

2017 in review



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Humidur® was successfully applied to three out of the five fields (E8, E11 and F23) developed to supply the Malaysian LNG plant in Bintulu, Sarawak. Thanks to its excellent performance, the Humidur® coating system will also be implemented at other Shell assets in the area.



Humidur® is applied to sweating lines for Shell Nigeria. Even though the surface is not dry and therefore does not meet the standard specifications, Humidur® provides excellent results and performance on these sweating lines.



Humidur® was used for Shell's slop tank in Nigeria. A slop tank is specifically constructed to collect tank mud, tank washings and other oil-yielding mixtures. Acotec's experience in the Offshore Oil & Gas Market has resulted in Humidur®'s outstanding properties to treat these structures: Humidur® is resistant to harsh exposure conditions and can be applied in a relative humidity of up to 95%.

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## Anti-corrosion protection on Tyra Fields

Tyra Fields is the largest gas condensate field in the Danish sector of the North Sea. The field is operated by Maersk Oil and is owned by Dansk Undergrunds Consortium, a partnership between Maersk Oil, Royal Dutch Shell and the Chevron Corporation.

Humidur® has now been approved for use on the two production complexes on Tyra Fields: Tyra West and Tyra East, which are connected by pipelines.

One of our engineers trained and certified the Muehlhan application crew in November to use Humidur® coatings and realise substantial cost savings.



## Humidur® applied on tubular piles in Belgium

**Project:** Tubular Piles

**Location:** Zennegat, Mechelen (Belgium)

For this particular project, Acotec's experienced applicators used a tubular DZI (Dry Setting Installation) to carefully carry out the surface preparation and coating application.

The DZI can be removed immediately after application, as Humidur® has the ability to cure under water. This allows the Acotec team to instantly move onto the next pile, which is a very cost effective approach and the only way to realise high quality corrosion protection without hindering the shipping traffic and in a minimum amount of time.

Specific benefits of a tubular cofferdam:

- Various diameters
- No need for divers
- Avoids shutdown of activities
- 360° sealing around pile
- Can also be used under a jetty

This environmentally safe and accepted system is able to contain all the debris resulting from the repair process: marine growth, grit from grit blasting, overspray, dust, etc.



**Client:** Shell UK

**Humidur® protects Shell's offshore platforms**

Humidur® is applied as an anti-corrosion coating and non-skid coating on the Shearwater Platform, Gannet Alpha Platform, Brent Charlie Platform and Brent Bravo Platform, amongst others. Humidur® is also being used on onshore facilities: St Fergus Terminal, Mossmorran, Braefoot Bay Terminal, etc.

Before application, areas are mechanically prepared, degreased and washed with fresh water. The Humidur® application resulted in substantial cost savings and increased efficiency thanks to its user-friendly one-layer system and the reducing of man-hours.



#### Humidur® FP QR (Quick Repair)

**Humidur® FP Quick Repair, with its straightforward application, has been specifically developed for the repair of coatings and for small/difficult areas of application. It offers high quality coating system repairs in one layer by means of a dispensing gun. Humidur® FP QR limits product waste and maintenance time in the marine, offshore wind, offshore oil and gas and petrochemical industries.**



Acotec received great feedback on the use of Humidur® FP QR. It has been applied to pipework at various Shell platforms and refineries. One of Shell's Fabric Maintenance Leads told

us: "Humidur® FP QR shows a reduction in waste (environmentally friendly) and the system saves time on the whole application procedure because it is coated in one layer, it is easy to handle and it has a quick drying time. All these benefits result in tremendous cost savings."

#### Dive chambers by Bibby Offshore



The first successful Bibby Offshore dive chambers were coated with Humidur®.

Bibby Offshore tested Humidur® for the internal protection of diving chambers. The concern with other coating systems is that they need to be fully cured before the diving chamber can be used. This is due to the presence of VOC's (Volatile Organic Compounds). To cut the drying times, Bibby Offshore tested Humidur®, as it does not contain any VOC's. Humidur® was applied to a diving chamber and the chamber was immediately pressurised to 30 meters and heated. Gas samples were taken. The test was very successful and Humidur® is now approved as VOC-free paint, reducing the painting time by a week.

## Training passes & training videos



Acotec has been issuing personal training passes to people who have attended a Humidur® coating training course and met the requirements for the qualified applicator

certification since 2017. If you successfully complete a Humidur® training course for brush and/or spray application, you will receive a certificate and a training pass!

