Geisum Oil Company

Geisum Oil Company Uses InduSoft For Its Offshore Platform Emergency Shutdown System in the Gulf of Suez, Egypt.

Geisum off-shore platform, Gulf of Suez, Egypt.

- The challenge was to eliminate the shutdowns by installing a control system for the ESD that was reliable and effective, as well as being easy to operate and maintain.
- With the InduSoft SCADA solution, engineers can build their own objects and I/O databases.
- Using InduSoft made it possible for maintenance people to use a PDA equipped with a Windows CE version of the InduSoft SCADA software.
- InduSoft SCADA software solutions are truly vendor-neutral. This gave Geisum the power to choose software and hardware that works best.
- InduSoft's SCADA software allowed GEISUM to improve operational efficiencies and quality without having to abandon their investments in existing networks, hardware, software, and applications.

Ragab Abd-Elfatah
Projects Engineer
Geisum

Background

Gulf of Suez, Egypt:

The Geisum offshore platform in the Gulf of Suez is a four-pile structure sitting in 120 meters of water. Supported by a floating production, storage and offloading (FPSO) tanker, it extracts approximately 16,300 barrels of crude oil per day. Geisum Oil Company, the owner of the platform, is one of the largest Egyptian oil companies.

Geisum needed to upgrade the platform's control system to increase production and improve safety. Prequalified local firms were invited to bid on the project, and EGICS Company won the contract for upgrading the facility's control system.

The Challenge

The platform has not had the benefit of the modern control technologies installed on the later platforms. In particular, the emergency shutdown system

Web-Ready InduSoft Tools for Automation

Continued from front page...

(ESD), which stops and makes safe all machinery and systems in the event of a hazard to equipment or personnel, was in need of an upgrade to its control system.

Given the sensitivity of the oil market to changing economic conditions, it was imperative that running costs and downtime be kept as low as possible in order to maximize production. The challenge was to eliminate the shutdowns by installing a control system for the ESD that was reliable and effective, as well as being easy to operate and maintain.

