SMARTON® CRANE

INDUSTRIAL CRANES NUCLEAR CRANES PORT CRANES HEAVY-DUTY LIFT TRUCKS SERVICE MACHINE TOOL SERVICE



Siemens Wind Power A/S, Denmark **A SMARTER WAY TO LIFT**





The Challenge

Siemens Wind Power is one of the leading suppliers of wind power solutions for onshore, offshore and coastal sites, the headquarters located in Brande, Denmark. It manufactures wind turbines of 2.3 MW, 3.0 MW and 3.6 MW consisting of nacelles, hubs and rotor blades, some of them up to 58.5 meters in length and 18 tons in weight.



At Siemens Wind Power, cranes are no less than indispensable when manufacturing wind turbines and their components. The company operates 4-5 big cranes simultaneously in the vast manufacturing halls. Maximum reliability is needed at all times. Other important features are safety and efficiency, in both economic and ecological terms. Since the volume in production was increasing, as well as the weight of the windturbine gears, both higher lifting capacity and further handling ability were needed.

The Solution

Siemens Wind Power has been a Konecranes customer for the last 30 years. During this long period of co-operation, Konecranes has delivered some 80 cranes to Siemens Wind Power, most of them standard SM and CXT cranes, with the lifting capacity of up to 40, 50 or 80 tons. All of them are maintained by Konecranes 4 times a year.

Siemens Wind Power has now started manufacturing next-generation wind turbines



with the help of SMARTON[®], the next-generation evolutionary crane. The required 120 ton lifting capacity and eco-efficiency of the new crane made it a perfect match for Siemens Wind Power's needs. The impressive list of SMARTON[®] product features includes the Human Interface to Machine (HIM) system; an information interface of the operator, which keeps him continuously up-to-date on not only the weight of the load but also its position relative to the available workspace and to the people working nearby. In case of any problems, the user gets guidance from the device's error detection diagnostics.

Other valued features are the higher lifting height and lifting speed. SMARTON® has the lifting speed of four meters per minute. The sway control system of SMARTON® automatically prevents the load from swaying.

The Results

With its advanced technical features, SMARTON® will enhance the efficiency of Siemens Wind Power's manufacturing process and minimize potential errors. SMARTON® will also improve safety and make the work easier for crane drivers. Especially valued in windturbine production is the crane's system feature, in which braking energy is fed back into the power

supply network, reducing energy consumption considerably. This is remarkable for Siemens Wind Power, working within the area of green industry.

SMARTON® was also attractive for Siemens Wind Power from the maintenance point of view. It monitors its own condition and recommends when and what kind of inspection or preventive maintenance should be performed. This guarantees well-functioning service and fewer standstills. This is crucial for wind turbine manufacturing in which any stop can cause considerable losses.

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