

A Kвас (Kvass) concentrate plant for Coca-Cola



If you have travelled to Russia, Belarus, Ukraine or the Baltic states you have certainly discovered a typical local drink called “**Kvass**”. Kvass is a fermented beverage traditionally made from black rye bread. With an overall alcohol content of 0.05% to 1.0%, it is classified as a non-alcoholic drink by Russian standards.

In May 2008, Coca-Cola launched its own brand of kvass in Russia, “Kruzhka i Bochka”, with a unique taste and aroma of crusty rye bread. “Kruzhka i Bochka” combines the traditional taste of kvass with the high quality of the Company’s beverages. Coca-Cola was the first foreign company to make an appreciable entrance into the Russian kvass market!

As a consequence of its success in Russia, in February 2009 Coca-Cola bought the famous local Kvass brand “Yarilo” and started its production on its own facility in Zaporizhzhya. It was Coca-Cola’s first entrance on the Ukrainian kvass market.

Besides the soft-drink “Kvass” itself, the plant at the Zaporizhzhya is making a concentrated wort, the main ingredient for kvass production.

In 2006 the R&D team of Coca-Cola contacted Meura Technologies (Meura’s R&D department) to discuss the development of a state-of-the-art “Kvass” extract production line. Both companies partnered in a program of trials at the pilot facility of **Meura Technologies**. Rye and especially dark malted rye yield a mash with quite

poor mash filterability. Starting from mashing-in, special attention has to be paid to the processing conditions in order to avoid negative impacts on the filterability. The **Meura2001 Hybrid** turned out to be most optimal technology due to its excellent filtration of this specific mash, producing the highest wort density in order to reduce the evaporation costs.

The combination of Meura’s brewhouse technology together with the expertise of the Coca-Cola R&D team in the selection of raw materials and process parameters to achieve the desired flavour, could only lead to success. Indeed, after about four years of collaboration an optimal process was developed.

In 2010, Coca-Cola placed with Meura an order for an industrial plant in Zaporizhzhya (Ukraine). Meura was responsible for the entire processing line from the intake of the delivered raw materials (barley malt, rye malt, rye and barley) to the production of the concentrated Kvass wort, including the evaporation plant unit. Certain process vessels were produced locally based on Meura drawings. In addition the electrical cabinets and automation were part of Meura’s scope.

The project installation of the equipment started after the winter of 2011. The first brew was made on 08/10/2012 as planned and the acceptance was already obtained by the end of November. In less than two months Coca-Cola fully accepted Meura's installation – for a turnkey production unit which is considered an industrial prototype.

Meura would like to thank the entire Coca-Cola team involved in this project for its confidence, professionalism and the fruitful collaboration.



Alexander BORISENKO

(Coca-Cola Technical Director RUB)

Why did you choose Meura for the project?

We knew that the company **MEURA** is a world leader in the production of malt extracts. Indeed, we consider MEURA on **the highest level of expertise** in this area.

How was the collaboration with Meura during the project execution?

It was, indeed, a **beautiful relationship**. I am satisfied and have the highest respect for the Meura company. Thanks to Meura and we wish the team all the best..

Victor BEHRMANN

(Coca-Cola Application Center Manager TCC R&D)

Why did you decide to work together with Meura to develop the final product?

It was known that **MEURA2001** would give us the main target – a maximum density of a wort..

How was the collaboration with Meura Technologies?

The collaboration went very well. Most importantly, even during the tests, we became friends. Special thanks to the efforts of **Laurent Marlé and Didier Hooreweghe**, who were doing their utmost during start-up to achieve the desired results.

Other comments?

The project was complex and unusual. As a turn key supplier, the Meura company showed their **professionalism**.

