



WORLDWIDE SUCCESS

REpower has a new name

Senvion SE – a new name in the wind sector but a well-known company: In recent weeks REpower Systems SE based in Hamburg, Germany, has been operating on the market under a new name. Senvion SE is one of the leading manufacturers of wind power plants in the onshore and offshore sector and is a wholly-owned subsidiary of the Suzlon Group, the world's fifth largest manufacturer of wind turbines. Senvion SE and Bachmann have worked together in close partnership for over 10 years.

he wind turbine manufacturer REpower is now launching its new Senvion name worldwide. This also involves the change of the overall corporate design: Like the green color scheme of the new logo, the elements of the name Senvion refer to the company's renewable energy operations: The S stands for the sustainability of its products, EN stands for energy, VI for vision and ON for being switched on. "These are also the attributes that connect our two companies," says a delighted Klaus-Peter Pawlowski, key account manager for wind at Bachmann electronic. He has been the contact for Senvion since the very beginning.

Over 5,000 installations controlled by Bachmann worldwide

Only last autumn Senvion commissioned the 5,000th wind power plant with a 3 megawatt turbine. The company's installations to date amount to over 10 gigawatts of capacityenough to supply electricity to more than 20 million people or the total population of Australia for a year. "We are pleased with this success as it confirms our approach," says Hennig Harden, leading expert for SCADA systems at Senvion SE. All efforts at Senvion focus on the reliability, performance, maintainability, communication and profitability of plants. "This is precisely why we feel well looked after by Bachmann," as Hennig Harden. "We have virtually no hardware failures in the field. This is due, for example, to the 48-hour run-in that Bachmann always carries out with our complete controller configuration prior to shipment."



Senvion also feels the need to pursue the constant further development of its plants and to implement the forthcoming standards of the sector. Senvion's proven output includes for example the most powerful series produced plants worldwide in the 6 megawatt class. With the completion of the third building phase, 48 of them went into operation last autumn in the Thornton Bank offshore wind farm off the cost of Belgium. "Bachmann supported our developments very closely," Hennig Harden explained. Test rigs for Senvion have thus been permanently set up with the controller configurations in the Bochum technical office. "We can thus test new technologies in hardware and



Senvion SE operated up to January 2014 under the name REpower Systems SE. The company has over 3,300 employees worldwide, is a wholly owned subsidiary within the Suzlon Group and is one of the leading manufacturers of wind turbines worldwide.





▲ 30 km off the Belgian coast: With an output of around 325 MW, the Thornton Bank wind farm is one of the largest of its kind in continental Europe.

software together. This is a support that we appreciate very much."

Triumphal march of IEC61400-25

Bachmann was also one of the first companies to implement the IEC61400-25 with the mapping MMS (IEC61850-8-1) communication standard in their controller. "This was the key requirement and certainly also one of the reasons for the victory of the communication interface in compliance with IEC61400-25," says a delighted Hennig Harden. "Worldwide we have more than 1,000 active installations which use this standard. The standardization of process variables is an enormous help if individual plants or entire wind farms have to be integrated in appropriate SCADA



»With Bachmann we can test new technologies together. This is something we appreciate very much. «

> Hennig Harden, Leading expert for SCADA systems at Senvion SE

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▲ Total output 355 MW: enXco Shiloh II, III and IV wind farm in Solano county, California (USA). This includes 175 MM92 turbines.

>> systems," the SCADA specialist explained. This makes the Bachmann solution equally useful for individual wind turbines, small and even large wind farms.

Hennig Harden regards the full implementation of the IEC61400-25 communication standard as one of the drivers for the expansion and integration of wind power in existing networks: "We have implemented our largest individual project to date in the Canadian province of Quebec. 150 2-megawatt turbines are thus permanently monitored by grid operators Hydro-Quebec and by the plant managers EDF EN Canada Inc." The Ormonde and Thornton Bank offshore wind farms equipped with Senvion turbines are also

integrated in the monitoring system. The IEC61400-25 standard is an ideal basis for controlling the power feed-in of entire wind farms for direct marketing. The highly effective implementation of

the standard by Bachmann makes it possible to create very accurate forecasts of expected feed-in power based on current measuring values. Major direct marketers use these ideal

Joint tests: The controller configurations for Senvion have been set up in the Bochum technical office of Bachmann electronic.







▲ Eight new turbines: The total height of the turbines of type 3.2M114 reaches the 200 meter limit for the first time in Austria.

AIMING HIGH

Bachmann automates Austria's highest wind power plant

In October 2013 "Austria's highest wind power plant" went into operation in Wilfersdorf im Weinviertel, Austria. The 3 megawatt turbines which are controlled by the Bachmann M1 system were supplied by Senvion SE.

The eight new turbines of type 3.2M114 are the first of their kind in Austria. Their total height – from the tower base to the top of the rotor blade – reaches the 200 meter limit for the first time in Austria. This size also has a noticeable effect on the yield: The eight wind power plants produce enough power to meet the annual needs of around 16,000 households.

Together with 14 installed plants of the previous generation, this wind farm is one of the largest in Lower Austria and makes a considerable contribution to making the Mistelbach district the number one in Lower Austria for wind power generation.

features of the Interface IEC61400-25 from Senvion to combine the wind farms they market into virtual power stations. Andreas Nauen, CEO of Senvion SE writes about the name change in his press release: "In addition to having unique products and services, we are now also the only company with this name. Our more than 3,300 employees around the world work energetically and enthusiastically to find the best solution for every project." And adds: "Our customers and business partners can sense that with us they will always come first. This claim is emphasized by the figure "1" in our logo." And this is also something that Senvion and Bachmann share together.

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