

C.C. Jensen A/S

For more than 50 years, filtration company C.C. Jensen has been battling oil's natural enemy—contamination—in an attempt to keep its customers' equipment running as long as possible.

By Stephen Sisk

In the wind energy industry, being “offline” is generally thought of as a bad thing. Unless, of course, what’s “offline” is helping ensure that you’ll stay “online” for years down the road.

For two decades now, C.C. Jensen has made it possible, through the design and manufacture of its offline oil contaminant filtration systems, for the wind energy industry to conserve oil resources, cut lubrication costs, and extend the serviceable lifespan of wind turbine gearboxes.

“What we’re all about is making clean oil,” said Justin Stover, sales manager for C.C. Jensen. “Clean oil keeps the machinery running. Turbines need to keep spinning, and we feel like we have a part in that. No wind turbine gearbox has ever failed because the oil was too clean.”

In the U.S., the company entered the wind power industry in 2000 when it became a business member of the American Wind Energy Association. The following year, C.C. Jensen attended the WINDPOWER show, which at the time, was held in a modest hotel ballroom in Washington, D.C.

When representatives from C.C. Jensen enter the Bayside Exhibit Hall at Mandalay Bay Resort and

Casino in May to participate in WINDPOWER 2014 Conference & Exhibition, they will do so for the 14th time as a company—a claim few others can make.

In the time between those two events, C.C. Jensen’s involvement in the wind market has tracked with the expansive growth of the industry itself. The company now claims almost 80,000 global installations of its wind turbine oil filtration units.

That success is driven by the consistent validation that the company’s philosophy produces positive results. Established more than 60 years ago, the Denmark-based company has a wide range of oil filtration products for multiple industries. No matter the industry, the approach remains the same. The company’s goals and operating philosophy is two-pronged. It seeks to conserve valuable resources by extending oil life, and to assist its customers in extending the lifespan of their equipment.

“The two go hand-in-hand and that’s really what we aim for as a company—to help companies and organizations run smoother, reduce downtime, and increase their bottom line,” Stover said.

“Oil is the one thing that most

organizations are using in their machinery,” Stover said. “If they take care of it, they can see it last two to three times longer, saving a tremendous amount of money. It’s good for the environment, and their machines will be happier also. They’ll last a lot longer.”

The key to that result is to maintain clean oil. That’s easily stated, but requires sophisticated equipment and technologies to achieve.

The enemy to clean oil is contamination. The company sees contamination—the introduction of insoluble, often microscopic pieces of metal, dust, oxidation deposits, etc.—as the biggest threat to gearbox lubrication. It claims that oil contamination accounts for around 80 percent of oil system failures.

On the positive side, however, C.C. Jensen also claims that almost 100 percent of these contamination issues can be prevented.

“When people look at a filter, they think ‘a filter is just a filter.’ It’s much more complex than that,” Stover said. “I think we have the most advanced R&D facility in the world for the development of filter media. They really tackle the complex issues that happen inside a gearbox in terms





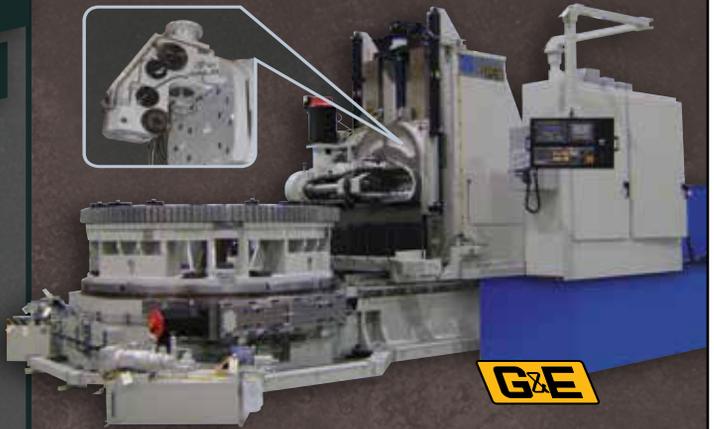
of contamination. So often, the focus is on larger particles, but we're really looking at improving our fine filters. We are also looking to the future by developing our filters with nano fibers and other technologies that can selectively remove sub-micron particles that contribute to oxidation in the oil, which means the oil life is shorter. We can remove those harmful contaminants without removing the additive package, ensuring that you get longer bearing and gear life. It will also mean longer life for the oil."

The process of maintaining contaminant-free oil begins for C.C. Jensen during the manufacturing process. The company has equipment that can filter oil before it is first pumped into the gearbox prior to testing. For example the Gearbox Flushing Unit is designed to fill, flush and drain a

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new or repaired gearbox in under an hour. From there, the process involves having contaminant-filtration systems in place throughout operation. C.C. Jensen offers its HDU offline oil filter systems for this purpose. According to the company website, the HDU features “a 3-micron absolute cellulose-based filter insert with a high dirt-holding capacity that removes particles, retains oil degradation products (oxidation, resin/sludge, varnish), and absorbs dissolved/emulsified and free water from oil.”

Further information about oil filtration and purification can be found online at www.ccjensen.com, which has a vast library of articles, case studies, and product brochures. Information ranges from general knowledge about contaminants and oil degradation to applicational studies of specific products.

C.C. Jensen’s headquarters (which generates 40 percent of its power from an on-site wind turbine) is located in Svendborg, Denmark. ↴