

The Vallourec Industry magazine
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iTube

PREON marine

Foundation for the offshore wind energy
of the future

**Vallourec's winning
brand launch**
A brand name
with a profile
in international markets

Vallourec brand: a true premium label



In May 2013, Vallourec launched a new brand uniting our diversity and making our offer more visible and comprehensive.

The move marks a new milestone in the Group's history, which was formed beginning in the late 19th century through successive mergers of numerous companies. Since the creation of the joint-venture Vallourec & Mannesmann Tubes in 1997, a number of entities have operated under the V & M brand.



That is why we are definitely moving to the single Vallourec brand as a true premium label, capitalizing on the Mannesmann know-how, and guaranteeing the same level of excellence and quality to our customers worldwide.

According to Philippe Crouzet, Chairman of Vallourec's Management Board: "We want the Vallourec brand to be the benchmark for performance, reliability and safety. It reflects our commitment to customers and partners, setting the grounds for a relationship of total confidence with them. The adoption of a single brand is also a means to unite our 23,000 employees around a common culture based on innovation and excellence, all of which will further strengthen us in achieving our ambitious growth targets."

Through the Vallourec brand, we truly reflect what we are made of: passion, enthusiasm, rigor and diversity.

- Enthusiasm and passion for our work... to meet our customers' more and more complex needs, to share our expertise and constantly challenge ourselves to deliver the best possible solutions.
- Rigor to provide high performance products and services. Our standard is excellence in everything we do. That is why we drive ourselves to be always at the cutting edge of innovation.
- Last but not least, diversity, as a source of richness, to better understand and support our very different customers all around the world, in their various markets.



Vallourec brand is a benchmark for performance, reliability, and safety. It is the symbol of the relationships of total confidence we have built with our customers.

Intelligent Basis for Offshore Wind Energy

Vallourec will have the improved PREON® marine system on display at Tube 2014. The innovative anchoring solution for offshore wind energy systems can be installed quickly, cost-effectively and at very low noise level and therefore with environmental compatibility.

The anchoring of offshore wind turbines is a gigantic effort: the steel anchoring piles up to 2.5 m diameter are driven 60 meters into the seabed by thousands of hammer blows. The problem: The noise the hammers produce is louder than a jet plane. Therefore, Vallourec attracted a lot of attention already at Tube 2012, where the company presented PREON® marine as world novelty, because that system can be anchored in the seabed with very little noise. During the last two years, a team of 15 experts of Vallourec improved the system consistently. "Now we are just about implementing the first test installation", Dr. Claas Bruns, Manager Offshore Structures, says.

Noise remains far below statutory levels

The highlight of PREON® marine is a framework structure of seamless tubes and MSH sections from Vallourec. "The structure is anchored in the seabed and serves as adapter for modern structural systems such as jackets or tripods, on which the wind turbines rest", Claas Bruns explains. The framework structure of PREON® distributes loads intelligently and in this way complies with the requirements of ever more powerful and heavier wind turbines. The system obtains its stability in the seabed from anchoring piles whose number is scalable: Depending on the seabed, wind and flow conditions, in addition to the turbine type and the supporting structure, up to 18 piles per adapter can be drilled 20 to 25 meters into the seabed and concreted. Anchors can now even be installed in rocky ground. And that happens with very little noise. "The noise pressure level is noticeably lower than the very strict statutory limits in Germany", Claas Bruns insists.

Efficient prefabrication

Due to the low depth to which we drill, no expensive surveys of the seabed are necessary. Besides, when removed, PREON® marine does not leave any extensive damage on the seabed. The system is consistently designed for high economic efficiency. "Most components of PREON® marine are prefabricated by automatic processes", Bruns explains. In this way, significant cost benefits can be obtained for anchoring systems of offshore wind turbines in the market.

In cooperation with a manufacturer of offshore wind turbines, a prototype PREON® marine systems will soon have opportunity of proving its suitability for routine use. In preparation of this, extensive scientific tests were carried out at the Fraunhofer Institute for Wind Energy System Technology in Hannover. "The high environmental compatibility and cost efficiency of PREON® marine are fundamental aspects for the success of the system. PREON® marine can be a decisive contribution Vallourec makes to the fundamental change in energy policy," Andreas Denker, Managing Director of the Industry Division of the Vallourec Group, states.



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