New LeitDrive 4Q frequency converter to be installed in all LEITWIND’s turbines following successful testing

LEITWIND announced today that its new state of the art 4Q frequency converter, known as LeitDrive, was now to be installed across all of its wind turbine product range, after successful testing demonstrated the prototypes’ superior performance. LeitDrive is one of the most remarkable innovations resulting from LEITWIND’s continuous direct drive technology research and development.

The decision to make LeitDrive a standard configuration in LEITWIND’s wind turbines follows the successful operation of 5 prototype units in Italy in the course of 2012. The first new 4Q frequency converters were installed in autumn 2012 in five of the LEITWIND LTW77 1.5 MW turbines in Montecatini, Val di Cecina Tuscany.

LeitDrive is a modular converter offering a power range from 250 kW up to 3,000 kW. In a typical 1.0 MW turbine, LEITWIND will install four 250 kW LeitDrive converters, each with independent electric circuits. This modular construction means higher availability and productivity since the turbine can continue to operate in the unlikely case of component failure of one converter. Each module is a fully functional unit including a grid and motor side inverter. The custom made, water cooled power stack allows an extremely compact size of only 400 mm width per module. The simple and elaborate mechanical handling simplifies the service. LeitDrive operates quietly and sits smartly with the generator. The perfect interaction between the generator and the 4Q frequency converter leads to a better optimization of the wind turbine performance. Its’ very compact and modular construction guarantees high efficiency and flexibility.

LeitDrive uses highly efficient, latest generation insulated-gate bipolar transistors (IGBT). “Due to the customized power stack the IGBT selection can focus on the application without compromise, while at the same time avoiding uneconomic over-dimensioning.”, commented Günter Tschinkel, Head of Electrical Engineering.

In order to operate LeitDrive, no installation of cryptic service tools is needed: user access takes place simply by using the built-in web interface. The most common field busses are supported via extension cards. The control algorithm, optimized for LEITWIND’s own generators, ensures unrivalled efficiency rates.

“Because LeitDrive has been developed and manufactured in house, we can guarantee a perfect service and client support. The LeitDrive is yet another significant milestone is LEITWIND’s ongoing technology evolution. The knowledge that we have acquired during the development of the direct drive and the frequency converter has opened new technical and engineering possibilities for LEITWIND’s R&D”, commented Günter Tschinkel, Head of Electrical Engineering.

About LEITWIND

LEITWIND is one the leading gearless wind turbine manufacturers with a patented synchronous generator using permanent magnets. In just five years, LEITWIND was able to install over 250 wind turbines worldwide. Almost half of these wind turbines were delivered in 2011 and are followed by further prestigious projects in Italy in 2012. More than 700 employees work worldwide at the three main company sites in Italy, Austria and India.
LEITWIND is part of the international company LEITNER group. The portfolio contains leading brands like LEITNER ropeways and POMA for rope-hauled passenger transportation systems for mountains and urban environments, AGUDIO for material ropeway systems, PRINOTH for snow groomers and tracked utility vehicles and DEMACLENKO for snowmaking systems. The company group generated a turnover of € 715 million in 2012 and employs 3,320 people worldwide. The investment in corporate growth counts for € 19 million and another € 26 million are invested in R&D.

FOR MORE INFORMATION PLEASE CONTACT:

Michaela Brugger Head of Marketing LEITWIND
Tel +43 (0) 664 887 922 04, michaela.brugger@LEITWIND.com

Jonathan Collings, PR Agency Collings & Monney Ltd:
Tel. +44 787 989 88 88, jonathan@collings-monney.com