Bangchak Petroleum Seamlessly Migrates to Experion and Improves Performance

“We were very pleased with Honeywell’s team and the successful completion of our DCS migration. Their enthusiasm, even under a very tight schedule, and ability to deliver on a challenging project was impressive. With a cutover that met a short shutdown period of just seven days, we were delivered a proven, reliable and very stable system.”

Pratuang Nokkat, Project Manager, The Bangchak Petroleum Public Company Limited

Benefits
As a leading Thai-owned energy company, it is imperative that Bangchak Petroleum continually modernize its technology. Having used a legacy Honeywell-Yamatake TDC 2000 control system, Bangchak wanted to migrate to the latest process control system technology.

With an extremely short deadline and a shutdown period of just seven days to migrate its control system, Bangchak turned to Honeywell and its proven Experion® Process Knowledge System (PKS) to provide a reliable, cost-effective cutover to the new system. The team finished the project in record time and a successful system handover took place in under a week. Benefits realized by Bangchak include:

- Successful, safe, smooth cutover in just seven days
- Saved more than one percent of revamp budget per year on corrective maintenance work
- Savings for lost production risk was mitigated and avoided more than $1.5 million in opportunity loss had DCS not been operational for just three months
- Sufficient time provided to conduct detailed and thorough field loop check to ensure on-time startup
- Zero incidents occurred during commissioning with no compromise on safety and quality
- Cost-effective implementation and proven system provide durable and stable platform
- Detailed up-front planning and engineering work ensured successful project from day one
- Improved performance and increased ease of use for system operations and data acquisition

Bangchak Petroleum relies on Honeywell’s Experion PKS for reliable and safe operations.

Background
The Bangchak Petroleum Public Company Limited is a Thai oil company that imports crude oil from the Middle East, Far East and domestic sources, producing 120,000 barrels per day. Bangchak refinery is classified as a simple refinery (hydro skimming) that fractionates crude oil into light oil, middle distillate oil and fuel oil. The company is constructing a cracking unit that can transform some parts of fuel oil to gasoline and diesel which are high value-added products. The cracking unit will turn Bangchak refinery into a type of complex refinery.

The company mainly distributes its products through its network of over 1,100 service stations throughout the country. In addition, Bangchak also sells directly to consumers in the sectors of transport, airlines, marine, construction, automotive and agriculture.
**Challenge**
In order to maintain its leadership in the energy sector, Bangchak Petroleum knew it was time to stop temporary fixes on its legacy TDC 2000 system, and find a way to migrate to the newest technology available. Bangchak looked to find a partner that could migrate its control system with no loss in production.

“We were skeptical that what we needed to accomplish could actually be done,” said Pratuang Nokkat, Project Manager, Bangchak Petroleum. “We had a very short timeframe of just seven days due to a pre-planned shutdown schedule, and needed onsite engineering support and a cost-effective solution to sell to management.”

**Solution**
Bangchak Petroleum investigated several options including a complete re-engineering of its system before calling on Honeywell to seamlessly migrate its technology to Experion PKS.

“With Honeywell’s Experion and the dedication of the Honeywell team, we were on a new technology path that provided us with the only process automation system designed to help manage our business, processes and assets in one system,” said Pratuang.

Concerned because of the short time period in which to accomplish the engineering work, the team embraced the challenge and finished the project engineering on time and even conducted a successful Factory Acceptance Test (FAT).

“Honeywell’s commissioning of our plant was impressive with a smooth, fast cutover in just seven days,” said Pratuang. “The system handover to us was very stable and in good condition, allowing us significant time to ensure a detailed and thorough field loop check.”

Intent on making sure safety remained a priority, the combined teams closely monitored the project and reported not a single accident during commissioning. This safety record, combined with the newly improved and easy-to-use system, ensured a standard of success with this project.

“We appreciate the team’s enthusiasm working under a tight schedule and applaud their dedication in maintaining a customer-centric approach throughout this entire project,” continued Pratuang. “Even though the project is over, it is comforting to know that when other issues arise Honeywell will solve them. This is definitely very reassuring to everyone in the company.”

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