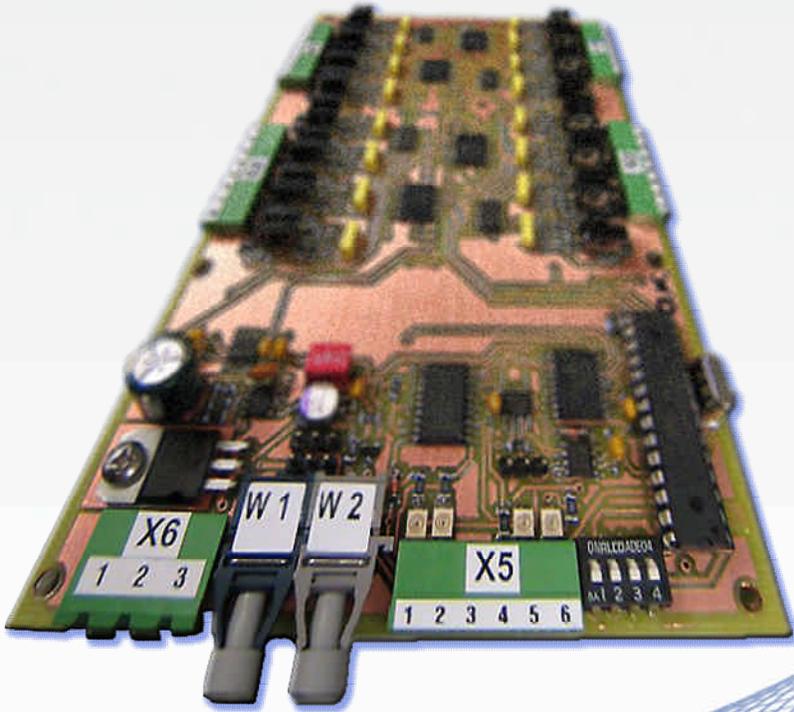


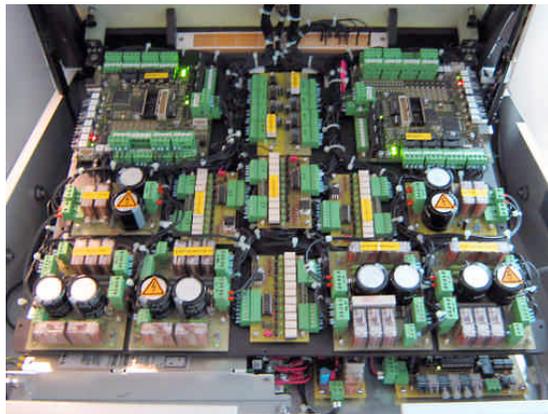
# LPKF ProtoMat Delivers Milling Diversity for Wind Power Specialist Enercon GmbH



**International wind power specialist, Enercon, is one of the largest wind turbine manufacturers in the world. Aside from the tall towers, nacelles and blades, these structures require a considerable amount of electronics to deliver the extracted energy needed, and the LPKF ProtoMat S62 has been an important factor in providing these since 2006.**

A long standing market leader in Germany, Enercon has installed more than 17,000 wind energy converters in 30 different countries. They follow the latest design principles and feature a sophisticated grid connection system.

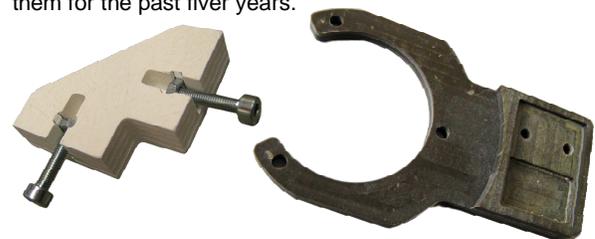
Enercon's Test Systems Department is utilizing their ProtoMat S62 to improve equipment for inspecting and enhancing pitch control units, power units, and boards. Design Engineer, Holger Lübben, loads his layout onto the computer using CAD and instantly turns data into functional PCBs.



The ProtoMat S62 mills traces into clad materials, drills vias, and cuts the PCB from the substrate material. It automatically picks the correct tool and has speeds up to 62,000 rpms. An LPKF MiniContac RS quickly and reliably plates the through-holes in the PCB.

Not only does the S62 have the ability to mill boards, it also creates mechanical pieces such as measuring adapters, component part fixtures, and front panels which are used in wind turbines throughout the world.

Due to milling diversity of the ProtoMat S62, Enercon recognizes the value that this system has brought them for the past five years.



**Pictured:**

**Front:** Enercon produces prototypes and small batches of measuring devices in house

**Left:** PCBs are tested in the magazine table

**Above:** The LPKF ProtoMat not only mills PCBs, but also adapters and fixtures. (Photos: Enercon)

### Enercon GmbH

Dreekamp 5  
D-26605 Aurich  
www.enercon.de

Telephone +49 (0) 4941 927-0  
Fax +49 (0) 4941 927-109  
E-Mail info@enercon.de

Enercon wind energy converters feature more than 25 years of experience. Each wind energy converter follows the latest design principles and features a sophisticated grid connection system. As longstanding market leader in Germany, the company has installed more than 16,000 wind energy converters in 30 countries, also making a good name for itself on an international level.

### LPKF Laser & Electronics AG

Osteriede 7  
D-30827 Garbsen  
www.lpkf.com

Telephone +49 (0) 5131 7095-0,  
Fax +49 (0) 5131 7095-90  
E-Mail laser.sales@lpkf.com

LPKF Laser & Electronics AG manufactures machines and laser systems used in electronics fabrication, medical technology, the automotive sector, and the production of solar cells. The worldwide operating company unites competences from laser technology and optics, drive and control technology with extensive experience in the micromachining of materials.