

Sasol Teams with Honeywell for Effective Operator Interface with Solid Return on Investment



Sasol teamed with Honeywell on a highly innovative project to help demonstrate the value and cost savings that upgrading to the Experion system would provide. Honeywell had the knowledge, motivation and right team to complete this project which proved to be a huge success demonstrating a direct correlation between Honeywell's Experion system and increase on return on investment.

Benefits

Sasol, a global energy company, is a long standing partner of Honeywell and teamed with them when the time came to upgrade its control system technology. With Honeywell's help, Sasol implemented an innovative pilot project to investigate, test, and evaluate the intrinsic value and benefits of Honeywell's Experion® Process Knowledge System (PKS). After a six month fast track from start to finish, the pilot project was deemed a success with various demonstrable benefits:

- Significant product savings by changing behaviour and operations at the plant
- Improved production and increased yield by switching work processes
- Conservative cost savings of \$500,000 due to increased situational awareness and improved consistent operation
- Improved safety and overall operational performance driven by a new user environment designed with built-in Abnormal Situation Management® (ASM) knowledge such as faster operator detection and quick resolution of process problems
- Minimized the overall impact on operations and reduced or eliminated the need for traditional change management techniques by direct operator involvement in the design of the new operator interfaces
- Improved understanding and handling of existing work processes via Experion's easily customizable and user-friendly display environment



Sasol teams with Honeywell for innovative Experion pilot project – setup of the Experion Station operator interface in the Icon furniture allows the operator to have an overview of the plant and/or a specific area.

Background

Sasol is an innovative global energy company. Headquartered in Johannesburg, South Africa, it is engaged in the commercial production and marketing of chemicals and liquid fuels. For more than 55 years the company has developed world-leading technology for the production of synthetic fuels and chemicals from low-grade coal, as well as the conversion of natural gas to environment-friendly fuels and chemicals. It is committed to sustainable development and is a signatory of Responsible Care®, a worldwide initiative by the chemical industry that strives to improve performance in safety, health and environment.

Challenges

As a very large user of process automation systems, Sasol has actively planned to update and modernize its facilities. As a Honeywell partner, Sasol knew that the natural migration path for its systems was the Experion platform, however it wanted to demonstrate the true value that this system could provide and help drive the adoption throughout all of its facilities.

Solution

With Honeywell's help Sasol implemented an innovative pilot project to investigate, test, and evaluate the intrinsic value and benefits of Honeywell's Experion PKS. The pilot project enabled Sasol staff to use the Experion operator interface to explore different graphics, details, and custom-designed objects to help interpret data. Displays were developed for the Central Control Room (CCR) and for the delayed coker plant. A total of five displays were developed to run on an Experion Station housed in Honeywell's Icon furniture to present the new concepts to CCR and management.

Operators were able to use the new interface to help interpret data by using innate pattern recognition skills to directly affect plant performance. Sasol wanted to let the team work in the most efficient and effective way, keep advanced process controllers on line more, and increase production. After only six months from concept to completion, the pilot project was deemed a success with various demonstrable benefits shown including a \$500,000 cost savings from increased situational awareness and operational consistency. Sasol implemented the new operator interface in parallel with existing consoles for comparison purposes. Operators were very involved in designing new

displays so that change management was very minimal and buy in was easy.

Sasol operators had direct involvement in the new interface and design but even staff from different environments were able to see the positive change and affect this had on business from a daily operational standpoint.

With Honeywell's help Sasol was able to perform a risk-based migration pilot that proved the benefits around some of the different solutions that were possible. The Sasol pilot was done to show the true value and benefits that Experion could provide in a relatively short period of time. Other advantages that Experion provided included seamless integration between various Honeywell technologies such as procedural operations, alarm management and condition-based alarming and Asset Manager.

The parallel deployment of Experion with earlier Honeywell solutions (GUS/TDC) was a unique innovation that provided Sasol with true system migration flexibility – allowing it to migrate at its own pace. Although the pilot was installed in a small part of the plant, the benefit could be applied company wide.

By improving the operator's awareness of his plant conditions and current operating state, Sasol was able to improve yields and more accurately switch processing conditions. The company observed direct production benefits, which could easily be quantified in the parallel operation and other expected benefits such as ease of deployment and commissioning, which helped to quantify production benefits.

More Information

For more information on Experion or any of Honeywell's automation products, services, or solutions, visit www.honeywell.com/ps or contact your Honeywell account manager.

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