

# PFLEIDERER Gütersloh

## Reference Story FuelOPT BA



Pfleiderer GmbH is one of Europe's leading manufacturers of wood-based materials and surface finishes with a total of 8 locations in Western and Eastern Europe. In Germany, the company is represented with five production locations with approximately 2000 employees. As an ecologically sustainable company, continuous improvement of energy efficiency is a high priority for Pfleiderer.

To supply the board production process with heat and steam, Pfleiderer Gütersloh operates a biomass combined heat and power plant for combustion of waste wood categories A1-A4, consuming about 16 trucks/day. The biomass fuel quality varies substantially regarding water content, calorific value and ash content. The project goal for Pfleiderer was to get an instrument with which the fuel quality parameters are detected directly during the unloading process. Quality control and billing were the economic targets, better knowledge of extraneous materials was the technical goal.

APOS developed the system type FuelOPT BA for Pfleiderer as the pilot customer. The system determines the water and ash content and the calorific value of each biomass supply during delivery - automatically and in real time. APOS has developed an application for full coverage of the fuel delivery process on the basis of its known NIR technology. Thus the whole process of weighing the truck, determination of calorific value, water content, ash content, a full fuel journal and management of settlement data are covered in the APOS application. FuelOPT BA also uses the automatic APOS classifier to distinguish A4 quality (e.g. railway sleepers) from other wood qualities to know the share of A4 material supplied and determine the calorific value with high accuracy.

The goal is obvious: Complete documentation of the quantity and quality of the biomass fuel delivered, quality and supplier assessment and billing to pay for energy rather than tonnage, e.g. by implementing a bonus/malus system. All instantaneously, without using a lab and at minimum costs.



Plant Pfleiderer Gütersloh



APOS probe installed



*„Finally we are able to analyze the biomass fuel already during delivery and understand what calorific value, water content and ash content the fuel has we receive. Using this information puts us in a position to use the calorific value as the basis for settlement rather than tonnage only.“*

- Dipl.-Wirtsch-Ing. Olaf Maasjost -