



AMSC Windtec GmbH | 9020 Klagenfurt | Austria

Partnership with tailwind

Model for success from Austria



bachmann.



AMSC Windtec was founded in Carinthia, Austria, in 1995 and develops comprehensive technology solutions worldwide for wind power generation units with high degrees of availability and efficiency. The system components for the complete automation of the unit come from Bachmann electronic. In a discussion with "realtimes", Martin Fischer, general manager of AMSC Windtec, describes the company's business model and reports on the successful cooperation between the two Austrian system providers.

Since 2007, Windtec has belonged to the American Superconductor Corporation (AMSC). The company develops complete design solutions for wind power systems and delivers the technology and know-how for wind power system builders. AMSC Windtec employs a total of 130 people at its Klagenfurt (Austria) location, where a team of more than 110 technical experts in the Design and Engineering Center work on developing solutions and on technology transfer for customers.

► **realtimes:** *AMSC Windtec does not build wind power generation units of its own, but instead markets the technology and components in a concept that you call "Build your own wind turbine". This makes it possible for companies (OEMs) to build their own wind power systems under license. Meanwhile, all successful new entrants in wind energy are your customers. What advantages do you get from your model?*

► **Martin Fischer:** *AMSC Windtec absolutely offers added value as a systems developer. We deliver the technology, whereby the development focus is on the optimal combination of mechanical engineering, electrical engineering and software. Currently, there is no other company in the wind market that can offer a comparable service of "everything from a single source". In addition, we offer support in building up a local supply chain, in which our customers either produce large components, such as rotor blades, gears, generators and towers, themselves, or suppliers build production facilities directly at our customers' locations. And so "wind energy clusters" are created. We also sometimes plan the logistics, from the processes to the production buildings. And we offer our customers the know-how for assembly, test, set-up, start up and maintenance of our wind power systems.*

► **realtimes:** *You now are developing the technologies for 10MW wind power systems. How do you see the further performance development of the turbines?*

► **Martin Fischer:** *If you look at the performance of wind power systems from the mechanical engineering perspective, the systems are disproportionately heavy and expensive compared to their performance. The reason is, the maximum blade top speed is almost constant, and then the torque (which in this context means the same as the costs) grows by the square of the performance. This situation can be countered by sophisticated control and regulation technology, perfect mechanical design and the use of new materials. In addition, the project developer must consider that the costs for transport and building the infrastructure are lower for a few large systems than for many small turbines. And so with advancing technology, larger systems will also become more attractive. There's no reason at this time to say there won't be commercial 20MW systems someday.*



“With a partner like Bachmann electronic, business is really fun.”

Martin Fischer, General Manager,
AMSC Windtec

► **realtimes:** How do you see the development of wind energy in Europe and globally?

► **Martin Fischer:** Regardless of all scenarios and forecasts, we have to face the fact that our fossil fuel resources are going to end. Currently, they meet 79 percent of the world’s energy needs. That is also the market share that alternative energies have available. And we can still serve this market, since besides hydroelectric power, wind energy is the only economically relevant alternative at the moment. The Global Wind Energy Council assumes scenarios for wind energy that, even in the moderate model forecast an annual growth rate of 12.5 percent and in the reference scenario of 7.5 percent. The best market for the wind industry in the coming years is certainly China. There we’re already very well established with a market share of 25 percent. But we also expect in the medium-term markets in South America, the CIS countries, the Middle East and, longer term, even in Africa.

► **realtimes:** Your wind power systems are characterized by innovation and constant further development. What tasks are given to Bachmann electronic as a technology partner?

► **Martin Fischer:** Bachmann electronic is also a system supplier, just like AMSC Windtec. We can both see the “big picture”. This means that in our communication with Bachmann, there is never any question who has to do what or why – the central issue is always the end customer’s success. We profit from one another during development because there are excellent ideas on both sides. And we’re also operating in an unbelievably good market, and business is really fun with a partner like Bachmann electronic. ■

