

Line-X Gains a Foothold in the Offshore Industry

By Kasper Helger, director,
Line-X Denmark

As the offshore industry is seeking new and durable materials to increase the lifetime of drilling rigs and process plants, an increased focus on materials like Line-X has emerged. The material is an elastomeric urethane for coating and was originally developed in America, but is now gaining a foothold in Denmark and the North Sea Region. The Danish branch office, Line-X Denmark, has during the last few years set the target on increasing the marketing effort towards the offshore industry.

Line-X is close to being an imperishable alternative to traditional paint and corrosion protection. It can be applied in several

centimeters depth, walked upon after 30 seconds, used as silencer and used for non-skidding of pedestrian areas, and also as a chemical- and pollution membrane, as well as being used for repairing of pipelines, helipads, cabin soles and other working areas offshore as well as onshore.

The product can hence be used for many purposes, especially considering the flexibility, heat-resistant and wearing qualities of the product. With only a few seconds dry up time, the product is actually suitable for coating in areas where "down time" is highly expensive or given high priority, such as in process tanks or in production areas with high wear and tear. The fast dry-up time can give savings, compared to more traditional paints when looking at the "down time"

only. Furthermore the extended time between repaintings will cut costs even more.

Surface treatment of steel in splash zones is also one of the offshore areas, which Line-X Denmark will be researching in 2007. The paint can be exposed to water and damps much faster after appliance, and therefore effects caused by the interaction of the tides can be solved.

Furthermore the material has accordingly proved itself useful at tasks where no other solutions have worked yet. As such Line-X was contacted by Statoil refinery regarding a problem nobody had solved. Three cracks in the "floating-roof" on a crude oil tank caused oil leaking on the roof, which gave a risk of an explosion due to leakage.

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Exploring the Opportunities in the North Sea

By Frank Øgaard Mouridsen,
Blue Water Shipping A/S

Line-X Denmark took on the task at a short notice. The cracks were inspected one day, a safety course held at Statoil the following day, whilst Statoil went looking for more cracks. The appliance of the urethane was carried out the following day and took 4 hours. Due to the short dry-up time, no extra treatment was needed, as Line-X is weather-proof as well.

The cooperation with Statoil refinery illustrated the possibilities of an efficient solution to an untraditional problem, within coating and leaking barriers. As Line-X Denmark also cooperates with and does work for a range of operators and subcontractors within the field of offshore, the goals and expectations of the company for 2007 are high. ■

Line-X technical specifications:

- Line-X technical specifications:
- Flexible and unaffected at -40° - 180° C
- Continuous, seamless and monolithic liner for flat, curved and sharp cornered surfaces
- Fast set 3-5 sec at any thickness without intervals starting with 250 to 50,000 µ
- No volatile organic content, 100% solids, environmentally friendly
- High resistance to severe weather conditions
- High resistance to broad range of chemicals, sea water, crude oil and outstanding abrasion resistance, impact strength, tensile strength, tear and high elongation percent
- High electric resistance (15 kw @ 1,500 µm)
- High Di – Electric strength approved cathodic disbandment for petroleum applications
- Environmentally friendly

Blue Water consider the opportunities in the North Sea from another view with a knock-on effect to more branches. The interesting things are the sixth round of tendering for the oil and gas concessions as well as the forthcoming extensions of the offshore wind energy parks. New players have entered the field, and others may come forward.

Sixth Round of Tendering

New licence holders have tendered for the sixth round of tendering, and they can prove to be interesting to the base companies in the Port of Esbjerg, because a number of new oil and gas explorations will be conducted for some considerable time ahead with a consequent demand for base facilities.

Some of the new licence holders are small and medium-sized oil companies. Should the opportunity arise to exploratory drilling, it should be expected that the oil companies purchase services from the established oil companies or companies that can offer a complete package deal. The keys to the puzzle will be the open slots on the drilling rigs and new rigs in play, because there is a heavy demand for drilling rigs.

Extension of the offshore wind energy parks

The base companies also take a great interest in the extensions of the offshore wind energy parks, as comparison can be made to the oil and gas activities.

Intensified competition and a continual development of improved and extended offshore wind turbines increase the demands on the performance of logistics and transport services. Consequently, the base functions will be of crucial importance as the infrastructure is a vital factor.

Maintenance and repairs of wind energy parks

There are some exiting possibilities for the



established wind energy parks, which have been operational for some years. Repairs, preventive maintenance and experience begin to accumulate, and now we experience operating and maintenance campaigns like the established offshore oil and gas installations. An interesting area, and there is an expectation that the base companies are likely to be involved in the projects.

Competence, engineering and clarity

Competence, engineering and clarity are key points of paramount importance to base operations. According to Frank Øgaard Mouridsen the strength of Blue Water is to ensure that sufficient competence is available, and thus can provide the very best logistics technology of all (administratively and practically) and provide clarity to the supply chain. This must be a well-known process in order to avoid misunderstandings.

The company intends to have an overall knowledge of the subject, and wants to cooperate with customers who assign a high priority to collaboration, and thus enables it to enter the initial phase of the project, with input of logistics and transport solutions. This will give the opportunity to perform at optimum efficiency to ensure the best logistics and transport services, and thus avoid risks of financial burden on the project, also as regards to safety.

Gearing up for the international market

With a newly developed base concept, combined with an accumulated expertise over many years within the logistics and transport areas, Blue Water are well equipped to be a co-operating partner in the international market, where facilities and operations can be established speedily - based on the "Esbjerg Model", according to Frank. ■