

## Honeywell Delivers Complete Automation Solution at Baltic Chemical Terminal



“Honeywell was able to manage the delivery of the entire terminal automation solution. Their expertise with Enraf and their unsurpassed experience in the oil and gas industry was a definite advantage to help make this project a complete success.”

Mr. Aleksandr Volohhonski, Chairman of the Board, AS BCT.

### Benefits

Almost three years ago, AS BCT (Baltic Chemical Terminal) began construction of a new terminal in Estonia for the export of Russian liquid chemical fertilizers: urea-ammonia nitrate (UAN) and ammonia. With five months to go before planned start-up, AS BCT needed a partner that could help coordinate the entire terminal automation effort from project management to procurement, and from tank inventory to safety and security.

AS BCT selected Honeywell to provide a full scope of terminal automation solutions, which incorporated products from multiple vendors to help supply a comprehensive tank inventory management system and as well as a complete system for the automation of the entire terminal. By combining several offerings across Honeywell's portfolio, AS BCT was able to benefit from a broader solution that included expertise in oil and gas terminal automation, field instrumentation, security, and safety to make this project a successful one.

With only 20 weeks to finalize the project and a ceiling on costs, Honeywell was able to deliver proven solutions and services including Enraf tank gauging, Krohne flowmeters, ammonia detectors, and temperature and pressure transmitters. In addition, the installation of Honeywell's Experion® Process Knowledge System (PKS) Terminal Manager provided the focal point of the entire terminal automation system.



Benefits realized by AS BCT include:

- Single source for terminal automation and more – Honeywell provided project management of multiple vendors to deliver a more comprehensive terminal automation solution compared to alternatives.
- On-time and on-budget project delivery – complete terminal automation system including field instrumentation.
- Improved operator performance – Digital Video Manager (DVM) monitoring solution helped increase operator productivity and responsiveness with a closed-circuit television (CCTV) surveillance solution.
- Optimized tank storage – maximized tank storage capacity helped to optimize operations and increase revenues.

- Improved safety and productivity – feature-rich Experion Terminal Manager helped deal with critical issues such as complexity in handling multiple products; regulatory requirements; and the need for terminal safety, productivity, and improved throughput.
- Better decision-making – operators receive information integrated from a variety of sources and can make faster business decisions.



AS BCT (Estonia) relies on Honeywell for a complete system for terminal automation.

### Background

The AS BCT terminal has an output capacity of over 1 million tons of ammonia and 1 million tons of UAN. The facility is located in the territory of the Port of Sillamäe, Estonia, which is the nearest port of the European Union to the Russian Federation. This makes the terminal an efficient liquid fertilizers transshipment facility to Europe and throughout the world. Commercial operation at the site started on February 9, 2008, and ammonia transshipment began in October 2009.

The key advantages of the AS BCT terminal include:

- Vicinity to the Russian border – 24 km
- Depth of the aquatory – up to 13 m at the deepest berths
- Year-round navigation – ice-free harbor
- Release of goods into free circulation in EU countries – free zone status

### Challenge

At its new terminal complex in Sillame, AS BCT planned for startup at its ammonia complex housing the largest ammonia tanks in Europe. With less than five months to complete the project the company searched for partners to handle everything from tank management to complete project management – resulting in a total automation solution for the terminal.

“We had a variety of partner companies as our go-to-sources for tank management and gauging, but really wanted to find one partner that could supply the entire automation system – including all connecting field devices – and provide the necessary support and services we needed onsite, as well as a possibility of further expansion,” said Mr. Maksim Ushakov, Technical Manager, AS BCT.

### Solution

AS BCT selected Honeywell and its key Enraf partners, Vicoma BV, MCT Engineering, Bibliopola BV and Proton Ventures, who supplied project management, storage and transshipment, and detailed engineering and procurement, respectively. Honeywell Enraf provided AS BCT a comprehensive range of products and systems for accurate tank gauging, inventory management and tank terminal operations. The combination of these capabilities and the partner expertise listed above helped maximize the usage of tank storage capacity to optimize operations and increase revenues.

Furthermore, Honeywell was able to deliver a complete system for terminal automation at AS BCT. By leveraging the combined assets of multiple Honeywell business units, including Honeywell Process Solutions, Honeywell Security and Honeywell Analytics, AS BCT benefitted from a single source for all aspects of terminal automation.

Honeywell’s Experion Terminal Manager provided the heart of the terminal automation system able to perform all key monitoring and control functions, including product receiving, gate access control and loading operations. With its ability to deal with critical issues facing liquid terminals such as the AS BCT ammonia complex, Experion Terminal Manager proved to be the right solution to handle multiple products and regulatory requirements while enabling improved safety, productivity and throughput.

The integrated DVM solution from Honeywell also helped increase operator productivity and responsiveness by putting control of cameras into the operators' hands and playing/storing high-quality images in the Experion system.

Honeywell products were installed at the ammonia complex in the following locations:

- Two tanks for liquid ammonia (30,000 tons each)
- Ammonia railway unloading area
- UAN railway unloading area
- Jetty (including pipelines)
- Main central control building and substation
- Administration and utility building
- Ammonia compressor room

“Honeywell's team-oriented attitude and ability to deliver benefits from all aspects of its business – from tank automation to security and overall project management – provided us with a comprehensive and complete solution which met our project requirements, on-time and on-spec,” commented Mr. Aleksandr Volohhonski, Chairman of the Board, AS BCT.

### More Information

For more information on Honeywell's Enraf solutions or any of Honeywell's Products, Services, or Solutions, visit our website at [www.honeywell.com/ps](http://www.honeywell.com/ps), or contact your Honeywell account manager.

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