Energy and capacity extension studies for SUTA and SUNABEL, Morocco – the basis for profitability and success

The location, size and technological parameters of a sugar factory are crucial factors for its profitability and future. Accordingly, these economic factors played a role in the purchase of the state-owned sugar producers SUTA (Sucrerie Raffinerie du Tadla) and SUNABEL (Sucrerie Nationale de Betterave G. L.) by Cosumar, a private sugar producer in Morocco. Cosumar decided to extend the factory at Ouled Ayad in the Tadla region, while closing the neighbouring factories Souk Sebt and Beni Mellal.

For the extension of the main process at the Ouled Ayad factory from 8,000 to 12,000 t/d, an order was placed with BMA to prepare a study in two phases. In the first phase, BMA prepared a concept with mass and heat balances for six different variants as decision guidance. The pros and cons were discussed and the customer opted for one of the variants. In the second phase, the basic engineering was prepared in the form of mass, energy and heat balances, process flow diagrams with equipment lists, specifications for the new equipment, and layout drawings. Up to this phase, the engineering is independent of the equipment manufacturer.

At the beginning of the studies, BMA also inspected and optimised the existing evaporator station. Since the participating experts from both sides – customer and BMA – knew and respected each other from the joint extraction project, this new task could be started straight away. The atmosphere during the meetings as well as the work of the engineering group were characterised by commitment, confidence, professionalism, and competence. In regular meetings in the factory, also during the campaign, all participants were able to contribute their ideas actively and promptly and take the necessary decisions.



Extraction tower at the SUTA sugar factory



... and the countercurrent cossette mixer





SUTA / BMA

engineering group

In October 2009, the basic engineering was handed over on time, and the budget needed for the factory extension could be determined. The customer knows he can rely on BMA's assistance as a trusted partner for the implementation of the study.

In November 2009, SUNABEL placed an order with BMA for a study to extend the Mechra Bel Ksiri (MBK) and Ksar El Kebir (KEK) factories from 4,000 to 6,000 t/d. Again, solutions for current problems with the evaporator station will be provided at short notice for the 2010 campaign in the form of an energy study. This will be followed by a basic study and the basic engineering. We will keep you informed about the course of this project.

Thomas Schulze

Benefits

- Engineering services adapted to the customer's requirements
- Tailor-made mass and energy balances
- Studies independent of BMA equipment
- Consulting in local language, whenever possible
- Efficient technologies, state-of-the-art engineering, and optimised investment and energy costs

View of the main process building

