

Renewable energy

In Morocco, Elecam catches



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➤ In just six weeks, Elecam (in a consortium with Mediaco) has completed the erection of a field of 12 wind turbines designed to cater for 50% of the electric power requirements of the Ciments Lafarge plant in Tetouan, in northern Morocco. "Apart from having an extremely short delivery time, this project demanded compliance with very strict health and safety regulations," comments Éric Martin, manager of Elecam Telecoms and networks department. "We also had to use very specific tools owing to the climatic conditions as, of course, we were working in an extremely windy area." This contract, worth €250,000, was awarded to the consortium by



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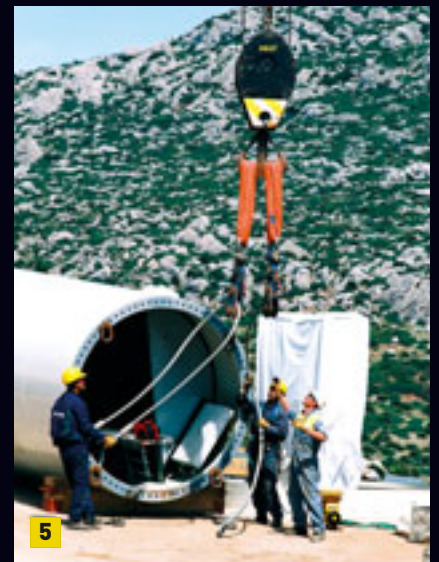
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the wind

Gamesa, a Spanish wind turbine construction firm. Twelve Elecam employees were mobilised for the wind turbine assembly, mechanical fitting and hoisting operations and to make the electrical connections between the alternator at the top of each wind turbine and the switchboard at the foot of its masts. "On completion of this work, Gamesa entrusted our MELB subsidiary with the electromechanical maintenance contract for the wind farm," points out Éric Martin. Having already installed 95 wind turbines for Compagnie Eolienne du Détroit, Elecam is now becoming renowned in the renewable energy market in Morocco. ■



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- 1 Preparation and fitting of mechanical components linking the alternator to the blades.
- 2 Checking the correct tightening of a blade with a torque wrench. Each rotor has three blades.
- 3 Checking the spacing of mounting pins on the first section before assembly.
- 4 At the foot of the tower, the hatch provides access to the electrical components inside the mast.
- 5 A first section is ready to be hoisted.
- 6 General view of the equipment required to erect the tower and nacelle of a wind turbine using two cranes (with capacities of 400 and 80 tonnes).
- 7 Lifting a blade for assembly on the ground.
- 8 Erecting a wind turbine. Each one is made up of two 22-metre sections, a nacelle at the top containing the alternator, and a 3.6 kV switchboard at the bottom of the mast. It generates a power of 1,000 kW.