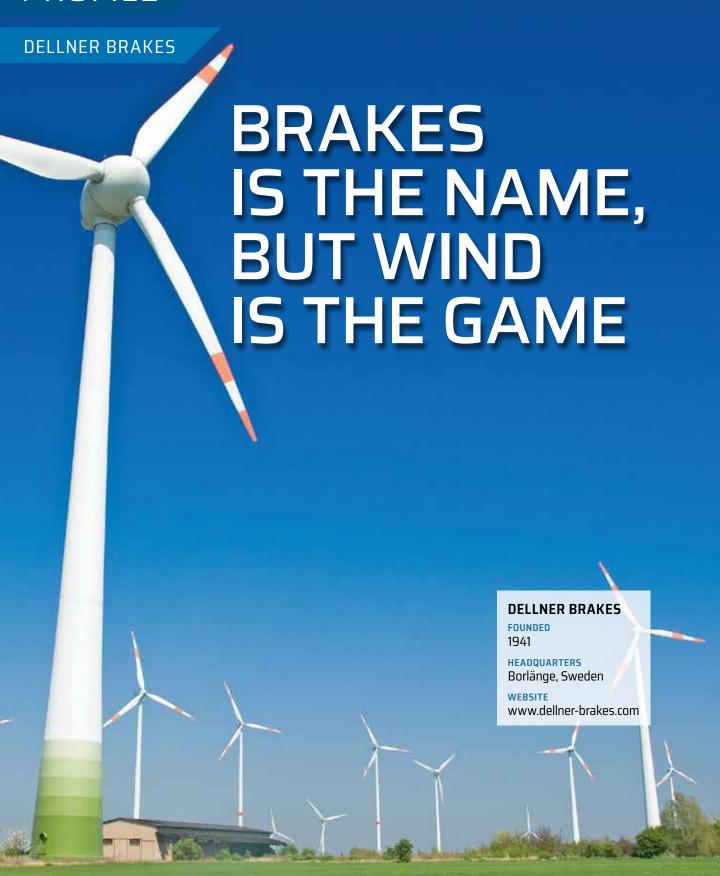
PROFILE



By approaching customers with a full-service mentality, Dellner Brakes works to supply the industry with a range of lightweight, noise-free systems for braking and gliding processes in wind turbines.

By KENNETH CARTER **▼** Wind Systems editor

hen watching a wind turbine slowly spin from a distance, it's easy to forget just how massive the blades actually are — as well as how fast they really are turning.

And sometimes, whether it's for scheduled maintenance or an emergency, those blades have to stop.

To perform that task, turbines are equipped with braking systems — and many of those braking systems are manufactured by Dellner Brakes.

Through Dellner's JHS product line, the company offers a range of lightweight, noise-free systems for braking and gliding processes in wind turbines, with an emphasis on noise reduction, which can play a big role in the overall acceptance of wind energy.

"What we offer is a complete braking system," said Dellner Brakes CEO Marcus Aberg. "That could be a yaw brake or a sliding bearing for the yaw brake, a rotor brake that slows and stops the rotor or a rotor lock that fixes the hub in place — right through to hydraulic power units and advanced friction materials, in line with our full system approach."

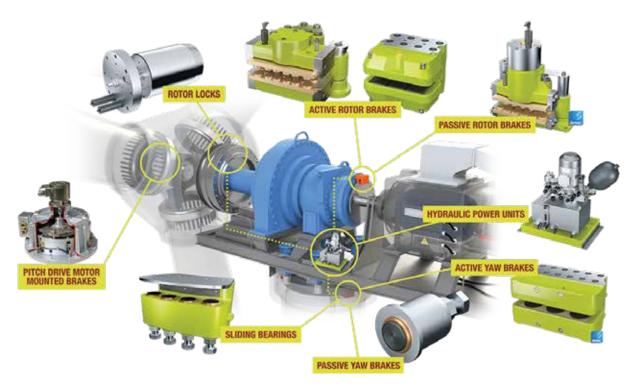
FULL BRAKING SYSTEM

Dellner is able to supply a full system that includes the power source, the brake and friction materials, as well as the locking devices.

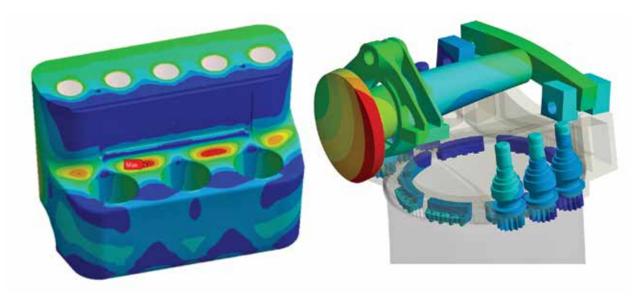
Some of the components that make up Dellner's full braking system include yaw brakes used to stop and hold the rotating nacelle in position once the rotors have been turned to face into the wind, hydraulic rotor locks that fix the hub of a wind turbine so maintenance can be carried out in safety, and rotor brakes used for slowing, stopping, and holding the turbine's rotors, including emergency stops.