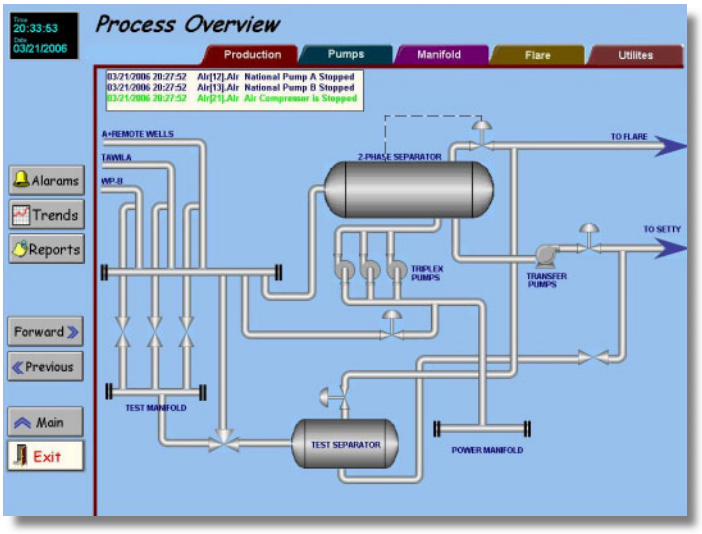
The Solution

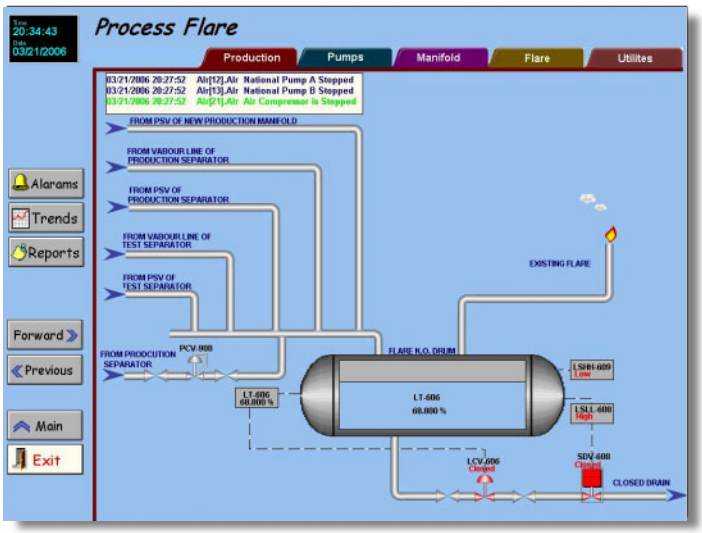
In January 2006, EGICS was awarded the project to upgrade the ESD control system with InduSoft SCADA software and a GE-FANUC series 90-30 PLC. The solution was to provide a fully-integrated control and ESD system.

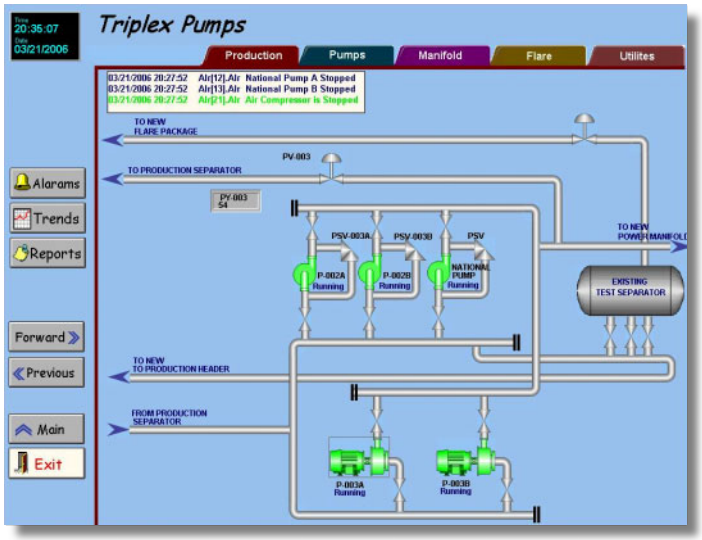
EGICS provided the system design as well as ongoing engineering support. They spent time to ensure that the solution met the requirements of the platform and minimized

"InduSoft SCADA has proved in Egypt its capabilities of being an open and scalable software architecture that can virtually connect with many automation systems, PLCs, databases, and business systems. This will enable users to expand their existing oil and gas SCADA systems without having to buy new hardware or control systems. With InduSoft SCADA software solution, you can."

Ahmed Hammad,
Application Engineer,
EGICS







Right
Process overview screen.
Center Right:
Process flare screen.
Bottom Right:
Triplex pumps screen.

"The reporting utility of InduSoft has offered us some great efficiency improvements, because we could monitor the platform on hourly basis and collect data more easily, plus, we could actually begin to control utilities and other critical tasks. Also the variety of communication library of InduSoft has enabled us to tie most of our diverse equipment together so that it functioned as a single system."

Ragab Abd-Elfatah
Projects Engineer
Geisum

equipment downtime. Their responsibilities included system integration, SCADA screen development, PLC coding, and installing all hardware into the supplied panels.

Graphic screens were designed to allow the operator on the central platform to:

- Monitor and control platform instruments and set points.
- Control the PID controller loop parameters
- Operate platform valves and monitor status of each device on the platform.

Results

The installation was completed successfully in March 2006. Geisum Engineers were impressed with the SCADA application, which was developed with 'simple to use' InduSoft Web Studio. The application achieved a low total cost of ownership (TCO), seamlessly integrated with other systems, and provided a mobile maintenance function.

