Plants for difficult to handle bulk materials

TYCC, Taiwan

YEAR OF CONSTRUCTION 2019

DESCRIPTION

SHW-SHS received the order for a fuel supply system in a power plant in Taiwan in 2018. The target of this system is saving fossil fuels.

SHW-SHS implements this by combining recycling products from the industry and sludge from a paper factory.

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

- Tyre chips
- Paper fibre residues/de-inking sludge

The system comprises:

- Two silos with rotor unit and three removal screws
- Two transport screws
- Three blade airlocks, including one with special sludge design
- Three emergency shut-off sliders
- Three infeed screws
- Three cooling screws for cooling the bed ash from approx. 950 °C to approx. 120 °C

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 arrangement of the fuel supply at the front and rear can be flexibly chosen and permits optimal fuel dosage.
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.

SHW-SHS stands out from other provides by its precisely adjusted machine design. It is important to us to design the machine precisely adjusted to the bulk material and to align it with this. This permits optimal dosage.