Kaspersky Lab implements industrial cybersecurity project at Pavlodar Oil Refinery

https://www.pnhz.kz/en/
Pavlodar Oil Refinery

Pavlodar Oil Chemistry Refinery (POCR LLP) is the largest enterprise in the northeast of Kazakhstan for oil refining and production of oil products.

Pavlodar Oil Chemical Refinery (POCR LLP) is one of the three main oil industry enterprises in the Republic of Kazakhstan.

POCR manufactures a wide range of petroleum products, including motor gasolines of various octane ratings, diesel, fuel oil (mazut), hydrocarbon gas liquids, vacuum gas oil, commercial sulfur, various grades of bitumen (construction, paving, roofing) and petroleum coke.

The priorities for POCR today are to produce motor fuels that meet the K4 and K5 emission standards in sufficient quantities to satisfy the country’s needs, upgrade the plant’s technical operating life, introduce a two-year overhaul cycle, and begin producing aviation fuel to Jet A standard – that is opening new opportunities to the plant.

Challenge

One of the top priorities for POCR operations is to ensure industrial cybersecurity and improve the safety of enterprise automation.

Increasing the level of automation and the active adoption of IT into the industrial infrastructure raises the risks of cyberattacks against industrial facilities.

Security of industrial facilities is currently one of the most hotly discussed topics in Kazakhstan. This is hardly surprising: according to the Kaspersky Lab ICS CERT report, in the second half of 2016 Kazakhstan ranked seventh in the world for the number of industrial computers attacked. In the first half of 2017, 45.9% of all industrial automation systems in Kazakhstan were targeted by attacks.

The plant therefore faced the necessity of ensuring the sufficient industrial security against cyberthreats.
The Kaspersky Lab solution

POCR chose Kaspersky Industrial CyberSecurity – a portfolio of technologies and services designed to secure industrial layers and elements of organization – including SCADA servers, HMI, engineering workstations, PLCs and network connections.

To ensure the cybersecurity of its infrastructure, POCR chose not only the endpoint security solution from the Kaspersky Industrial CyberSecurity portfolio but also protection on the industrial network level as well as training for employees. Such a comprehensive approach helps ensure continuity and stability of industrial processes.

Kaspersky Industrial CyberSecurity is specifically designed to protect critical infrastructures and industrial facilities. The solution uses a broad range of technologies to counter threats, including protection from malware, whitelisting and detection of anomalies in industrial network communications. It also controls device access, so clients can control connections to removable data storage devices and peripheral devices.

"The day-to-day business protection capabilities provided by Kaspersky Lab have been complemented with technologies developed specifically for industrial environments, such as integrity checks and semantic monitoring of process management commands. Kaspersky Industrial CyberSecurity can also work in a special monitoring mode that detects cyberattacks, operational errors by employees and anomalies in industrial networks," says Tatyana Pyatina, Kaspersky Lab’s Head of Business Development in Kazakhstan.
Results

Implementation of solutions from the Kaspersky Industrial CyberSecurity portfolio by Kaspersky Lab experts in conjunction with suited security training has helped build a systematic approach at POCR to ensuring industrial cybersecurity, and provided reliable protection against cyberthreats.

“Kaspersky Lab’s task was to ensure the cybersecurity of industrial computers and the SCADA servers, as well as provide a tool to control the core parameters of the industrial processes. The solution was also to have no impact on the industrial process and require no changes to the SCADA configuration. This was accomplished in full by Kaspersky Lab”

Semyon Tikhonenko,
Chief Information Security specialist at POCR