



During last period, real-world exposure tests for innovative anticorrosion and antifouling coatings have started at several locations: Teesside (North Sea), Banyuls-sur-Mer (Mediterranean Sea), Sines, Portugal, and the Canary Islands (Atlantic Ocean).

Enerocean has conducted a large-scale demonstration of the **new antifouling and anticorrosion coatings by applying them on the WP2Power floating structure**, that was subsequently deployed at sea. More in detail, the anticorrosion coating application process consisted of three essential stages. Initially, the metal surface was prepared for coating by stripping it down to bare carbon steel. This was followed by the direct and easy application of the developed anti-corrosion coating by spraying and finally a yellow paint was applied to the upper sections of the floating W2Power structure from Enerocean. Therefore, the material has proven to be compatible with the yellow paints mandated for offshore visibility regulations. Thus, monitoring has been conducted to ensure the treatment's long-term effectiveness in real exposure conditions.

During the exposure period, **materials exposed to the atmosphere have exhibited no evidence of corrosion**, as continuously monitored by Enerocean. The consistent evaluations indicate a promising outlook for commercial application.

Koshkil has led the repairs and maintenance operations by using **advanced anticorrosion coatings on essential turbine components** and tracking their long-term performance. This process entails repairing parts with anti-corrosion treatments, painting the structure, and addressing the most exposed areas.

The new coatings were tested on wind turbine components to assess their corrosion resistance over time. Results collected up to now, suggest that **the new coatings ease repair operations by the direct spray application of one-layer coating, not needing special surface preparation or thermal treatment for curing**. Furthermore, real-world applications on various sections of the windmill have demonstrated the straightforward application of the anticorrosion coating. These findings are essential for confirming the suitability of the MAREWIND formulations and application methods, enhancing their effectiveness and cost-efficiency.

Concerning **antifouling coating**, initial tests showed a clear difference between untreated samples and those coated with MAREWIND's advanced treatment. Additionally, recent assessments of sample submerged in Sines (Portugal) integrated in the Gravity-based structure (GBS) from INEGI, have revealed unique attributes of the low thickness product developed, compared to commercial options, especially in terms of adhesion properties.

In summary, the present tests are showing encouraging results, suggesting we are progressing well toward meeting the MAREWIND project's goals.





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