

# Plants for difficult to handle bulk materials

## Gwangju, South Korea YEAR OF CONSTRUCTION 2016

### DESCRIPTION

SHW-SHS received the order for a fuel supply system in a power plant in South Korea in 2015. Combustion of alternative fuels permits 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:

- Replacement fuel (RDF)
- Replacement fuel (Fluff)

The system comprises:

- Three silos with rotor unit and two removal screws
- Three dosage belt scales with dedusting filter
- Three blade airlocks
- Three pneumatic conveyor systems for introduction into the boiler
- System control

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 fuel supply (three input points) is variable and permits optimal fuel distribution in the boiler due to the flexible line routing of the pipes.

The integrated rotor unit in the silo ensures storage and dosed output.

Precise gravimetric dosage of the fuel is ensured by the dosage belt scales. The same applies to optimal and flexible line routing by pneumatic transport. The system can be used for many residue combustion types with this design.

The control, also supplied by SHW-SHS, also permits recipe-like fuel supply from different bulk materials and, as a result, fuel value adjustment to the boiler operation.

SHW-SHS stands out from other providers by its precisely adjusted machine design. It is important to us that the machine is designed precisely based on bulk material and customer wishes. We are available to the customer as a competent partner throughout the product life cycle.

