

Hot water boiler, Schlachtbetriebe St.Gallen AG (CH)

Retrofit of the safety-related control system

Since the renovation of the building in 2007, the slaughterhouses of St. Gallen AG (SBAG) have operated three hot water boilers equipped with dual fuel burners. A woodchip boiler was installed during renovation work. In the same

step, the two older boilers were taken out of operation. The third existing boiler, built in 2007, and its control system were getting on in years, which is why renovation was necessary.

Task definition

- Renewal of the safety-related components
- Increasing the level of automation from BOSB72 to BOME
- Supplemented by a colour HMI with touch operation
- Carried out by a company that also provides the required service after commissioning offers

The old safety control was implemented in BOSB 72 (operation without permanent supervision), which required extensive checks at least every 72 hours. Furthermore, the lifetimes of the individual components were exceeded.

As this boiler is mainly operated as a fail-safe to the wood chip boiler, the conversion had to be planned in detail. Thanks to the prefabricated mounting plate, the conversion and commissioning was completed in four days.



Figure 1: Left before the retrofit / Right after the retrofit

The non-safety relevant part of the control system was left and only all components of the old BOSB 72 control system were removed and replaced by a prefabricated mounting plate. The new control system was thus implemented in BOME (operation without manual intervention).

The work in the periphery included the replacement of all safety-relevant field devices. This also involved adapting the manostat bar and the piping to the differential pressure gauge.

The mechanical adaptations were carried out by a third part company, which was called in, instructed and coordinated by us.

Thanks to the newly installed HMI, the current status of the system is visible at a single view. In addition, the control behaviour of the burner, as well as that of the field devices, can be set, controlled and monitored. The greatest possible flexibility has been ensured here without restricting safety and functionality.

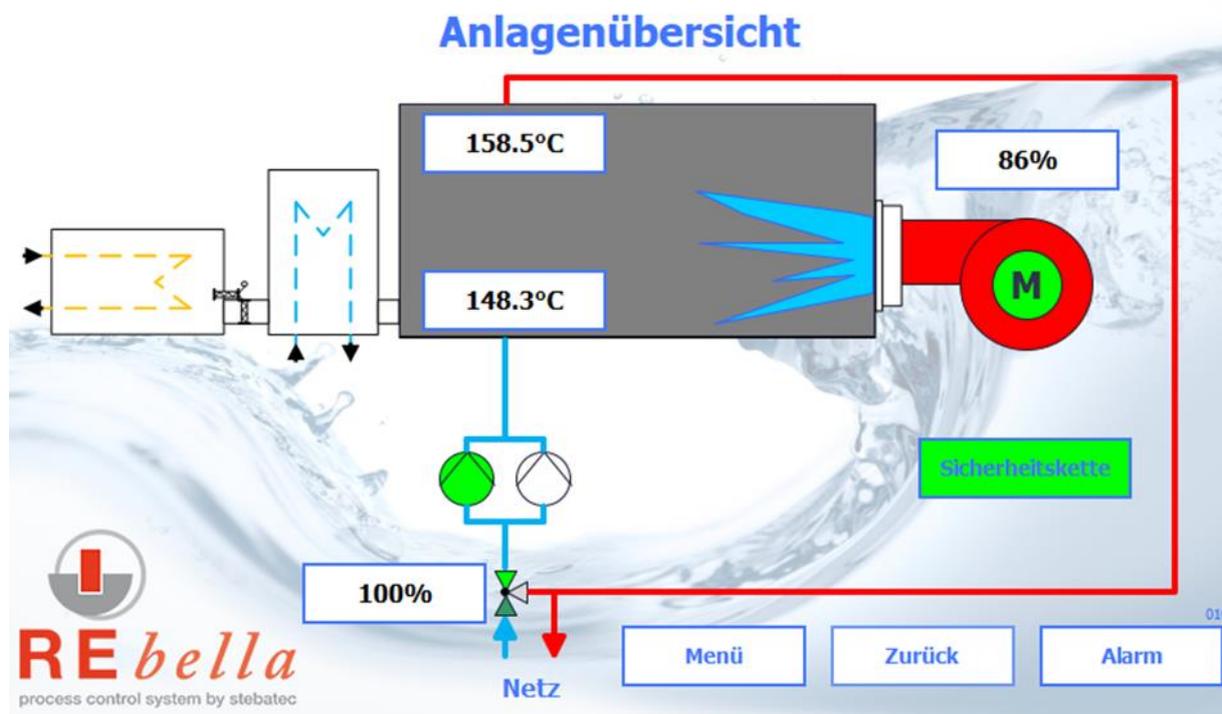


Figure 2: HMI presentation screen

The successful safety acceptance in cooperation with the SVTI (Swiss Association for Technical Inspections) and the Swiss Safety Center

rounded off the successful completion of the project and contributed to the customer's complete satisfaction.

« I am glad that we are now at the cutting edge of technology and that we have found a competent contact person for any problems » says Ter Haar Arjan, Technical Manager.