



**PROJECT PROFILE:
RENEWABLE ENERGY**



Quality and Manufacturing Inspections Secure Design Compliance

Integrity Management

Situation

RWE Innogy needed a third-party to carry out manufacturing inspections for 49 offshore foundations at its wind farm, Nordsee Ost, in the North Sea off the German coast. Upon completion, Nordsee Ost will have a total output of approximately 300 megawatts based on its offshore sub-station and 48 multi-megawatt wind turbines, each with a rated output of 6.15 megawatts.

Approach

Using its European and global network to provide inspection services, as well as technical solutions, ABS Group is inspecting the welding, assembly, and coating processes of the steel foundation and checking for compliance with the manufacturer's design documentation according to their specifications. In addition, ABS Group is inspecting transition pieces, pile clusters, lattice steelwork, and interface flanges as any undetected manufacturing faults can affect the integrity and lifespan of the foundation.

Result

ABS Group inspectors are performing monitoring tasks seven days a week to assure that the requested quality is met and that the manufacturing is in accordance with internal standards, manufacturing procedures, and the certification process. Proving especially effective is the manufacturing monitoring as the inspection of the foundation is difficult and costly once the wind turbine has been erected.

Benefits

As inspection results and non-conformities are documented in daily, weekly, and even in ad-hoc reports, RWE Innogy can act quickly to initiate corrective measures to control problems once they are identified. Acting as the eyes and ears of RWE Innogy at the foundation manufacturers in Finland and Norway, ABS Group inspectors are helping both RWE and the manufacturer improve quality to prevent scheduling delays. As a result, ABS Group inspectors are helping RWE Innogy save money by preventing additional expense in the long run.