We are very happy with the Honeywell solutions having attained a solid return on investment in a very short amount of time. The strong determination and excellent communication skills of the team eased to solve the problems we faced.”

Kaan Mutluel, IT Manager, Tüpras İzmit

Benefits
As the largest oil refinery in Turkey, Tüpras İzmit Refinery was looking to improve the accessibility, accuracy and timeliness of data to make better operating decisions and address issues with data integrity.

Tüpras implemented Honeywell’s Uniformance® System Monitor to gain information about the network’s health, following the installation of Honeywell’s Uniformance Process History Database (PHD).

Reducing manpower costs was one of the key goals for Tüpras. Since implementing Uniformance PHD and System Monitor, the company has saved two hours per technical services engineer per day, and plant supervisors are now able to prepare their monthly reports in one to two hours instead of two days.

Tüpras has achieved many additional benefits, including:
- Data can be gathered from many sources, including third-party systems
- Data is consolidated into a centralized database so engineers can understand past performance and make improvements
- Real-time access to data flow and no data loss
- Ability to maintain large volumes of online data
- Sensitive data is secured by tag and user role

Background
Turkish Petroleum Refineries Corporation (Tüpras) is the leading oil refining company in the country and seventh largest refiner in Europe. Tüpras runs four oil refineries located at İzmit, Izmir, Kirikkale and Batman, with a combined capacity of 28.1 million metric tons per year. Tüpras cover a wide range of products including LPG, naphtha, gasoline, jet fuel, kerosene, gas oil, domestic and export grade fuel oils, asphalt and lubricant base stocks.

Tüpras İzmit has gained a more organized and reliable method of collecting and managing process control data with Uniformance.

The Tüpras İzmit refinery began production in 1961 with an annual capacity to process 1 million tons of crude oil. The company has grown over the years, and in 2007 the İzmit refinery processed 11 million tons of crude oil, achieving 100 percent capacity utilization and breaking production records. The İzmit refinery accrued sales of 11.6 million tons in 2007, indicating an increase of 869,000 tons (8.1 percent) while breaking all-time records for jet fuel, diesel, asphalt and sulfur sales.
Challenge
The Tüpras Izmit Refinery faced issues with data accessibility and accuracy. Each morning the technical services department would spend about two hours per engineer visiting each unit to manually collect data. Additionally, the integrity of historical data could not be trusted and needed to be manually corrected on a regular basis. Quick access to reliable information and a more organized method of collecting, storing and managing process control data was needed to stay ahead of the competition.

Solution
Tüpras chose Honeywell for its data management solution because of the positive results it had experienced from other Honeywell solutions, including DCS and field instruments.

“Honeywell’s team is very experienced and has supported us well throughout the years,” said Kaan Mutluel, IT Manager, Tüpras Izmit.

Tüpras implemented Honeywell’s Uniformance PHD, Uniformance System Monitor and Workcenter. Uniformance PHD gives Tüpras timely and accurate data to make the right operating decisions. The technical services department is able to reach plant data from their computers faster and more accurately than the previous manually intensive collection process. Engineers have access to real-time data and there is no more data loss.

Uniformance PHD provides a robust, flexible environment for the collection, storage and analysis of data for Tüpras. Uniformance System Monitor automates many of the repetitive tasks commonly performed by a Uniformance system administrator to evaluate the health of the system and take appropriate actions.

PHD’s collector/shadow architecture allows data to be gathered from disparate control systems and other sources into a unified database for long-term storage. The data is shadowed into a single centralized database, allowing Tüpras engineers and plant management to analyze performance of the entire operation from a single location.

Tüpras first installed Uniformance PHD and then added Uniformance System Monitor to ensure uninterrupted collection of data. System Monitor checks the performance of PHD buffers, while at the same time verifies whether advanced process control applications are running well. Uniformance System Monitor ensures Tüpras’ network health and provides notification to support personnel – often automating corrective actions when potentially problematic software conditions are detected.

“We are now happy with the Honeywell solutions and have attained a return on investment in a relatively short amount of time than expected. We are pleased with the entire Honeywell team that works with us. They are well equipped in all areas and our support is taken very seriously. It gives us great confidence to know that any issues will be resolved quickly and professionally,” commented Mutluel.

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