Expectations exceeded – commissioning of the refinery at Fangcheng

"The benefits of experience are mirrored by the result of the project". The accuracy of this statement was proven conclusively when the sugar refinery at Fangcheng was commissioned in November 2008.

Guangxi State Farms, a Chinese company, constructed its first sugar refinery at Liuxing; it has been producing refined sugar since 2005 (see BMA Information 43/2005). The second refinery was built at Fangcheng near the Vietnamese border and the South China Sea and commissioned at the end of 2008. For both projects, BMA components such as evaporators, vacuum pans, centrifugals and sugar drying plants were installed.

Upon commissioning at Liuxing in 2005, there were considerable startup problems in some parts of the production process. In our experience, such startup problems are the result of incorrect piping and missing or non-calibrated measuring and instrumentation equipment. The consequences became apparent during commissioning and caused a tremendous delay because of the adaptations required. For this reason, precise and reliable measuring and instrumentation equipment is a fundamental prerequisite for today's plant systems and a decisive factor in successful operation.

About 3,000 tons of raw sugar were available for production startup at the Fangcheng refinery. Following assembly work, the individual plant sections were prepared for 'dry' commissioning, which means that they were initially commissioned without any product. During this phase, all electric drives were checked for correct functioning and direction of rotation, the tanks were filled with the appropriate fluids and the measuring and control devices were checked. After all other necessary preparations had been made, such as those for the power and steam supply for the factory, it was possible to start the actual commissioning by conveying the raw sugar into the related refinery silo. Just 48 hours later, the first bags were filled with refined sugar and piled in the white sugar store.

This commissioning is unique not only because of its short duration but also because the plant systems functioned almost without errors after the first switch-on. The experiences gathered four years ago at Liuxing had been analysed and all necessary measures implemented consistently.

The local press was very impressed by the successful commissioning at Fangcheng, and wrote an article about it.

Hartmut Hafemann



Local press

report