International

Interzone 1000

30 YEARS OF SUCCESS

Photo © Callum Davidson

This track record comes from the first ever Tension Leg Platform (TLP), the Hutton. It was built by ConocoPhillips at Highland Fabricators in 1982. Chris Jordan, Coatings Specialist for ConocoPhillips during construction of the Hutton and with more than 40 years experience of surveying in the North Sea commented:

"It is clear that after nearly 30 years in service the high loaded glass flake epoxy applied on the tubular splashzone sections of the Hutton TLP hull is performing very well. Even areas subjected to abrasion from topside equipment such as pumps, ropes and chains are in excellent condition considering the lifetime."

Jordan went on to say that: "We chose the high loaded non-micronised glass flake epoxy for the Hutton as it's easier to apply than other high loaded glass flake coatings and offers the long term protection we wanted."

The coatings specification at the time called for up to 20 years performance lifetime in the harsh environment of the North Sea. AkzoNobel recommended using Interzone® 1000 which was a newly formulated glass flake epoxy at the time.

The secret to the product's success is the high level of lamellar glass flake in the dry film which makes the coating very impermeable to water and ingress of corrosive ions to the steel surface.

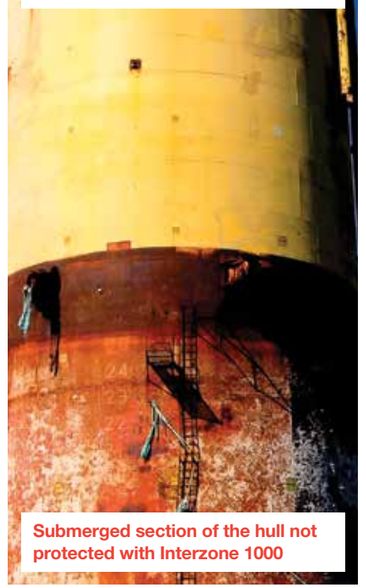
In its lifetime on the Hutton TLP, Interzone 1000 has withstood waves in excess of 25m high driven by winds at over 100 mph.

A recent inspection of the protective coating Interzone 1000 on the now decommissioned tension leg platform (TLP) showed the glass flake epoxy coating to be still in very good condition after almost 30 years. The inspection concluded that Interzone 1000 was still offering excellent corrosion protection.

Today, Interzone 1000 is still widely applied in the offshore industry and this case history clearly demonstrates the product's long term performance attributes.

The topside portion of the Hutton TLP was recycled and used on the Prirazlomnoye platform

Interzone 1000 after nearly 30 years in an offshore environment



Submerged section of the hull not protected with Interzone 1000

The story of the Hutton didn't stop after decommissioning. In fact the decision was taken to re-cycle the topsides for a new drilling platform for the Arctic waters of the Russian Prirazlomnoye oil field.

Discovered back in 1989 the field is located in the Pechora Sea 60km offshore deep into the Arctic circle. It is estimated that 72 million tonnes of oil reserves exist in the field. J.SC. Sevmash built the ice-resistant oil platform for operator Gazprom. The decision was taken to use the Hutton topsides with a concrete caisson which will be capable of storing 900,000 barrels of oil to be offloaded by shuttle tankers.

The topsides module was refurbished using a surface tolerant epoxy primer which could provide long term anti-corrosion performance. Interplus® 356 was the primer selected for its ability to offer both low temperature cure and excellent brush workability on pitted steel. This provided a good sealed surface onto which Interzone® 954 was applied to give a coating scheme that will provide long term abrasion and corrosion resistance.

In addition, over 40,000m^2 of Chartek® 7 was applied to give epoxy passive fire protection. A mixture of H-30, 60 and 120 fire ratings were required for external bulkheads and columns. Ease of application and proven long term performance in harsh conditions, for example in Norway and the Sakhalin region of East Russia, contributed to Chartek being selected.

Overall, the Hutton and Prirazolmonya platforms clearly demonstrate that AkzoNobel provides coatings with a proven long term track record in some of the world's harshest environments.