ENSCO 100 JACK-UP OIL RIG

Reconstruction and modernization of platform in Remontowa Shiprepair Yard (Gdansk)

06 - 11.2009
ENSCO 100 JACK-UP OIL RIG

- Flag: Liberia
- Construction year: 1987
- Total height: 147,50 m
- Total length: 90,53 m
- Width: 89,00 m
- Depth moulded of the hull: 9,14 m
- Drilling depth: 9144 m
- Deadweight: 5204 t
- Drill height: 48,76 m
- Draught in transit: 5,79 m
- The last renovation: 2000, Keppel Verolme, Holland
Renovation of platform ENSCO 100

Scope of anticorrosion works:

- Columns 17000 m² - abrasive blasting to cleanliness Sa 2, application of two-layers ant-icorrosion coatings
- Wells of legs 2000 m² - abrasive blasting to cleanliness Sa 2, application of three-layers anti-corrosion coatings
- Preload tanks 14250 m² - abrasive blasting to cleanliness Sa 2, application of two-layers anti-corrosion coating, execution of holiday test
- Hull and bottom 8000 m² - abrasive blasting to cleanliness Sa 2, application of three-layers ant-icorrosion coating
- Superstructure 2800 m² - machine tool cleaning to cleanliness St 3, application of three-layers anti-corrosion coating
- Fresh water tanks
- Mud pit tanks
Renovation of ENSCO 100 – shell plating

The shell plating before renovation. Micro and macroscopic examination of existing coatings, assessment of cracking, flaking, chalking, etc.

A lot of examinations and tests have been carried out like hardness test of coatings (Barcol Test), in terms of the selection of paint system supplementation technology.

Qualification of areas for renovation works.
Renovation of ENSCO 100 – shell plating

The shell plating after abrasive blasting to cleanliness Sa.

The shell plating after application of new coats.

DFT measurements and visual inspection after application of each layer.
Renovation of ENSCO 100 – bottom shell plating

The bottom shell plating.

The bottom shell plating after application of new coats.
Renovation of ENSCO 100 – ballast tanks

Plating of ballast tanks before renovation.

Plating of ballast tanks after abrasive blasting to cleanliness Sa 2,5.

Evaluation of roughness on surface.
Renovation of ENSCO 100 – ballast tanks

Plating of ballast tanks after application of first new anti-corrosion layer.

DFT measurements after application of each layer.

Execution of holiday test by high voltage porosity detector.
Renovation of ENSCO 100 – ballast tanks

Executions of holiday test of new anti-corrosion coat.
Renovation of ENSCO 100 – legs

The leg area before renovation.

The leg area after po abrasive blasting to cleanliness Sa 2.5.

Evaluation of roughness on surface, mechanical damages identification.
Renovation of ENSCO 100 – legs

Leg areas after application of first layer. Epoxy paint with high solids content was used too.

Leg areas after application of topcat. Epoxy paint with high solids content was used too.

DFT measurements and visual inspection after application of each layer have been carried out.
Renovation of ENSCO 100 – superstructure

The superstructure before renovation.

The superstructure after the final inspection of the first floor.
Renovation of ENSCO 100 – mud pit tanks

The mud pit tank after application of anti-corrosion coating.
Renovation of ENSCO 100 – mud pit tanks

The mud pit tank after abrasive blasting to cleanliness Sa 2.

Evaluation of surface contamination (quantity of soluble salts, dust test).
Renovation of ENSCO 100 – fresh water tanks

Plating of fresh water tanks after abrasive blasting to cleanliness Sa 2.5.

Examination of quantity of soluble salts on the surface (Bresl test).
POT SINCOR Company has been selected by the tower operator as The Company that took care of all the issues related to the quality of the anti-corrosion works performed.

In this connection, the following have been carried out:

Opening report- assessment of corrosion status and existing anti-corrosion coatings in every place in ENSCO 100.
Renovation of ENSCO 100 – documentation

Daily reporting to the project manager on the progress and quality of the anti-corrosion work carried out.

Development of specifications and procedures for new corrosion protection systems.

Final report – documentation concerning all anticorrosion works performed, including deadlines, quality and used materials, etc.
Renovation of ENSCO 100 – platform after modernization