

Case Study



Macom Technologies Ltd



Who

RenewNet provided **funding** for a project between Macom technologies ltd and the University of Edinburgh.

Macom Technologies Ltd was formed in 1999 and is the main manufacture of the TA10 sensor used for **condition monitoring** in wind turbine gearboxes and other industrial gearboxes. Gearbox failure a major problem in **wind energy** and the more real-time information that can be gathered about the life-cycle the quicker and more **optimised** maintenance can be.

How

Macom Technologies Ltd approached Interface to help them find expertise to help them with the **development** of their current product. The idea was to develop the sensor so that it addressed all aspects of condition monitoring- full flow capture efficiency and low pressure drop. The product would need to be able to be retro fitted to allow different applications as well as **future proofed** to allow ad-hoc flow rates.

"The project would not have happened without RenewNet funding"

Mathew Smith, Macom Technologies Ltd

Interface and RenewNet matched Macom Technologies Ltd with Professor William Easson from the University of Edinburgh who has **expertise** in fluid dynamics and an interest in sensor development. RenewNet funded the collaborative project awarding £5000.

Macom matched the award to provide the extra time needed for the project to be a **success**.

Results

"The university of Edinburgh fast tracked the design work and freed up engineering resources within Macom to carry on with other projects"

Mathew Smith, Macom Technologies Ltd

Using computational fluid dynamic software Prof. Easson provided the three design **solutions** that fitted the project goals. These were then used to incorporate the ease of manufacture needed for the product to be a success. The solution that was developed was compact, had **improved** capture efficiency, was easy to to manufacture, had minimal pressure losses – all of which were essential for the design to be a success

The next stage of the project is to build a prototype to allow validation of the design, which RenewNet is helping source.

"The RenewNet funded project between Macom and the University of Edinburgh was a fascinating project and is a great example of the wide range of support RenewNet is providing for SMEs in Scotland"

Dr Markus Mueller, RenewNet Director, University of Edinburgh

If you want to know more about RenewNet or would like to be our next success story please got to our website www.renewnet.org.uk or contact us on 0131 6505694 or email us at renew-net@see.ed.ac.uk.

Funded by:

