

## **Case Study- Application of Armaflake EHB at Splash zone location of British gas Platforms.**

### **Back Ground :**

**BG** Exploration and production **India** Pvt Limited (BGEPL) has awarded contract for maintenance painting of unmanned and process platforms located in Heera Panna field in order to preserve the structural integrity of offshore structure.

The offshore structures are exposed to high degree of Corrosion ( C5-M ) category and hence right coating design, application and inspection were key for higher service life of coating system.

### **Coating Design :**

Though the coating specification was well suited for most of the area of offshore platforms, the challenge was to protect Splash Zone Area using suitable coating system but without carrying out abrasive blasting. Abrasive blasting has several safety and environmental challenges and hence was not found suitable as a mean of surface preparation.

The coating system should have very high impermeability, abrasion resistance, fast drying and curing properties, mechanical strength , excellent adhesion etc to serve well for splash zone expose to highly demanding condition. Though few coatings systems are available for splash zone, almost most of them need abrasive/hydro blasting to adhere to the substrate and deliver optimum results.

The need was to find a coating system with excellent properties which can be applied on marginally cleaned surface ( St-2 / St-3 ).

### **Armaflake EHB for Splash zone:**

Armaflake EHB is the result of years of extensive research by coating experts, novel resin / hardener chemistry and high performance additives . The system is designed for C5-M environment with excellent impermeability, high DFT buildup, faster curing, high abrasion resistance and excellent adhesion on manually/power tooled cleaned surfaces. Also the product is solvent less and hence environmental friendly.

Due to uniqueness of Armaflake EHB, The product was approved by BG technical team for application at Splash zone. The trial of the product was also conducted at Corrosion/paint



lab at IIT Bombay and all the parameter were found in line with offshore coating system requirement for splash zone.

#### **Application and Performance:**

A basic training was provided to application team of contracting company for right mixing and application of EHB.

The product was successfully applied at splash location of 04 unmanned and one process platform b/w October 2013- May 2014. The product was applied seamlessly without any problems such as runs , sags, low DFT, delayed curing etc. The product was tested against applicable parameters such as DFT, adhesion, curing during and after application and was found in order.

The installed coating system is still in intact condition ( 2019 ) and has not shown any degree of failure.

#### **OUTCOME :**

The performance and results easily establishes the efficacy of Armaflake EHB for splash zone locations even without carrying out surface . This establishes the product as one of the best candidate for splash zone, jetties or any structures exposed to sea environment,

