

Scour Protection Design

Monopile foundations for offshore wind turbines in an erodible seabed are often subject to scour which can compromise the operability and/or the stability of the turbine. The presence of a monopile affects wave and flow patterns around the monopile which can result in local scouring of the seabed. Furthermore, the monopile foundation or offshore wind farm may be located in an area where the seabed is subject to erosion that will cause the seabed elevation to decrease after installation of the foundation.

Typically a rock scour protection is installed around the monopile foundation to mitigate against scouring of the seabed. Primo Marine has extensive experience in the design of various subsea rock structures including scour protection around monopile foundations and can support offshore wind projects from the planning phase until the detailed design phase as well as during operation and maintenance. Primo Marine combines academic knowledge with offshore installation experience and therefore can ensure constructable and cost-efficient designs.



Typical services related to design of rock scour protection around monopile foundations that Primo Marine may provide include:

- Review of site conditions including metocean and soil conditions
- Review of morphological and scour studies
- Conceptual or tender design of rock scour protection or its repair
- Preparation of bill of quantities and cost estimates
- Rock scour protection design review
- Development of rock specifications
- Review of installation method statements
- On site installation supervision

Design methodology is based on state-of-the-art design guidance as well as the relevant codes and standards. Primo Marine's expertise in subsea power cables ensures acute awareness of issues around the interactions between cables, cable protection systems and rock scour protection near monopiles that may arise during installation or repair.

***You have another request? Get in touch with us!
We look forward to helping you. Your Primo Marine Team.***

***Wijnhaven 21, 3011 WH Rotterdam, The Netherlands
+31 10 2409821, info@primo-marine.com***