Brand new training videos are available on the "AcotecHeadquarters" YouTube channel, to support training and Humidur® applications worldwide.

The following videos are shown during the training:

Brush application, spray application, deck coating, pump adjustments, surface preparation, stripe coating and wet-on-wet.



Video Training Spray Application  
AcotecHeadquarters  
8 maanden geleden • 228 views

## Fluxys, Belgium

Acotec was awarded the renovation and corrosion protection of the Fluxys LNG terminal in Zeebrugge, Belgium, which is considered to be the access gate for the LNG supply throughout North Western Europe. The project includes the corrosion protection of 205 jetty piles and 12 mooring piles. The corrosion protection is installed below the water line by means of an Acotec DZI mobile cofferdam system. The remaining tidal area and the part of the piles above the waterline are protected from corrosion by means of scaffolding. The two-phase project runs simultaneously and will continue in 2018.



Courtesy and copyright of Fluxys Belgium



The job includes removal of the old existing coal tar coating using an induction disbonding machine and with ultra-high pressure water jetting. A basic grit blast will finish the surface preparation following the cleaning process. Finally, one layer of Humidur® coating is applied to finish the process and keep the jetty maintenance-free for decades. The Humidur® coating will continue to cure under water, allowing for tidal work to be done very efficiently and the DZI cofferdam can instantly be removed after application in the submerged zone.



أرامكو السعودية  
saudi aramco



Humidur® was tested and approved according to Saudi Aramco's APCS-19C/09-SAMSS-070 qualification requirements for splash zone steel in 2017. This test programme is based on the NORSOK System 7, but is more severe. Saudi Aramco will continue field trials in 2018.

## Humidur®'s approvals

After successfully training the Chevron crews in Angola, Humidur® has now been specified as one of the best maintenance coatings in Angola.




## Induction Disbonding System



Acotec had to remove an unknown old coating, which was very hard to remove by conventional grit blasting, in the Dolvik Depot, owned by Statoil, in Norway. The Induction Disbonding System was therefore used.

Humidur® was applied as an anti-corrosion coating on the Dolvik Depot tanks. The tanks contain jet fuel A1. Both the outside and inside were coated with Humidur®.

**BG INDIA**  Humidur® is approved by BG India for use on offshore platforms.

Initial work for BG India will start in December 2017.

Teekay Petrojarl is the largest floating production storage and offloading operator in the North Sea. Humidur® is now approved for use on Teekay Petrojarl's vessel, Petrojarl Foinaven.



## Projects in Chile: Centinela and Cabo Froward

9 km of spools were coated with Humidur® for the Centinela Project in Chile. Centinela was produced in 2014 to produce copper concentrate.

By using Humidur® coatings the producer of the spools, Fastpack, coats three to four times more pipeline spools in one day shift compared to using conventional pipe coatings. Acotec offers a solvent-free UV-resistant topcoat to maintain colour stability.



**Portuaria Cabo Froward** is situated in the northern part of the bay of Coronel, Chile. The steel structures (the quay Puchoco, dolphin structures and docks) were treated with Humidur® as anti-corrosion coating.

## Acotec's worldwide support

We are also excited about our new partnership and agreement with:

- Petronella**, our partner in Nigeria
- ACTS**, our partner in Trinidad and Tobago
- Jurunature**, our partner in Malaysia, Brunei, Singapore and Indonesia

If you'd like more information regarding these partnerships, please contact the Acotec Headquarters.



Humidur® was used as an anti-corrosion coating on the pipeline system of Shell's Nelson Platform. Dry ice blasting was chosen as the surface preparation. This is a non-abrasive, non-flammable and nonconductive cleaning method. Neither encapsulation nor water wash were required before blasting



"A healthy mind in a healthy body". That is what we support in Acotec. Acotec employees are given the opportunity to work out with a professional, personal trainer every week. This weekly training results in a better team spirit and happy vibes within the company.



This year, Acotec attended Climbing For Life in Gérardmer, France.

3000 people joined this event to help the fight against diabetes. Climbing For Life wants to raise awareness of diabetes, maintain a healthy lifestyle, help each other to achieve the goal of the weekend (walk, run or cycle in the Vosges) and inspire one another with their stories.



Humidur®'s WFT



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