

Industrie Du Bois Vielsalm & Cie s. a. (IBV) Biomass-Fired Heating Plant

AUTOMATION SOLUTION & PROCESS VISUALISATION

Industrie Du Bois Vielsalm & Cie s.a. (IBV) is one of the largest sawmill industries in Belgium. For the plant in Vielsalm, IBV built a new biomass-fired heating plant for combined heat and power supply.

The new biomass-fired heating plant of IBV consists of two biomass boilers with a steam power of 44 t/h each. The boilers are fired with bark, wood chips, loppings and thinning material. Generated steam is transferred to a steam turbine, which drives a 20 MW generator.



Beside power supply for the Vielsalm sawmill, a part of the generated electricity is also supplied to the public grid.

In addition to power supply, the biomass power plant also delivers heat for various auxiliary systems such as timber and chips drying.

For the complete electric and electrotechnical components consisting of process visualisation, control hardware and control software, control cubicles and electrical installations, the Australian plant construction company Bertsch (Bludenz, Vorarlberg) had to decide on an appropriate partner.

Concerning the strict regulations and the highly levelled quality demands as well as the experience gained from previously realised projects, Bertsch decided again in favour of Sprecher Automation.

Sprecher Automation provided electric and electrotechnical systems for the biomass boilers 1 and 2 as well as for general plant parts such as feed water supply, steam bypass and many more.



The biomass-fired heating plant of IBV in Vielsalm

Beside hardware engineering, Sprecher Automation also developed software components for the plant covering control at PLC level as well as the complete visualisation software (SPRECON-V).

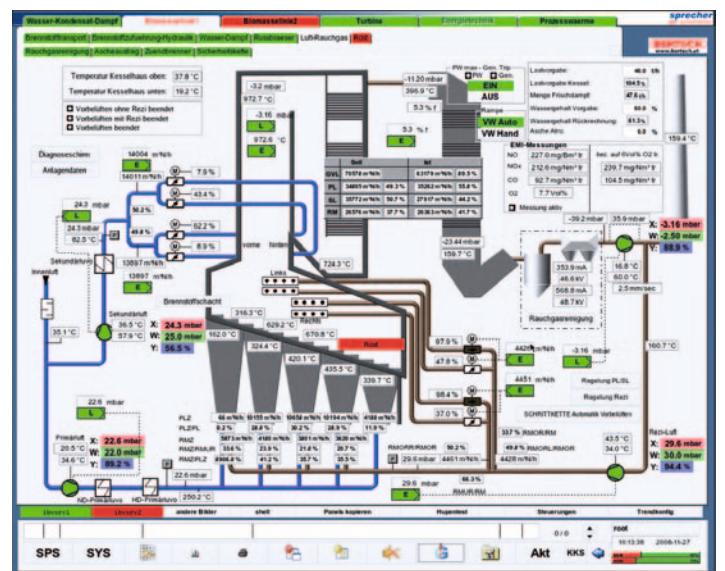
All security-relevant functions, which are essential for sustaining national and international boiler security regulations, were also engineered by Sprecher Automation at PLC level.

The SPRECON-V control center for control and monitoring of 12 programmable logic controllers was realised as a redundant server-client architecture.

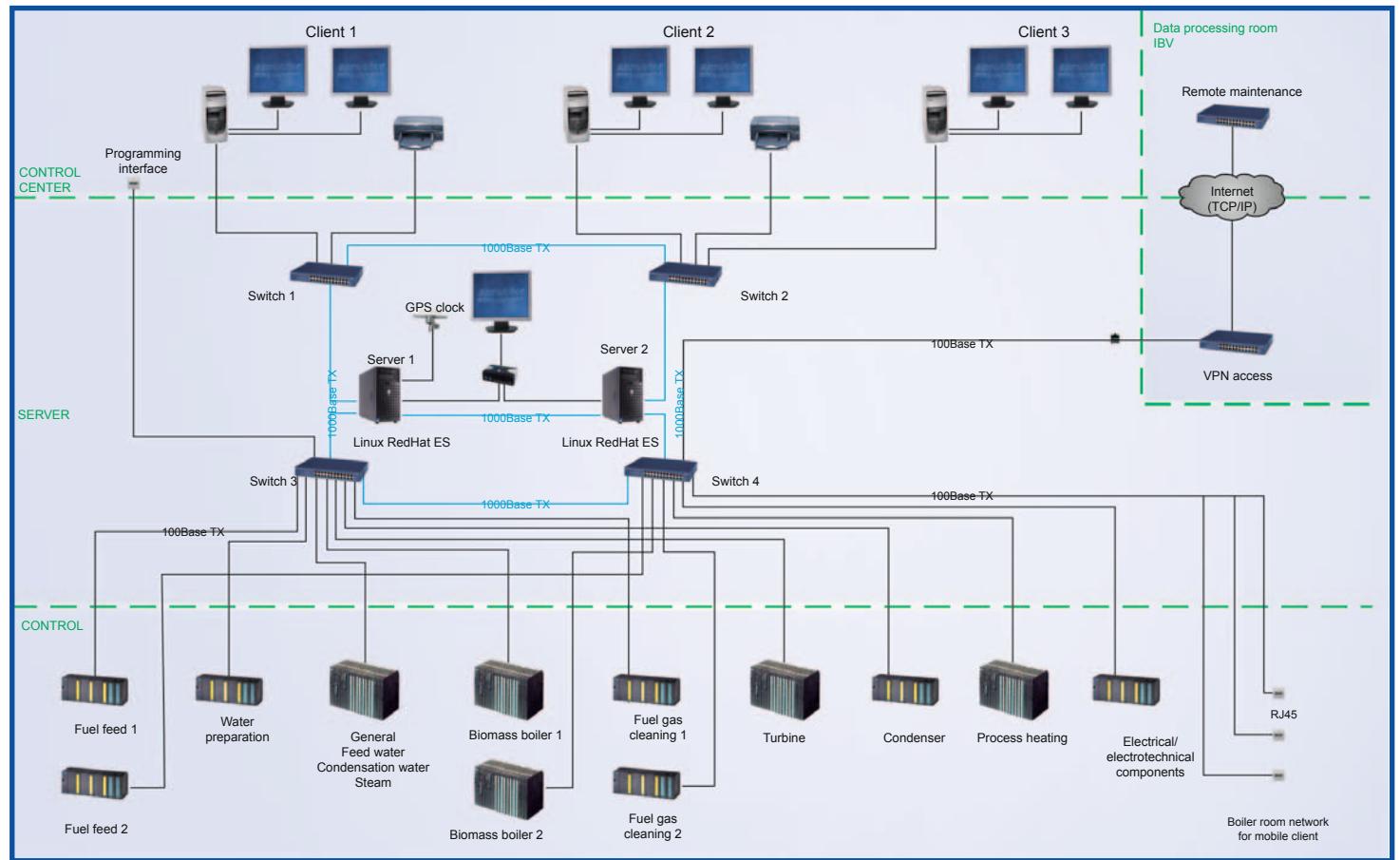
Furthermore, SPRECON-V provides comprehensive functions for archiving and data logging.

The new control system can be remotely operated via Internet for service and maintenance matters.

The biomass-fired heating plant of Industrie Du Bois Vielsalm & Cie s.a. was put into operation in March 2008.



Visualisation screen of a biomass boiler (fuel gas)



System architecture of the control system