaired components include printed circuit boards, pitch drive systems, inverters, converters, thermistors, IGBTs, PLCs, VRCC units, AEBIs, proportional valves, hydraulic pumps, pitch and yaw motors, encoders, slip rings, transducers, yaw modules, 3-phase bridge rectifiers, blade-bearing automatic grease dispensers, active crowbars, oil level sensors, battery chargers, cold climate converters, and much more.

PSI's engineering services include custom tests, root-cause analysis, product upgrades, remanufacturing, and new product-manufacturing services. The custom test program leverages advanced diagnostic equipment, allowing PSI to detect hard part failures, as well as parts degraded due to stress, right down to the microchip level. The root cause analysis service allows PSI to get a comprehensive view into a customer's production environment to identify all the elements that are connected to recurring problems so the appropriate corrective actions eliminate the problem once and for all. The product upgrade service allows PSI to improve upon legacy design with newer, more reliable technology. PSI's remanufacturing services are available for obsolete and unsalvageable parts, such as circuit boards and power supplies. Finally, the new product manufacturing service is available for customers who need a cost-effective option to produce a small run of unique legacy parts or components.

"PSI is proud to support the renewable energy industry," said Mike Fitzpatrick, general manager of PSI Repair Services Inc. "We understand the importance of keeping wind turbines up and running, so we have created a wide variety of solutions to help O&M professionals achieve those objectives."

Source: PSI Repair Services Inc.

For more information, go to www.psi-repair.com/wind-turbine-repair

Siemens Signs Long-Term Wind Service Agreement in U.S.

Siemens has been awarded a long-term contract for service and maintenance at the Lower Snake River wind farm near Pomeroy, Garfield County in Washington State. The customer is Puget Sound Energy (PSE), headquartered in Bellevue, Washington. Completed in early 2012, the Lower Snake River project contains 149 SWT-2.3-101 wind turbines that produce up to 343 MW of renewable energy. On average, the facility generates enough electricity to power 82,000 average U.S. homes. The turbines have been serviced and maintained by Siemens since beginning commercial operation in 2012.

Under terms of the agreement, Siemens will provide long-term service and maintenance at the Lower Snake River project for an additional 10 years and install the company's Power Boost function and High Wind Ride Through (HWRT) turbine modernization products to all 149 units.

"We thank PSE for their continued confidence in our products and services," said Mark Albenze, CEO of Siemens Power Generation Services, Wind Power, and Renewables business unit. "This agreement and all Siemens' value-driven wind-service plans are targeted to each customer's specific operational needs. We combine our expert domain knowledge and global fleet data with our highly advanced digital services

Siemens provides service and maintenance for more than 4,000 installed wind turbines in the Americas region. (Courtesy: Siemens)

and analytics to customize a flexible service agreement that provides excellent value and lifecycle care and that helps drive down the costs associated with wind energy."

"We're very pleased to continue our partnership with Siemens for the Lower Snake River Wind Project," said David E. Mills, vice president of Energy Operations at Puget Sound Energy. "Siemens' dedication to workplace safety, operational excellence, high reliability, and great customer service really sets it apart in the wind industry. This new agreement will maintain the great plant performance we've seen since beginning operation in 2012 and deliver real value to our customers over the next 10 years."

Siemens' Power Boost functionality helps ensure a wind-power plant performs at high levels. This controller feature increases power production of the turbine by raising the output limitation under specific operating conditions. Depending on site conditions, the annual energy production can be increased by up to 4 percent. Part of "Siemens Digital Services for Energy" offerings, the digitally driven HWRT is designed to prevent the wind turbine from shutting down immediately as wind speeds reach above 25m/s. This leads to enhanced grid stability and replaces the high wind, fixed-threshold shutdown with an intelligent, load-based reduction in output power to help avoid shutdown during high winds.

In addition, with its sophisticated monitoring, management, and data analysis tools, Siemens' Remote Diagnostics Services, also part of "Siemens Digital Services for Energy," supports predictive maintenance planning by identifying certain potential issues before they affect operations.

Siemens provides service and maintenance for more than 4,000 installed wind turbines in the Americas region and more than 10,000 globally, with a combined generating capacity of more than 25 GW.

