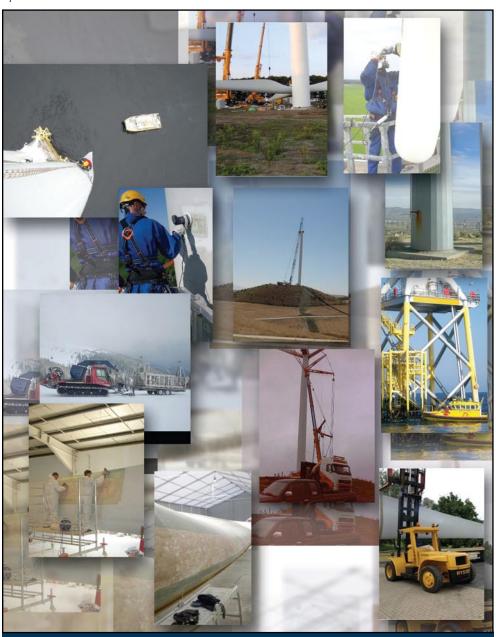
## **PROFILE**

## **BS ROTOR TECHNIC U.S.A.**

By Russ Willcutt



GL certification proves that this company's blade inspection and repair services are second to none, and available to help keep your turbines spinning.

ANYONE WHO'S WAITED TOO LONG to change the oil in their car and experienced an expensive—and avoidable—meltdown is fully aware of the high price one can pay for procrastination when it comes to preventive maintenance. The same holds true for windfarm owner/operators, according to Patrick Parmelee of BS Rotor Technic U.S.A., but with much more drastic consequences.

"We encourage owners to consider allowing us to conduct a detailed blade inspection when the turbine is erected, especially since they can incur damage during shipping to the site, and then every couple of years beyond that point," says Parmelee, who oversees sales. "As is the case with an oil change, the cost is minimal when compared to what you'll pay for a new engine block—and especially a new blade, or a gearbox destroyed by a catastrophic blade-related event."

Founded in 2009 the company is a separate, cooperative entity associated with BS Rotor Technic GmbH of Germany, which was launched by Jeremy Sheppard in 2003. "Jeremy had been involved with blade repairs for years before he started his own company, working for LM Wind Power as a service technician," Parmelee explains. "We met at a tradeshow and began discussing setting up operations in the United States, eventually choosing Anaheim, California, since it's near so much wind activity. The great thing about having Jeremy as a colleague is that he possesses an incredible amount of knowledge and experience from his years spent in the European wind market, which is more mature than it is in North America. He has worked on literally thousands of blades, and he's familiar with every type of turbine out there."

As is the case with many European companies that are establishing themselves in the United States and Canada, they bring with them information and benefits resulting from long years spent servicing the wind industry. One that BS Rotor offers is certification by Germanischer Lloyd (GL), which is the gold standard for any company providing services to the wind industry. "What you'll find in the early days of any industry is a certain 'Wild West' mentality, which has certainly been the case with some U.S. blade

repair companies in the past," Parmelee says. "But once you achieve a certain maturity it's time to get serious, and our GL certification stands as proof that we are."

Other benefits include possessing knowledge of the intricate details of blade repair that will lead to a successful outcome despite the make, material, or design. One of the leading causes of blade damage is erosion of the leading edge and tip, according to Steve Elrod, general manager. "What happens is that during operation the blades are flexing back and forth, and the adhesive on the leading and trailing edge begins breaking away and accumulating in the tip, where it rattles around and erodes the shell. That imbalance caused by loose materials can eventually lead to a cascade of damaging events, so we'll go in and make the repairs and apply a coating to the edges, rather than the tape some companies use. Then, once our work has been completed, we provide the customer with a two-year warranty on the blade."

Depending on the extent of the damage BS Rotor will either dispatch a two- or three-man team uptower, working from a specially designed platform that has room for all the necessary tools, materials, and equipment. In more serious cases blades can be lowered to the ground, where they are housed beneath tents while repairs are completed. Apart from lightning strikes or manufacturing defects, the vast majority of repairs can be conducted uptower, and Elrod points out that regular maintenance generally keeps blades operating in excellent condition for many years.

With future plans including establishing satellite locations around the country, preparing to service offshore turbines as that market develops throughout North America, and expanding services to include repairs to generators and gearboxes, etc., BS Rotor Technic U.S.A. is poised to help keep its customers' turbines operating and productive. "We will continue reaching out to the industry and building our reputation for quality and safety," according to Sharad Mehta, the company's managing partner. "We want to become the first company that comes to mind whenever blade inspection or repair is required."