Project

Reduce annual cost to surface protection maintenance of the Gullfaks Field.

The issue faced by our client

The existing Surface Protection Maintenance program was over budget due to the lack of qualified personnel who had worked on the surface maintenance. Other contributing factors were the use of inadequate products and poor planning. This poor combination contributed to more frequent and unscheduled maintenance than anticipated, leading to costly budget overruns along with a short life expectancy.

Poor record keeping and unqualified personnel resulted in more frequent maintenance applications than budgeted due to the lack of quality control.

The program was implemented without planning or a review of maintenance and budget histories.

SOLV optimizes the maintenance operations with regards to cost, safety and quality. The concept is based on a methodical and detailed recording of total maintenance scope, surface condition and other relevant data of corrosion management.
The Situation

The maintenance scope was based on individual properties and available budget.

It was a difficult balancing act between the budget, personnel and required scope of work.

Poor communication regarding the scope of work, quality and guarantee.

The most inexpensive paint system, materials and methods were preferred.

Work was poorly executed, which resulted in a shorter life expectancy.

The surface protection maintenance was accomplished incorrectly.

Performing personnel had missing or erroneous qualifications and poor quality control.

The customer overpaid for the poor executed work.

Lack of maintenance and budgetary oversight.

The Solution

- Begin an analytical survey to establish a descriptive study according to the consumer requirements and delegate control on the installations integrity.
- Measure all areas and register the condition.
- Establish a budget tool that provides full cost control, and presents a predictable annual budget that will be required.
- Prioritize surface maintenance according to condition and/or critically select the vital areas primarily.
- Determine an accurate and defined scope of work for protection maintenance.
- Establish requirements and a fixed price/rate system to personnel and inspectors to ensure quality workmanship.
- Follow up guarantee requirements.
- Provide technical support and competence to the installations during the maintenance.
- Make long term planning schedules for surface protection maintenance.

Cost growth condition [%]

Production forecasting was based on detailed reservoir models.
The Estimated versus Actual

SOLV CMFM has worked with some of the main oil and gas operating companies in the North Sea.

The following services SOLV CMFM provide are: External corrosion management and Insulations Maintenance systems aligned to industry safety & integrity best practice.

Consultancy providing technical solutions to external coatings, corrosion and insulation problems, including external integrity audits, failure investigation and the preparation of specifications for problem areas.

Management services, which include the preparations of insulation and coatings strategies, long term plans and detailed work packs and project management of related activities such as scope definition, procurement, safety management and quality control. Inspection & quality management services including insulation and coatings inspection surveys, preparation of detailed insulation/ coatings/corrosion inspection work packs, third party insulation/paint inspection, and the training of coating/corrosion/insulation inspectors.

These services are delivered by the SOLV CMFM’s expert team of insulation and corrosion engineers, coatings and insulation inspectors and surveyors, which includes many FROSIO-certified inspectors.

CMFM’s unique management tool, SOLV, enables the team to provide the best support to asset owners requiring any advice concerning corrosion, coatings or insulation.

The system has been used the last 18 years and the costumers have achieved cost savings up to 70 %.
The Results

The survey with a descriptive study gave full control and an overview on the installations volume/area, condition and integrity.

Long term plans and budget was established from the study.

Prioritizing surface maintenance according to condition and/or critically in both short and long term was made easier.

The customer was now equipped with a usable tool that identified items of priority.

Workpacks were prepared with accurate and a defined scope of work from maintenance and using a fixed pricing scenario resulted in a cost saving up to 70%, leading to better efficiency.

The requirement for paint system, paint materials and follow up guarantee requirements resulted in extended surface lifetime from 3-5 years to 10-15 years.

The survey study identified maintenance needs on safety barriers.

The system satisfies government requirements and demands.

Long term planning schedule provided a predictable budget and the foundations for easy decision making.

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<td>Hourly based work with incentive and SOLV</td>
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ABOUT

Oceaneering is a global oilfield provider of engineered services and products primarily to the offshore oil and gas industry, with a focus on deepwater applications. Our asset integrity management business provides a variety of services within subsea technology, inspection and maintenance management. Through the use of its applied technology expertise, Oceaneering also serves the defence and aerospace industries. Oceaneering International Inc., has 10 000 employees across 21 countries.

Asset Integrity

Oceaneering is a global oilfield provider of engineered services and products primarily to the offshore oil and gas industry. For more information please call us or send an e-mail to: asset-integrity@oceaneering.com

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