Source: Siemens

For more information, go to www.siemens.com

Magnetometer Provides Fast Measurements of Ferrous Wear Particles

The FerroCheck portable magnetometer from Spectro Scientific provides accuracy and convenience in measurement of total ferrous wear particulates in lubricating fluids.

FerroCheck enables users to perform accurate measurements of ferrous wear particles, both in the field and in the lab where it can be used to analyze gearbox, transmission, and other fluids in fleet and industrial maintenance applications.

FerroCheck works by sensing disruption of a magnetic field generated due to the presence of ferrous debris, specifically iron, in the oil. Operation involves simply drawing the sample, placing it in the instrument and using the touchscreen to complete the analysis and view the results.

Non-lab personnel can operate the FerroCheck with no solvents or sample preparation. The lightweight unit weighs less than five pounds, is compact and battery-operated for fast, 30-second testing of small samples.

The FerroCheck magnetometer can detect particles from nanometers to millimeters and has a sensitivity range of 0 to 2,500 ppm with a limit of detection of less than 5 ppm. Results are highly repeatable (+/- 5 ppm at concentrations of 0 to 50 ppm).

The FerroCheck portable magnetometer. (Courtesy: Spectro Scientific)

Coupled with one of Spectro Scientific's condition-based maintenance systems (MiniLab Series, MicroLab Series, and ViscCheck 3000 Series), FerroCheck is part of a comprehensive solution that ensures asset availability and longevity.

When performing measurements on-site, FerroCheck eliminates the wait associated with lab-based fluid analysis and enables users to make immediate maintenance decisions that reduce unexpected downtime and costs and eliminate potential catastrophic machine failures.

"FerroCheck is a great addition to Spectro Scientific growing portfolio of performance fluid analysis tools," said Robert Wopperer, Spectro Scientific vice president for business development. "FerroCheck enables users to perform rapid and accurate fluid assessments on-site as well as in the laboratory.

The availability and ease of the measurement facilitate frequent, routine use that supports predictive maintenance programs as well as detecting unforeseen incidences of ferrous contamination that, if unrecognized, can threaten the viability of large capital assets."

Source: Spectro Scientific

For more information,
go to www.spectrosci.com

Power Backup Systems Optimized for Seamless Switchover

Ultra Capacitor DC UPS power backup systems from Altech Corp. have been optimized for seamless switchover during power outages, interruptions, peak power demand, or power dips and sags.

Their advanced capacitor technology contributes to environmentally safe operation, compared with battery-based systems prone to emit toxic chemicals from discharging batteries. The technology further enables excellent energy storage, fast microcontroller-based charging and discharging, and extended energy release (up to 55 minutes). These systems will deliver higher energy (up to 10,000 W) than electrolytic capacitor-based technologies and higher power than batteries. They ultimately will help to ensure reliable and consistent power for applications in any industry or setting where uninterrupted power supply is both critical and essential.

The Ultra Capacitor UPS (Uninterruptible Power Supply) systems are available in 12VDC and 24VDC output versions from 3 A to 40 A, depending on the model. The CTEC and C-TEC P versions perform in conjunction with separate main power supplies (with the C-TEC P system able to produce an output spike for applications requiring a temporary surge of power). The AC-C-TEC systems augment these designs by incorporating a built-in power supply with AC input for maximized ease and convenience. Compatible with all models, a CEM (Capacitor Extension Module) ideally extends buffer times for applications exhibiting increased power demands.

The systems excel at controlled shutdown functions, resist shock and

vibration, and they feature compact and sturdy convection-cooled metal housings built to weather extreme conditions. They are engineered to operate over a wide temperature range from minus-40 degrees C to 65 degrees C (minus-40 degrees F to 149 degrees F), require virtually no maintenance over their 15-plus years of expected service life, and can be DIN-rail mounted.

All systems meet relevant worldwide product standards and are covered by a three-year warranty. Altech additionally offers setup/monitoring software and comprehensive product support. Customized solutions (including available output models up to 600 A) can be developed to meet particular application requirements.

Source: Altech Corp.

For more information,
go to www.altechcorp.com

Ultra Capacitor DC UPS power backup systems. (Courtesy: Altech Corp.)