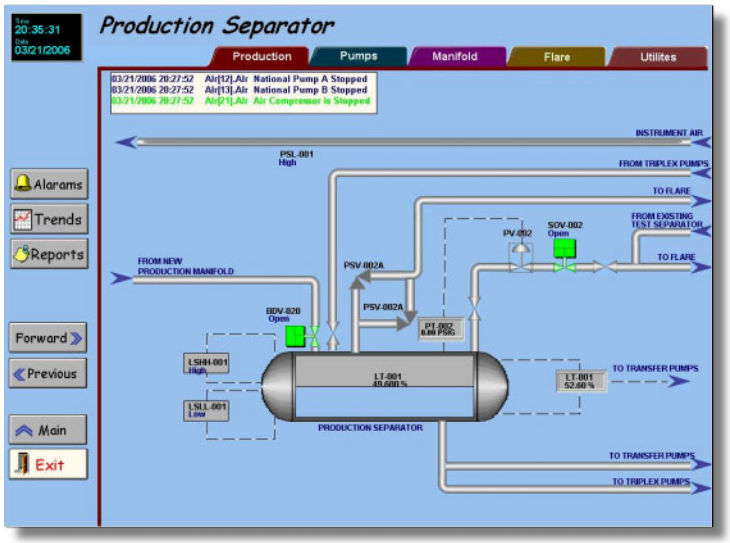
- ***Lower TCO***

Simplicity of developing applications with InduSoft has maximized engineering productivity, which is usually elusive in the development of Oil & Gas SCADA applications. With the InduSoft SCADA solution, engineers can build their own objects and I/O databases. Once they are configured, objects can be reused throughout the entire system for any other similar device. This saves a tremendous amount of time when upgrading or developing similar applications, because engineers can reuse the template that contains all the information necessary for control, such as scripts, alarms and communication methods. This technique can also greatly improve system reliability because the templates are already field-proven.

- ***Seamless Integration***

InduSoft develops and supports software that is not designed for any specific vendor's RTU or PLC hardware. Therefore, InduSoft SCADA software solutions are

Right:
Production separators screen.



This application was developed with InduSoft software for a particular project, and we are planning to use InduSoft for more future projects, based on our engineering staff positive recommendation."

Mahmoud El-Banaa
General Project Manager
Geisum

truly vendor-neutral. This gave Geisum the power to choose software and hardware that works best. This inherent flexibility allows us to connect to any system or hardware we have. This capability also allows for complete testing and simulation. When simulation is complete, the system can be switched to run-time mode and brought online with just a click of the mouse, without affecting existing operations.

• ***Mobile Maintenance***

Maintenance personnel are often deployed to the field to gather data or troubleshoot problems. Using InduSoft made it possible for maintenance people to use a PDA equipped with a Windows CE version of the InduSoft SCADA software. Because the CE version is the same as the InduSoft Web Studio running in the control room, operators and maintenance technicians could see the same HMI screens as appear in the control room. This increased operator productivity by facilitating mobile visualization and control. Personnel do not have to remain at one specific station or location; instead, they can travel all over the platform and still have access to HMI and maintenance displays.

InduSoft's comprehensive, field-proven SCADA software allowed Geisum to improve operational efficiencies and quality without having to abandon our investments in existing networks, hardware, software and applications.

Integration Team

Ahmed Hammad,
Application Engineer,
EGICS Automation

Ahmed Farouk,
Application Engineer,
EGICS Automation

Headquarters

200 Professional Building New Orleans Road

Hilton Head Island - SC, USA 29928

Phone: (843) 842-6668

E-mail: info@InduSoft.com

www.InduSoft.com

Sales and Marketing Office

3445 Executive Center Drive, Suite 212

Austin, TX, USA 78731

Phone: 877-INDUSOFT or 512-349-0334

E-mail: info@InduSoft.com

Engineering Office

Av. Eng. Luis Carlos Berrini, 962 8º andar

São Paulo, SP Brazil 04571-906

Tel: (11) 5505-0093

Fax: (11) 5505-1672

E-mail: info@InduSoft.com