



**BOSCH**

## **Rexroth lifts wind energy to new heights**

High performance jacking systems from Bosch Rexroth are in demand for challenging offshore wind turbine installations.

The UK is the world's leading offshore wind power provider, setting the standard since the first installation in 2000. However, installers of these wind turbines are faced with the enormous challenge of erecting these 60 plus metre high machines out at sea.

Since Rexroth, part of the Bosch group, is one of the world's leading specialists in the field of drive and control technologies, its expertise has been called on to develop powerful vessels to assist with this dangerous task. To install a wind turbine, developers require vessels with a specially-designed hydraulic jacking system to elevate the turbine to operational level. While traditional oil and gas vessels only require occasional use of a jacking system, these vessels require a high performance hydraulic jacking system for fast operation to provide a safe, stable working platform that remains operational well beyond traditional vessel limits.

Following the successful launch of its first innovative hydraulic jacking system over five years ago, Rexroth is producing a further three turbine installation vessels for 2010. Each vessel is equipped with Rexroth drive and control systems, with jacking capabilities of up to 22,500 tonnes.

Rexroth is a recognised specialist in worldwide offshore operations and has the breadth of products needed to act as a single-source; providing design, manufacturing, project execution and support throughout the life of the equipment. Being a global company also means Rexroth can provide support regardless of the system's location.

Throughout production, Bosch Rexroth employed its specialist knowledge and experience in engineering design to meet requirements that frequent-jacking operations would demand during a service life of 20+ years. It also ensured that its elevation systems were designed, tested and delivered according to appropriate certifying authorities.

Bosch Rexroth is already involved with the next generation of renewable energy, developing high-performance drives for marine energy plants. These

towers, anchored to the sea bed, are equipped with rotors that are driven by tidal currents and have the capacity to generate as much energy as about 100 nuclear power stations. The first towers, built using Rexroth's transmission technology and hydraulic components, have been installed off the coasts of Norway and Great Britain.

To find out more about Rexroth's innovative marine power systems, visit [www.boschrexroth.co.uk](http://www.boschrexroth.co.uk)



*'The Adventure', a six-legged wind turbine installation vessel employing Rexroth drive and control systems.*