

# Biomass CHP Moers

## Reference Story ProcessOPT WA



The biomass CHP plant in the industrial park EUROTEC Moers is in operation since 2009. It provides about 21,000 megawatt hours of electricity and 70,000 MWh of heat in combined heat and power per annum. The heat produced is used as a heating feed into the district heating network of the Niederhein Duisburg / Dinslaken GmbH. The power generated is sufficient for the environmentally friendly supply of around 5,500 households.

The plant is fueled by energy crops, i.e. renewable resources, consisting of 100% natural and almost untreated material. In particular the fact that the fuel materials come only shredded/chipped but without further cleaning significantly impacts the fuel quality and has a high influence on water content and ash. The resulting ever changing calorific value and the high amounts of sand/ash make dealing with energy crops in CHP's demanding. High amounts of sand carried into the boiler lead to higher wear and tear and reduced availability.

This is where the APOS system ProcessOPT WA is used:

The system is used to permanently and online control and manage the fuel and create a complete documentation of the fuels and fuel qualities used. Water content, minerals (ash/sand) content and calorific value are monitored on the second, real time, all year round. No more waiting for lab results but online information. Moreover, the system is equipped with an automatic warning device that warns the plant team when e.g. the alarm value for ash content is exceeded. The team can react immediately and can change the fuel mix to avoid dirt peaks in the fuel flow. The APOS system contributes to a better average fuel quality and improved availability. In parallel, APOS transfers the measured values via the supplied OPC interface to a remote control room, where, in addition to the power plant operating data like power and steam production, now also fuel qualities are displayed and evaluated.



Plant Manager Wolfgang Blaj in the plant in front of the APOS unit



Biomass combined heat and power plant Moers



*„This is the first time that we have an instrument to fully oversee the fuel quality used in the plant. We can react immediately to fuel quality changes and we have a continuous fuel journal and documentation.“*

*-Wolfgang Blaj, Plant Manager-*