More than 100 BMA centrifugals in Ukraine

A noticeable increase in gas prices and a surplus of sugar in Ukraine placed many operators of sugar factories in an extremely difficult position in 2012. They are now faced with these challenges:

- How to survive in this market segment with such fierce competition
- How to reduce sugar production costs
- How to increase sugar quality

During their inspections of various sugar factories, BMA engineers could clearly establish that the existing centrifugal stations ran with old-generation machines and should thus urgently be modernised.

Replacing them with centrifugals of the latest generation, such as the E (batch-type) or K series (continuous), offers several advantages:

- Increased throughput
- Clear improvement of the sugar colour
- Considerably reduced power and water consumption

One feature of the batch-type centrifugals that deserves special mention is the energy recovery realised during braking. This energy can be used for accelerating the next centrifugal, thus ensuring an even power supply at the turbine. Power consumption can be reduced to a quarter in this case, which essentially helps reduce the factories' power deficit.

Furthermore, the conversion of a sugar factory has to be implemented as quickly as possible, to ensure it is ready again for production at the beginning of the next campaign. At the same time, the costs of such a conversion should, of course, be kept as low as possible.

In September 2012, Svitanok installed new batch-type BMA centrifugals in the A centrifugal station of one of its sugar factories and experienced the advantages of this new centrifugal type first hand. The efficiency and safety of the centrifugals installed in fact impressed Svitanok so much that, only two months later, another contract was signed for the supply in 2013 of new A, B and C centrifugals of the newest E series for another sugar factory. In addition, all A, B and C centrifugal stations will be equipped with closed distribution mixers made of stainless steel, which



Extension of the centrifugal station at the Gaisin sugar factory



will have an immediate effect on the efficiency of centrifugal charging and the hygiene conditions for the sugar. For industrial users and consumers in Ukraine, it is no longer only the sugar colour that determines the quality standard, but also the fulfilment of hygiene requirements. BMA therefore uses stainless steel to manufacture those centrifugal parts that are in contact with the product.

Decisive factors in a customer's decision are the safety and high efficiency of the staged basket and the Turbo3 product distributor, as well as the simple operation and installation of the K3300 centrifugals compared with its predecessor model K2300. This has been confirmed by the orders placed in 2012 by Ukrainian sugar factories, exclusively for installation of the new K3300 model. Thanks to the installation of a frequency converter instead of a soft starter, centrifugal operation could be perfectly adapted to the local process requirements in one of the Ukrainian sugar factories, with the centrifugal throughput increased to 50 t/h of B product.

The cost effectiveness and safety analyses of the use of new E centrifugals, which were successfully tested and optimised in the field during two campaigns, show that, after replacing the old machines with new ones, many Ukrainian factories could achieve a ROI after only one or two campaigns. By using high-tech and largely automated equipment in a centrifugal station, the possible effects of human error can be reduced and personnel saved.

BMA is not only one of the world's leading manufacturers of equipment for the sugar industry, but also offers comprehensive services such as project assistance. Due to the steadily growing demand for BMA equipment in the CIS countries, the service team of BMA Russia was expanded to include five Russian-speaking engineers. These have been responsible for supervision of assembly, commissioning, service and training of operating personnel in the CIS countries since 2011.

Roman Schumacher

- Drives with energy recovery
- Minimised maintenance efforts and long service lives
- Minimised recirculation thanks to integrated syrup separation
- High degree of automation
- Maximum gravity factor ensures high product quality