

Solution for Upstream Application

Inspection data reporting system for offshore oil rigs

Our client is the world's leading inspection, verification, testing and certification company. Recognised as the global benchmark for quality and integrity, they operate a network of more than thousand offices and laboratories around the world. Their range of services covers all industry sectors. Oil, gas and chemical services are one of their major offerings.

Problem

Our client does the quality inspection at the offshore drilling sites of the rig pipes used for exploration and drilling oil. The inspection reports of the pipes must be available to their clients immediately for better management of logistics of the pipes and saving oil rig time. The inspection reports are complex and are required to report on several parameters which are more than twenty in numbers. Some of these parameters have a complex relationship among them. The reports also need to display the diagrammatic representation of the inspected units indicating the bad segments in the units.

Our client had been doing these reports manually in excel files and making drawings for each report separately. The process was very time consuming and it became overwhelming for the onsite inspectors to perform complex calculations based on the measured parameters. The task at hand demanded a solution to resolve this issue.

Solution

Web Access' technical team designed a web based reporting application to resolve this issue for the client. The reporting system makes the reports available online to various customers of our client. The system provides screens for data input, applies data range to various parameters and defines relationships among the parameters. The system provides for uploading the system drawings, draws the appropriate unit drawing while generating report and based on the measured data pinpoints the defective areas of the inspected unit.

The system works in three steps at the user level.

- Physical inspection of the units is carried out by the inspection team and measurements are taken.
- The measurements are uploaded into the system.
- The system generates reports based on predefined formats and filtering criteria.

At the customer level, the users are able to log in with their login details and generate reports based on various filtering criterion. Customer has role based access to the data. The customer users are not

able to modify the data. However, they can insert their comments and seek clarification online on the report.

At the administration level, creation of users, clients, defining access privileges, adding new categories, defining data ranges, taking data backup and uploading data/pictures/diagrams are facilitated.

The system has been in use for over three years and generates more than fifty reports per month.