

OMEXOM



ACCURACY IS OUR BUSINESS

Independent inspection body by Omexom Offshore

THE EXPERTISE OF OMEXOM OFFSHORE

Never before had an offshore wind farm been so far out to sea as Germany's first offshore wind farm alpha ventus, namely 64 kilometers. With the start of planning in 2006 our success story began. Since then, the wind farm alpha ventus has produced two terawatt hours under our operational management.

Now Omexom Offshore delivers services to more than a dozen offshore wind farms. As a technological pioneer we bring along decades of wind energy expertise.

The success of renewable energies was a team effort from the very start. In our team all competencies for the development and operation of a windfarm are represented. Therefore we understand our customers' requirements perfectly and implement them on a daily basis. Omexom Offshore evaluates the feasibility and the economic efficiency, develops concepts and plans, takes over the supervision of all ongoing works and keeps an eye on operations, services and the management via its own control room.

“Omexom Offshore is a driver of innovation. We offer drone inspection of rotor blades with AI-supported evaluation, underwater inspections with our easy-to-handle MiniROV and acoustic photography of electrical components to track partial discharges and check rotor blades.”

*Lennart Reepschläger,
Vice Business Unit Manager of Omexom Offshore Solutions*



EVERYTHING THAT DEFINES OFFSHORE: THE INSPECTION BODY

The range of services of the inspection body is as diverse as the customers' requirements:

Starting with the inspection of technical systems – from the offshore wind turbines to the substations and converter platforms. In the process, also the support and substructures and the corrosion protection systems are checked.

In the life cycle of offshore windfarms, the inspection body offers all elements required for permitting, design and construction, commissioning and operation, and decommissioning of the facilities. Not only the windfarms themselves have to be inspected, but also the processes of the production and maintenance and their documentations.

Briefly said: we can examine all components that have specific requirements and assess their conformity.



OUR SERVICES



SYSTEMS ENGINEERING

- Recurring and manufacturing inspection, end-of-warranty
- Wind turbine inspections, statutory inspections
- Damage assessments
- External inspection of rotor blades via drones
- Internal inspection of rotor blades via inspection carts and humans
- Functional tests
- Lifetime-extension evaluation purposes
- Evaluation of suppliers' services
- Condition-based inspection

ELECTRICAL ENGINEERING

- HV and MV inspections
- Transformer and DGUV tests
- Damage assessments
- Electrothermography
- Accident analyses
- Inspection electrical operating sites according to TRBS, ASR, VDE
- Conformity evaluation of the electrotechnical organization
- Soundscanning: acoustic photography of partial discharge

CONSTRUCTION

- Recurring and manufacturing inspection
- Statutory inspections during operations
- Check of corrosion protection systems (FROSIO)
- Damage assessment, preparation of reports
- Evaluation of suppliers' services
- Customized underwater inspection

PROCESS ASSESSMENT

- Quality control
- Examination of processes, instructions, organizations for normative compliance
- Client representative services
- Examination of the implementation of factory or construction process specifications

PERMIT REQUIREMENTS

- Compliance to official requirements
- Check for fulfillment of the recurring inspection requirements
- Examination and fulfillment of requirements from guidelines and ordinances

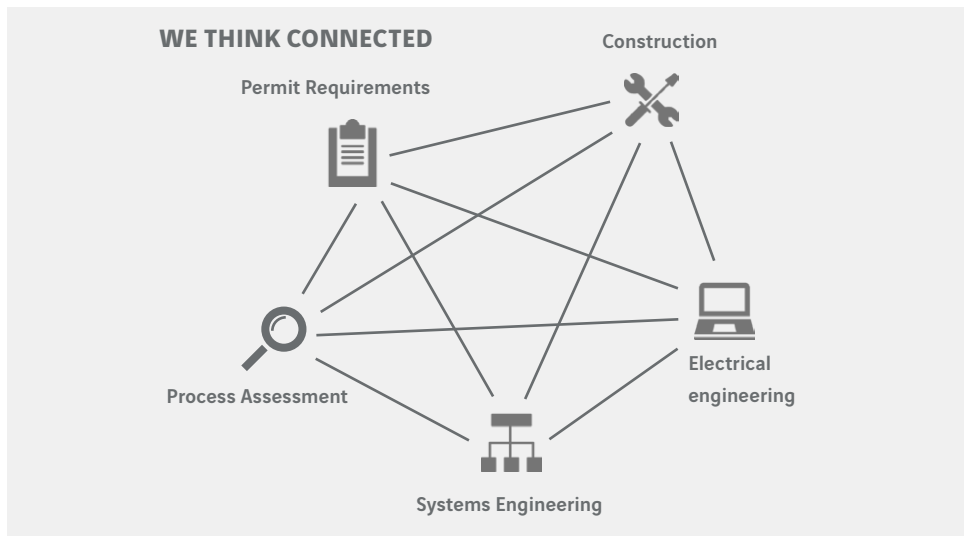
OUR EXPERTISE IS YOUR ADVANTAGE

Many wind farms that are already in their 5th to 10th year of operation are experiencing damages and problems that were not foreseeable at the time of construction or whose existence was completely unknown. Windfarms being built today should not repeat these mistakes and at the same time they have to cope with completely new requirements due to the increasing dimensions. In addition, new detailed requirements for the windfarms and for single components are imposed by authorities and customers on the basis of constantly updated regulations (as e.g. ISO, IEC, DIN, VDE, etc.).

Owners and operators depend on reliable information about the conditions of their wind farm. Unknown damages can be expensive in the long term. Customers want to ensure that past mistakes are not repeated and that conformity with all requirements is ensured at completely new scales and in later years of operation, in order to be able to operate their assets safely. For this, correct balance between efficiency and accuracy is crucial.

**We cannot stop your wind farm from ageing,
but we can give you the best understanding of its
condition and help you to take the right actions!**

Omexom Offshore brings the decades of experience of its experts and the demands of its customers together to let the optimal testing criteria become the basis of the inspection service. We connect the guidelines of technical regulations with the practical requirements of our customers to perform efficient and exact inspections. We can understand the customer's perspective like no other, as we have been involved in the project development and operation since the beginning of the German offshore wind energy use. This also makes us a known and trusted name for the authorities.



OUR KNOWLEDGE - YOUR BENEFIT

A pioneer in renewable energies is now contributing its broad expertise: the former EWE Offshore Service & Solutions GmbH operates as part of the VINCI-Group as the offshore competence center Omexom Renewable Energies Offshore GmbH.

With this concentrated know-how, we can perform inspections that comply with the regulations of the Bundesamt für Seeschifffahrt und Hydrographie (the Federal Maritime and Hydrographic Agency in Germany) and are recognized by the responsible authorities. Our professional judgement is always problem-aware and solution-oriented.

We perform recurring inspections, damage assessments, maintenance measures – the results of our work are so clearly documented that they can be included in manuals, instructions and any comparable document.

ACCREDITED

as an inspection body type C according to ISO 17020:2012

FURTHER CERTIFICATES

ISO 9001:2015

ISO 14001:2015

ISO 45001:2018

ISO 27001:2022

Safety Culture Ladder: Step 3

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