

CASE STUDY

S-Oil

One of the world's largest refineries reduces costs & improves operational analytics infrastructure by migrating from PI System to dataPARC.



“One of dataPARC’s advantages is that it can quickly and easily connect to our existing data sources.”

S-Oil’s Story

Headquartered in Seoul, South Korea, and a wholly owned subsidiary of Saudi Aramco, S-Oil Corporation is the 3rd largest refinery in South Korea, producing petroleum, petrochemical, and lubricant products for global distribution. S-Oil’s Onsan Refinery in Ulsan has a capacity of over 650k barrels per day.

S-Oil’s Challenges

S-Oil had been using OSIsoft’s PI System for process data management since it was introduced in 1997. Over the course of 20+ years S-Oil experienced declining performance with PI as the system struggled to provide quick access to the large amounts of data now stored in the historian. At the same time the need for data to improve decision making was increasing, significantly increasing future costs for the PI System.

In dataPARC, S-Oil found a system that would provide all the functionality of their PI system, unlimited user licenses, improved performance, and upgraded trending and analytics tools. All of this was achieved with a lower total cost of ownership.

The biggest challenge S-Oil believed they faced was in converting and importing 20+ years of data, displays, and reports into dataPARC. Additionally, they had numerous integrations with ancillary systems (LIMS, ERP, etc.) that they would need to re-establish with dataPARC as well.

Migrating to dataPARC

Fortunately, dataPARC is a proven solution for large-scale PI replacement efforts. S-Oil was able to complete data migration in 3 1/2 months.



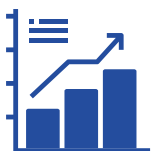
PI System Migration

20+ Years and 150k tags migrated



Lower Cost

Reduced total cost of ownership for quick ROI



Improved Analytics

Better trending & operations management capabilities



“We use a lot of long-term historical data for maintenance and in our day-to-day operations. Over time we began to experience problems with performance degradation with PI. It couldn’t access the long-term data fast enough.”

Migrating to dataPARC

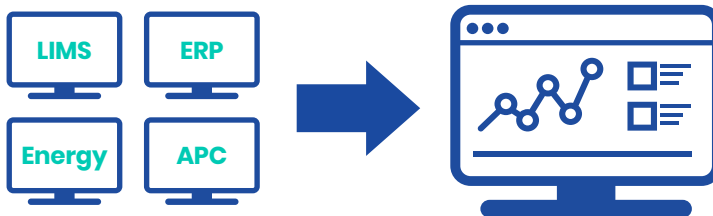
20+ Years of data migrated

800+ ProcessBook Displays **100+** PI DataLink Reports

400 PI Active View Displays **150,000** Tags

Re-establishing Integrations

It was essential that integrations with S-Oil’s critical data sources would survive the migration. dataPARC allowed S-Oil to easily establish those integrations.



Phase II: Upgrading S-Oil’s Analytical & Operations Management Capabilities

Post-migration, S-Oil was eager to begin to leverage dataPARC’s tools to optimize their processes and increase the efficiency of their operations. They moved forward with a number of initiatives supported by the capabilities of their new plant information management system.



Soft Sensors

to predict process variables



Energy Management

dashboards to optimize consumption



Smart Alarms

to notify personnel of process deviations



Corrosion Monitoring

system to improve maintenance

Improved Performance. Reduced Cost.

Immediately, data access speed and reliability in trending long-term data sets was improved remarkably by leveraging dataPARC’s Performance Data Engine. Data queries that used to take several minutes, was now being returned in seconds. In addition, S-Oil was able to greatly reduce operating expenses thanks to dataPARC’s unlimited user license model and reduced maintenance costs.