

Proton Finishing Brøndby

Maintenance costs are an important factor when offshore installations are placed still farther from coasts, and costs related to replacement of worn-out or corroded parts increase as the distance from coasts grows. When offshore wind turbines are placed far from coasts, it is important to use optimum surface protection to ensure that installations have the longest possible lifetime and that they require the fewest possible number of man-hours for maintenance.

This has put the company Proton Finishing Brøndby at the centre of a growing offshore wind energy market as more and more offshore wind farms are established in deeper waters. With the company's specially developed Delta MKS surface treatment, Proton Finishing Brøndby has documented that its treatment ensures the market's best longevity of an offshore wind farm. This has been done by means of a salt fog test that simulates influences from the sea and air around an offshore wind farm.

"Better longevity means lower costs in terms of maintenance, and surface treatment is a very important part of the product in relation to offshore wind turbines," observes Jørgen Bisgaard, Proton Finishing Brøndby's quality and environment manager.

Proton Finishing Brøndby is the Danish department of the Swedish industrial concern Proton Group, which is concerned with manufacture and design in a range of business areas from hospital equipment to lighting design and industrial technology.

Surface treatment and corrosion protection for the offshore industry are relatively new business areas; however, Proton



Proton Finishing Brøndby delivers its product to Vestas Wind Systems A/S. The gentleman in the photograph is Jørgen Bisgaard with a new delivery to Vestas.

Finishing Brøndby deals with treatment of many types of elements that require great durability under tough weather conditions. The company has thus been a supplier to the car industry for many years, and also supplies its product to wind turbine manufacturer Vestas Wind Systems A/S. "Many companies keep their knowledge to themselves because they fear competition. We're doing the opposite; we're pleased to tell about the many ways in which our product can be used thanks to research and development. More and more industries are realizing the significance of surface treatment when it comes to costs," says Jørgen Bisgaard.

According to Jørgen Bisgaard, Delta MKS surface treatment also has the advantage of being more environment-friendly than for instance heat galvanization, because a lot less energy is required to create more durable treatment.

"Our surface treatment hardens at 220 degrees Celcius while heat galvanization hardens at 450 degrees, so we're talking about a product that doesn't require much energy, and this is an important parameter in an environmentally friendly field such as offshore wind turbines. And you don't like to think about the fact that in some Far East countries heat galvanization is carried out by people who aren't wearing shoes and who aren't environmentally protected in any way," says Jørgen Bisgaard.

Proton Group consists of 5 divisions

Proton Finishing Brøndby is the Danish department of the concern's surface treatment and corrosion protection division. The 6 departments of Proton Finishing in Sweden and Denmark together employ around 200 people in this business area.