

Expectations fulfilled: successful commissioning at Casablanca



Sugar loaves form part of the Moroccan tea tradition



The new production building during construction

In our BMA Information 47/2009, we already reported about the large-scale order for the extension and optimisation of the Cosumar refinery at Casablanca, Morocco. In addition to various engineering and staff assignment services, miscellaneous continuous and batch centrifugals, 7 batch vacuum pans, 1 VKT for R2 massecuite and 1 plant for sugar drying and cooling have been supplied.

Commissioning of the extended and optimised Casablanca refinery at the beginning of August 2009 was successful.

To ensure commissioning would go smoothly, comprehensive testing of the equipment items and the new plants was required, which was performed jointly by Cosumar and BMA.

The technical functions of the individual equipment items were tested and verified in mechanical tests, which were performed simultaneously with assembly in some cases. Subsequent cold-water tests demonstrated that all items of equipment and piping worked properly and that the tightness of the plant was ensured. These were followed by extensive tests during which steam, vacuum and hot water were applied, and inspections of the control and instrumentation equipment as well as

the process control system. All electrical functions and interlocks were thoroughly checked in order to prepare the plant for live operation with product.

Since all tests were performed during normal refinery operation and during the refinery's annual summer break, it could be ensured that refinery operations were not affected by this large-scale extension. Thanks to the extensive tests performed in coordination between Cosumar and BMA, the functionality of mechanical, electrical, control and instrumentation equipment could be guaranteed prior to commissioning.

This thorough preparation was rewarded by successful commissioning: Within a very short time, the refinery could be operated at the desired capacity and with good technological results.

The interaction between the existing installations such as the boiler house, turbine, melting, liquor clarification and filtration, decolouration and evaporator stations and the new plants (crystallisation for the products R2, R3, R4, A and C, and sugar drying) worked well from the beginning.

Prior to and during commissioning, the Cosumar personnel received comprehensive training from BMA specialists on how to operate the



*Fluidised-bed
cooler*



*From left to right: Mr Djoukwé (BMA), Mr Ihray
and Mr Chah (Cosumar), Steffen Kaufmann (BMA)*

machinery. In the course of commissioning, the machines were technologically optimised further.

In October 2009, the performance runs for the extended refinery were carried out, and significant performance parameters like capacity, steam consumption, sugar quality and yield were reached.

After successful commissioning and the accomplished performance tests, Cosumar issued the acceptance certificate in November 2009.

At present, the refinery is operating at a capacity of up to 2,700 tons per day. In the next months, Cosumar is planning to realise further modifications in the sugar storage and packing area. This will be linked to a refinery operation at an installed capacity of 3,000 t/d of white sugar, and to the optimisation of the technological parameters under these conditions. BMA will again provide active support for these measures.

*Steffen Kaufmann
Abdellah El Hamoumi*

Benefits

- Maximum one-stop share of supplies and services
- Reduced number of interfaces
- Competence in technology and project execution
- Individual concept tailored to market and customer