

# Use CalorVal BTU Analyzer for Waste Wood-to-Energy Plants

## Application Note

### **The Customer**

The company is a leader in the development and implementation of state of the art timber gasification.

### **The Process**

The company uses a gasification process that breaks down different types of waste wood such as wood chips, pallets, sawdust and other non-virgin wood and converts it into a clean producer gas. The producer gas fuels the turbine engines and produce electricity for the community.

### **The Problem**

The company had to verify that they were producing useable fuel. This fuel has a varying composition as well as tar. Environmental regulations require that the Calorific Value of the fuel be within 4-6 MJ/Nm<sup>3</sup>. They needed an analyser that would provide a real-time measurement of the Total Calorific Value of such a producer gas.

### **The Solution**

The company chose to install a CalorVal BTU Analyser on their process. The CalorVal completely burns the sample and therefore is a direct measure of Total Calorific Value. It is fully heated to 120°C to prevent condensation and minimize downtime due to clogging. It provides an accurate and continuous measurement of the BTU content in real time mode. In addition, the CalorVal is a rugged industrial design offering fast response and operating simplicity.

With the CalorVal in place not only is the company meeting environmental regulations but they have a better understanding of their process as well. They can now see their plant's performance and have learned what products are useful as fuels and what products are not. The management and operators are pleased with the CalorVal's performance and will be installing analysers in their new plant.