



REFERENCE

INNOVATIONS IN EQUIPMENT & PLANT MANUFACTURING

Steam boiler system with 2 UL-S steam boilers Biotechnology

PROJECT | INITIAL SITUATION

For a new biotechnological production at an innovative Swiss pharmaceutical company, a new steam boiler heating system was required. The new steam boiler type UL-S has a capacity of 5000 kg/h saturated steam. Through efficiency-enhancing additional modules, both energy costs and emissions are reduced. The integrated economizer ensures lower flue gas temperatures. The waste heat is used to preheat the boiler feed water. 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.

TASK | TARGET

The specified requirements called for a customer-specific system, which must also comply with the latest Swiss environmental regulations LRV 2018. To reduce the installation and assembly work on the plant, a modular design of the boiler plant with factory insulation and cabling of the two boilers with boiler house components was to be used.

SOLUTION | MEASURES

Bosch boilers and boiler house components are factory insulated and where possible completely prewired. Due to the high degree of automation, operation without manual intervention (BomE) is possible, which is characterized by reduced personnel requirements and fewer errors than with manual operation. Thanks to the multi-fuel firing system, the plant can be operated



either with natural gas or fuel oil. User-friendly boiler control is ensured by the intuitive user interface of the plant management system BCO. 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 called up, analyzed 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.

CONCLUSION | FUTURE

Thanks to the successful and high-quality work Apaco was able to make a positive impression. Follow-up projects are in the starting blocks. Apaco would like to thank you for the trust you have placed in us and looks forward to further successful projects.