

Plants for difficult to handle bulk materials

Cheng Loong, Vietnam YEAR OF CONSTRUCTION 2016

DESCRIPTION

After three successfully completed projects with a customer, SHW-SHS received the order of a fuel supply system in a power plant for the site in Vietnam. Combustion of residues from paper production/wastepaper processing achieves partial substitution of fossil fuels.

SHW-SHS has designed a fuel supply system for a circulating fluidised bed boiler that provides energy in the form of electricity or steam with the combustion of residues. In this case, these are:

- Paper sludge
- Organic sludge
- Waste wood.

The system comprises:

- Two silos with rotor unit and two removal screws
- Two TKF as collection conveyors
- Two blade airlocks, special design for sludge
- Two introduction screws into the fluidized bed boiler

The fuel supply system was designed with wear protection and low maintenance needs. All components were freely adjusted to the project in their design (material selection, wear protection, design, drive output) and are fully adjusted to customer needs. The silo prevents bridge formation of the bulk material by the tried and tested SHW-SHS relief systems.

The integrated rotor unit in the silo ensures storage and dosed output. Precise dosage of the fuel is ensured by the sophisticated concept. #So is the high plant availability through redundant removal and redundant fuel supply to the fluidised bed boiler.

Both lines are designed for waste wood and sludge applications. With this design of the fuel supply system, SHW-SHS offers the option of a large number of residual combustion and fuel mixes.

The considerable cost savings are to be highlighted, since high disposal costs of residual materials are dispensed with and additional energy in the form of fossil fuels is saved.

