

Steam for high-tech medical production

THE COMPANY

Located in the north of Switzerland, this large pharmaceutical company with around 1200 employees is one of the largest producers in the pharmaceutical industry in Switzerland and one of the most important employers in the Schaffhausen region. The company produces high-quality active pharmaceutical ingredients and products that benefit patients worldwide.

In addition to purity and sterility, the security of energy supply is essential for pharmaceutical production, as some intermediate products would not be usable in the event of a production stoppage. To ensure security of supply and increase energy efficiency at the Schaffhausen site, the company opted for a concept and the services of plant specialist Apaco AG from Grellingen, Germany, with an efficient steam boiler system from Bosch. Apaco

AG installed the entire plant, including piping, in a very confined space and during ongoing operation.



Janssen / Cilag AG



THE PROJECT

The new UL-S type steam boiler has an output of 3,200 kilograms of steam per hour. Efficiency-enhancing additional modules reduce both energy costs and emissions. The integrated economiser ensures lower exhaust gas temperatures. The waste heat is used to preheat the boiler feed water to around 135 °C. This reduces exhaust gas losses and fuel consumption. To prevent corrosion, thermal degassing of the make-up water is carried out via the WSM-V water treatment module. For this purpose, the water is heated to a temperature of 103 °C so that the corrosion-causing gases contained in it, carbon dioxide and oxygen, can escape.

By means of multi-fuel firing, the plant can be operated with natural gas or fuel oil. Peak loads can be covered with a second fuel, thus increasing the reliability of the energy supply. Due to the high degree of automation, operation without constant supervision (BosB 72h) is possible, which is characterised by reduced personnel requirements and fewer errors than with manual operation. With the Securimat BosB 72h used, for example, the water level safety devices are automatically sharply checked every 6 hours.

User-friendly boiler control is ensured by the intuitive user interface of the BCO plant management system. The higher-level overall control SCO with interface transfer to the process control system was also installed by Apaco. All data such as fuel consumption, steam quantity, pressure curve or the number of burner starts can be



Water service module WSM-V for corrosion prevention



| Placing the boiler in the boiler house



UL-S steam boiler with a capacity of 3.2 t/h

called up, analysed and optimally adjusted in terms of energy by touch screen. The modern steam boiler system from Bosch is intelligently controlled and convinces with its reliable and energy-efficient operation. Thanks to its modular design, the energy system can be expanded at any time if capacity increases.