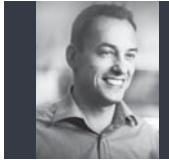


# Reliable water treatment for the food and beverage industry

Danone Ukraine, a large international manufacturer of dairy products, and the company RUD, a leader among the Ukrainian producers of ice cream, are both realizing the benefits of reliable water treatment from SILHORKO-EUROWATER.



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One of the most important issues within the food and beverage industry is a reliable daily supply of the desired water quality and quantity. It is vital for ensuring high-quality products as well as dependable production with no downtime. The focus of Danone Ukraine is to follow extremely high international standards providing the best dairy products for the Ukrainian market. And the aim of RUD is to ensure high water quality to produce one of the best ice creams in Ukraine.

Designing, manufacturing, delivering, and servicing water treatment plants with high reliability of operation is EUROWATER's mission. In other words, what these two compa-

nies wanted characterizes exactly why EUROWATER is here: "We treat water" - and have been doing so since 1936. That is more than 80 years of proving the quality of our solutions, confirmed by a very high repurchase rate from existing customers.

## Pre-engineered filtration units for RUD, Ukraine

The Public Joint-Stock Company "Zhytomyr Butter Plant" - known as RUD is an industry leader among the Ukrainian ice cream producers. "Ice Cream No. 1" is not only considered to be the publicity slogan but also the goal of the company's activities.

A reliable supply of 2 x 25 m<sup>3</sup>/h of clean water was needed for several purposes; ingredient water for the ice cream production (mixing with dry milk), water for rinsing and water for push-out between production batches.

The raw water is municipal water sourced from a river. Therefore, to secure a good inlet water quality the first

treatment step is to treat the water for mechanical impurities. This is done in pressure filters designed and manufactured at one of EUROWATER's own vessel factories. The filters are quite unique in design, offering very efficient backwashing for continuous and trouble-free operation.

The second treatment step is nanofiltration. Nanofiltration is a membrane technology, which is constructed and operates like reverse osmosis, but only retains divalent ions and larger molecules. It leaves some hardness in the water, which is a requirement for this specific application. The technology operates with a lower pressure than reverse osmosis (RO), typically less than seven bar, resulting in a lower energy consumption per volume of treated water.

The delivery included several units: pressure filter, dosing units, nanofiltration units, CIP unit, and central PLC control cabinet. The scope of supply included installation and start-up, undertaken by the EUROWATER sales and service team in Ukraine.

## Custom-made reverse osmosis unit in sanitary design for Danone Ukraine

The products for RUD were pre-engineered, meaning that they were selected from a catalogue of standard units based on the requirements. The EUROWATER modular-built standard system includes all necessary documentation such as certificates, instructions manuals, and spare parts lists. Danone Ukraine wanted a solution that was not directly available in the standard product range; a reverse osmosis (RO) unit in sanitary design and equipped with a selection of customer-defined measurement equip-

ment following the very high Danone standards for all components.

The production needed a reliable supply of 12.5 cubic meters of demineralized ingredient water per hour.

The supplied RO unit is custom-made for Danone Ukraine. The horizontal pressure vessels holding the membranes as well as the pipe system and valves are in stainless steel, quality AISI 316L. The unit also includes a UV disinfection unit as well as a cartridge filter on the inlet, and is equipped with a range of very high-quality instruments for measuring flows, conductivity, and redox. The inlet water for the RO unit is pre-treated in existing sand filters and ultrafiltration units.

In addition to the RO unit the solution includes a CIP unit for the RO as well as installation and start-up. The unit has been supplied to the Danone facility in Kremenchug, 300 km south-east of Kyiv and is ready to be installed, again by the EUROWATER sales and service team in Ukraine. A factory acceptance test (FAT) has been performed in Denmark before delivery. ■

## Pure water treatment since 1936

SILHORKO-EUROWATER has more than 80 years of experience within the fields of developing, manufacturing, selling and servicing complete water treatment plants for the food and beverage industry, heat and power plants, waterworks, hospitals and other industries. The main applications are product water, boiler water, process water, cooling water, rinse water and drinking water. SILHORKO-EUROWATER has almost 400 highly qualified employees at 23 sales and service offices around Europe. For more information, please visit [www.eurowater.com](http://www.eurowater.com)



EUROWATER custom-made reverse osmosis unit in sanitary design for Danone Ukraine.

**Reliable water treatment  
- for the food and beverage industry**

Safety, product quality and running costs are important issues in food and beverage production. EUROWATER has decades of experience in dimensioning, producing, installing and servicing water treatment plants for a demanding industry.

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