

IRPC Makes Significant Gains in Plant Safety, Reliability and Efficiency with Integrated Safety and Control Solution



“Honeywell’s best-in-class technology and elite team of experts have supported IRPC to continuously benefit from overall improved operations. This seamlessly delivered Experion R300 platform integrated with Safety Manager is proving to be highly reliable.”

Sompas Samnianglam, Instrument Section Manager, IRPC

Benefits

IRPC Public Company Limited (IRPC) wanted to update the process controls at its plant in Rayong, Thailand. The existing system had exceeded its optimum usage, so in a steady push to maintain the most modern and efficient technology processes, IRPC turned to Honeywell to not only deliver a state-of-the-art replacement, but also accomplish the changeover under a tight schedule with minimal disruption to operations. IRPC partnered with Honeywell to install Honeywell’s Experion® Process Knowledge System (PKS), Release 300, and integrated Safety Manager for increased safety, reliability and maximum operability. As a result of this decision, IRPC gained the following strategic advantages:

- Modernization with upgraded flexibility and productivity in operational procedures
- Increased safety, reliability and maximum operability with integrated Safety Manager solution with enhanced alarm management for smooth plant operation
- Savings in resources and cost due to project delivery ahead of schedule
- Improved ability to gather and share business-critical information
- Superior insight into tracking of process results and monitoring practices.
- Fast response from locally-based Honeywell support resources



Background

IRPC (Thai Petrochemical Industry) Public Company Ltd. is a Bangkok, Thailand-based manufacturer of petrochemical and petroleum products, lubricants and polymers. IRPC’s mission is to cultivate value-added industries for manufacturers and consumers by developing highly-qualified personnel who are knowledgeable, skillful and experienced in assisting customers of all kinds to obtain the highest advantages from the company’s broad portfolio of products and services.

IRPC is committed to maintaining the highest production standards and product quality by adopting internationally accepted standards and acquiring state-of-the-art technologies that can be fully integrated with IRPC’s incumbent expertise and resources.

Challenges

IRPC’s Rayong plant was needed improvements to its process systems. The existing system, consisting of Fisher Rosemont

DCS RS3 and Siemens PLC S5, had long since exceeded its viable lifecycle. Issues with system reliability caused a loss of confidence and potential loss of revenue, which warranted the search for an immediate replacement with the latest state-of-the-art technology.

“We’d gotten all we could expect from our long-time systems,” said Sompas Samnianglam, Instrument Section Manager, IRPC. “As we strive to use technology to continually maximize our deliverables, it was obvious that it was time to start investigating systems that would permit our plant to maintain the highest levels of safety, reliability and efficiency.”

In seeking new process control systems, IRPC needed to implement robust procedural operations that would integrate a series of best practices for system startup and shutdown to improve overall operator performance. The new platform needed to exhibit high levels of flexibility and functionality.

Solution

With the Experion R300 with C300 controllers mated with a Safety Manager system, IRPC now has in place a field-proven automation and control platform that delivers improved productivity, reliability and safety, as well as on-going investment protection. The Series C controllers, in particular, offer IRPC the latest in control room technology and performance in a minimized footprint design.

More Information

For more information on Honeywell’s automation Products, Services, or Solutions, visit our website www.honeywell.com/ps, or contact your Honeywell account manager.

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Honeywell’s focus on innovation is apparent in the features and functionality of the Experion and Safety Manager technologies. For example, the system can deliver a series of interactive instructions to operators to help ensure consistently elevated performance. The controls are engineered to provide best practices for daily procedures. Then each operator’s work is checked by the system control to make sure it is safe to move on to the next step. If something goes wrong, the control system then invokes an exception handler to notify the operator of the condition.

“Experion represents Honeywell’s latest commitment to extending innovation to control technology,” said Samnianglam. “As a result, we now have a state-of-the-art solution to support improvements to business performance.” The plant staff had particular praise for Honeywell’s products, specifically the technical design and incident-free start-up, as well as the accompanying local support.

The smoothly executed implementation process began with Honeywell exhibiting solid pre-planning, and then followed through with exceptional teamwork, spotlighted by the entire team’s repeated willingness to work extended hours in order to finish the installation in less than two months. IRPC also expressed complete satisfaction with its return on investment.

“We greatly appreciated the non-stop support exhibited by everyone from Honeywell, especially the engineering team,” said Samnianglam. “They finished the project ahead of schedule with only a brief shutdown period. Working continuously under tight deadlines, Honeywell delivered high-quality expertise throughout the entire demanding schedule.”