

FROM COAL TO BIOMASS HODONIN, CZECH REPUBLIC



Biomass is an alternative renewable energy source, which shall contribute to replacement of conventional fossil fuels. The biggest Czech utility company ČEZ announced corporate program for emission reductions and partial conversion of CFB boiler in Hodonin from lignite into biomass was selected as a pilot project. Coal mines in the region were closed and therefore it was the first choice of ČEZ for the biomass conversion. UNIS Power was awarded as EPC contractor to rebuild one CFB boiler from lignite firing into minimum 60% biomass fired boiler.

The project included:

- Biomass receiving and unloading area
- Underground screw conveyors on storage yard
- New silos in boiler house
- Conveyor scale
- Transportation and feeding of biomass into the boiler
- Firing process design sizing review
- Modification of boiler management system

The contract has been signed on a turnkey principle including installation, commissioning and testing.

Already first tests confirmed UNIS Power proper design approach and the biomass ratio has been even continuously increased up to final 100% of the boiler thermal capacity during follow up testing.

All the equipment has been supplied in compliance with Czech standards at full customer satisfaction. The boiler is continuously operated at full load with 100% biomass firing only.



Power Plant Hodonin

Client

ČEZ a.s. Hodonín, Czech Republic

Year of Completion

2008

Boiler data

- 1 x 170 t/h
- 96 bar(a) superheated steam
- 510 °C
- CFB lignite/biomass fired boiler

UNIS Power scope of works

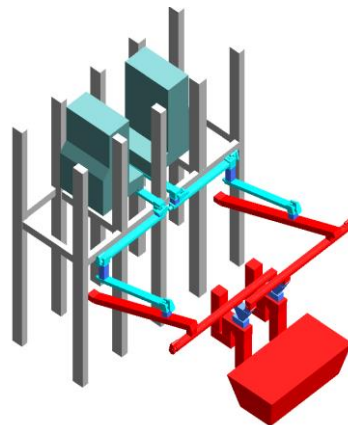
CFB boiler conversion from coal to biomass firing including design, manufacturing, site delivery and commissioning of biomass receiving and unloading area, screw conveyors, silos, conveyor scale and boiler management system modification.



Biomass unloading yard



Biomass receiving area with underground screw conveyors



Conveyors from silos to boiler 3D model