Even with Dellner's wide range of braking hardware, Aberg is keen to emphasize that their business is not just about the brakes.

"It's a hard task, but our ultimate goal is to be part of the wind industry, and not just be 'the brake people,'" he said. "We would like to understand as much as possible about the full turbine, how it works, and how it's manufactured. If we can understand the turbine better, then we are in a much better position to develop the right braking system for our customers."



This look inside a wind turbine shows Dellner Brakes' products at work. (Courtesu: Dellner Brakes)



Dellner Brakes provides engineering services for manufacturers' own product design. (Courtesy: Dellner Brakes)

And Aberg says Dellner likes to be hands-on with a project from start to finish.

"We like to be hands-on and be there to help our customers out wherever we can," he said. "When we're closely involved with manufacturers and their projects, I think that makes it easier for us to see things in the round and then use our experience to support development."

UNDERSTANDING THE FULL PICTURE

Part of the reason Dellner wants to be more than just a brake supplier is the simple reality that a wind turbine is made up of so many parts with the common goal of creating clean energy.

"When a customer comes to us, we try to understand the full picture," Aberg said. "If we can understand how the turbine works, we are then in a stronger position to develop solutions on how to control it with the brakes. Development of a wind turbine is always ongoing, and we are at our best when we are invited to be part of that development as part of the OEM's team. I would say the last year and a half have been really busy for us in regards of being a partner for a lot of OEMs, working together to create new turbines and new ways to control them with our brake systems."

To that end, Dellner is able to offer engineering services so its customers have a strong platform from which to start manufacturing braking systems. Those services include engineering and 3D construction of components, assemblies, tools, and special parts; optimization of existing solutions, technical documents, customized testing, and development of prototypes.

And since wind turbines are being built all over the world, it becomes paramount that the parts are tested to endure in a wide variety of climates. Dellner has a climate chamber available to make sure parts can pass that critical

requirement.

NEW TO WIND

Dellner Brakes, based in Sweden, is a family-owned business that has been developing, manufacturing, marketing, and maintaining brake solutions for industrial, marine, and oil and gas since the 1950s.

But in September 2018, Dellner Brakes acquired German wind-brake specialist JHS and has been making prominent headway in the wind sector as a result.

"We are building a worldwide organization," Aberg said.
"Right now, we are established in China, in India, in Europe, and in the U.S., and we are also starting up in South America. These business units are 100-percent focused on the wind market."

STEADY, STRONG, PROUD

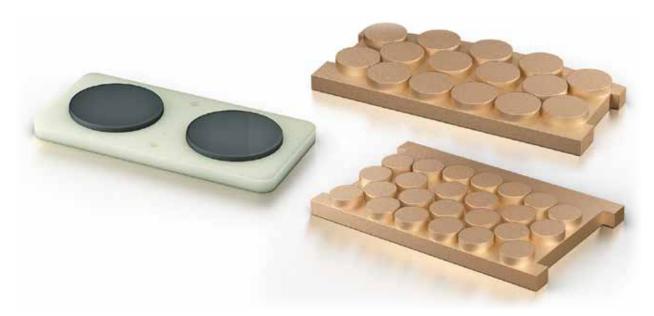
Hard work and hard-won partnerships are Dellner's core strengths, and it is something Aberg is particularly proud of — when he is spurred into admitting it.

"I'm from Sweden, and we are quite practical, down-toearth people," he said. "But I do have lots of good memories through the years where we have worked in partnership with our OEM manufacturers. Where we have succeeded the most is when we've been able to work together with a customer and help them develop their product to be more competitive in the market. We are pleased to have been here with Dellner Brakes during the past 20 years and, having entered the wind market, to be a part of that development."

STRONG GROWTH AHEAD

And Aberg said Dellner's wind division is hoping to continue making strides in the constantly growing industry.

"I see the industry developing quite strongly," he said. "If



High quality spares and accessories including brake pads, side linings, and service tools. (Courtesy: Dellner Brakes)

you look into 2020 with everything that's happening, it feels like wind is standing tall."

Even though wind as an industry is still quite young compared to, for example, the automated train industry and power plants, unlike those industries, wind is working toward a cleaner future.

"It's one of the most developed green energies that we

have," Aberg said. "It feels like it's constantly being developed, and the development of getting more efficiency out of the wind turbines will most likely continue. The wind is constant, giving us a good opportunity to create green, substantial energy for society. It feels like it will be steady for a long time."

YOUR SOURCE FOR WIND ENERGY NEWS

For 10 years, Wind Systems magazine has been a leading authority on the wind-energy industry and its place in the world as a stable and sustainable source of renewable, clean energy.

Each issue, Wind Systems offers the wind industry workforce timely, valuable information from key segment players in order to increase its readers' knowledge of the wind industry's positive future.

On windsystemsmag.com, we have paired our vast archives with the latest web technologies to develop the most efficient, streamlined, user-friendly web experience in the wind-energy industry.

Best of all, it's free to you. All you need to do is subscribe.



SUBSCRIBE FOR FREE

www.windsystemsmag.com

