HEAT RECOVERY

## BIOMASS

PRIMARY FUELS SOLID RESIDUES LIQUID & GASEOUS RESIDUES



# **BIOMASS POWER PLANT UNTERRADLBERG, AUSTRIA**



H

ш

ш Н



## **BIOMASS POWER PLANT UNTERRADLBERG, AUSTRIA**



| Fuel                             | Wood Residues (solid),<br>Grinding Dust,<br>Waste Wood |
|----------------------------------|--|
| Low Heating Value<br>(min./max.) | 9.0 / 14.0 MJ/kg                                       |
| Fuel Throughput (min./max.)      | 6.2 / 16.0 t/h   |
| Rated Thermal Input              | 40 MW  |
| Electrical Power Output          | 10 MW  |
| Process Heat Output              | 3.5 MW   |
| Steam Capacity                   | 45 t/h   |
| Steam Temperature                | 452 °C   |
| Steam Pressure                   | 61 bar   |
| Feed Water Temperature           | 110 °C   |
| Rated Flue Gas Volume            | 73,300 m <sup>3</sup> i.N./h                           |
| FG-Temperature                   | 170 °C   |
| Operating Approval               | AVV  |
| Type of Boiler                   | Natural Circulation                                    |
| Year of Commissioning            | 2006   |

## THE TASK

For the chip board factory in Unterradlberg, Egger planned the construction and operation of a biomass-fired power plant for the lowcost generation of electricity together with process steam for the chip board production plant. Both were to be obtained from waste wood and the residual materials left over from the production process.

The order was placed to Standardkessel Baumgarte in November 2004.

#### THE SOLUTION

The solution implemented by Standardkessel Baumgarte with a grate stoker and a system for the injection of saw dust into the steam generator furnace ensures, on the one hand, efficient utilisation of the residual material accumulating and, on the other hand, a contribution to sustainable environmental protection by means of the use of "renewable energy sources" for the generation of the power for station service.

Downstream of the 4-pass steam generator, which is working according to the natural circulation principle, a dry flue gas treatment plant is installed.

The plant was taken into operation in May 2006.

#### SCOPE OF SUPPLY

**Biomass Boiler Plant** 

- Fuel Reception and Transport
- Grate System, Boiler
- Flue Gas Treatment
- Electrical Instrumentation and Control System
- Auxiliary Equipment

#### **ENGINEERING SERVICES**

- Engineering incl. Licensing Engineering and Engineering for official Permits
- Assembly and Commissioning
- Trial-Run

