

Russian Refinery Migrates from Bailey System to Experion to Improve Performance



“Honeywell’s priority throughout this migration project was total customer satisfaction. We were concerned about the migration project but the professionalism of the Honeywell team and the reliability and stability of Experion helped set our minds at ease.”

Alexandre Gershberg, Head of Instrumentation and DCS Department, Kirishinefteorgsintez Refinery

Benefits

Russia’s Kirishinefteorgsintez Refinery (Kirishi) needed to update its legacy Bailey control system and related technology while improving reliability and stability. After reviewing Honeywell’s Bailey migration process, the Kirishi refinery decided to migrate to the Experion® Process Knowledge System (PKS). Benefits realized by using Experion include:

- Raised performance levels through greater process reliability and stability
- Improved decision making with better and faster access to process information
- Enhanced integration between various systems
- Retained investment in Bailey controllers
- Simplified work through one common interface and graphical displays between different process units
- Improved service with one common and consistent source for support and service

Background

Kirishinefteorgsintez is a refinery located in the Leningrad region of Kirishi, Russia and a subsidiary of Surgutneftegas, one of the largest oil companies in Russia.



Kirishinefteorgsintez Refinery in Russia migrated to Experion PKS for total plant automation.

The Kirishi refinery was completed in 1966 and by 1972 it ranked fifth among major Soviet refineries in terms of petroleum refining. Petroleum refining capacity accounts for 17.3 million tons a year. In addition, petrochemical products account for more than one-third of the refinery’s products.

The potential growth of the plant is closely linked with the construction of a deep petroleum refining unit, which will increase the depth of refining to 96 percent with light products meeting world standards. The multipurpose technology applied at the deep petroleum refining unit will also allow the refinery to manipulate the product mix to keep it in line with current market demands.

Challenge

The Kirishi Refinery needed to upgrade its Bailey INFI90 system after years of decreasing support. It also needed a more versatile, easy-to-use, stable and reliable system.

“We needed to find a solution to our aging control system and limited support for that system.” said Alexandre Gershberg, Head of Instrumentation and DCS Department, Kirishi Refinery. “We needed a solution that would improve process performance while still leveraging our investment in the Bailey controllers.”

Solution

Although the refinery had a standing relationship with Honeywell and needed to decrease maintenance costs, it was cautious about protecting its significant Bailey investment.

Stated Gershberg, “We looked at the advantages that a Honeywell Bailey migration provided and decided to pursue that path for a variety of reasons, all which led to more opportunities for the refinery.”

Honeywell makes integrating or migrating to Experion easy and seamless – all driven by the customer’s business goals.

“A real selling point was that we could migrate to Experion when we needed to. Experion technology allows you to move piece by piece if you want to,” said Gershberg. “This kind of flexibility was a significant advantage for us.”

Experion migration advantages include:

- Experion controllers can be added at any time and will integrate with existing Bailey controllers.
- The user interface is configured using standard Experion configuration tools and there is a common interface regardless of whether the data originates from a Bailey DCS or Experion controller.
- The Bailey Network 90 and INFI 90 integration migrates Bailey data to the Experion system.
- You can replace proprietary Bailey consoles with web-enabled Experion stations. The Experion user interface reads and displays Bailey function block configurations through Bailey-oriented detailed displays and faceplates as if they were Experion controller function blocks.
- The Experion system permits Bailey data access from any Experion user interface with minimum configuration.

Concluded Gershberg, “The most important aspect for us was that it wasn’t just a cookie-cutter solution but custom-fit for our case. We needed redundancy at each point. We needed to be confident that the system would operate exactly like it was documented. We couldn’t have any doubts about normal operations and configuration. The results of the migration met our expectations.”

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For More Information

To learn more about how Honeywell’s migration solutions, visit www.honeywell.com/ps or contact your Honeywell account manager.

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