

Baltoflake: Saving steel beyond 30 years

Proven maintenance free steel protection in the splash zone

When it comes to installations, stable foundations are everything. Nowhere is this truer than in offshore wind; where the might of the oceans conspire with the full forces of nature to test everything in the splash zone to the absolute limit.

A new independent study by, DNV, the world's leading classification society with globally renowned testing certification and advisory services for the energy sector and maritime industry, has demonstrated that Jotun's Baltoflake can provide 30+ years of maintenance-free steel protection in splash zones.

Performance at the edge

In the harsh environment of the North Sea, opportunities to carry out maintenance at the splash zone are limited, making unplanned repairs an unpredictable and expensive exercise. It costs time and money.

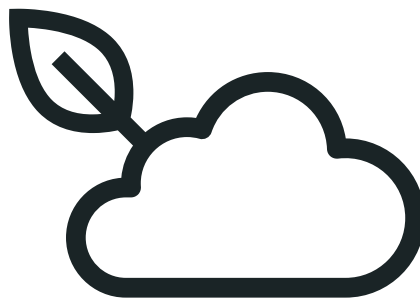
Products such as Baltoflake, with its glass flake polyester technology, can help eliminate maintenance of splash zones and offer protection that matches the design life of the asset.

That means no planned or unplanned downtime to make repairs in the splash zone, allowing operators to do what they do best – focus on creating clean renewable energy.



Methodology

In the study, DNV inspected a section of jacket from a North Sea oil platform which was installed in 1972 and decommissioned in 2020. Jotun's Baltoflake coating was applied to the platform in the late 1980s and, despite over 30 years' exposure to the North Sea's harsh environment, analysis revealed that the coating at the splash zone was intact, still smooth and showing no signs of delamination.



Potential for better performance in offshore wind installations



Corrosion allowances for jackets in the oil and gas industry are already thought to be conservative for structures coated with Baltoflake, but with no risk of oil or gas leakage, offshore wind turbines can potentially benefit from an even lower CA – offering an even longer lifetime than the 30+ years of protection already experienced right across the offshore oil and gas sector.

Decades of flawless performance at the splash zone

- A Norwegian-operated FPSO was refurbished in 2020 after 22 years in service, allowing for inspection by DNV.
- A visual inspection of the section of jacket from a North Sea oil platform coated with Baltoflake had been exposed to both the atmospheric and splash zones of the structure. Both areas were found in a good condition after 22 years of exposure.
- A visual inspection of the North Sea oil platform steel revealed that the coating at the splash zone was intact, still smooth and showing no signs of delamination after more than 35 years in the North Sea.
- Further examinations were carried out on a 4m section of the North Sea oil platform steel brace and examined at DNV's lab. The general condition of the coating was good, with good fitting to the rugged surface. No blistering, rust, cracks or other visual defects were observed.
- Further spectroscopy revealed the coating remained intact with no significant coating degradation.