Plants for difficult to handle bulk materials

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DESCRIPTION

After submission of an economical, efficient and operationally safe concept, SHW-SHS received the order for a fuel supply system for new construction of a boiler for the Taiwan site.

Saving of fossil fuels such as coal, natural gas or crude oil was useful. SHW-SHS implements this by combustion of

- RDF 3 (Fluff)
- RDF 5 (Pellets)
- TDF (tyre chips)

SHW-SHS planned the supply system for a new power plant construction. This was implemented in close coordination with the manufacturer of the power plant and further suppliers of the project and customer.

The system comprises:

- A replacement fuel storage with two migratory screws as acceptance
- A vertical trough chain conveyor
- Three supply silos with one rotor unit and two output screws each
- Two horizontal trough chain conveyors (among the three silos)
- Two blade airlocks
- Two compensators
- Two manual flat sliders
- Two boiler infeed screws

To ensure the required dosage accuracy, the fuel is transported into the horizontal trough chain conveyor by removal screws.

They are controlled via the screw revolutions, to avoid power fluctuations in the combustion chamber.
All components were adjusted to the project in their design (material selection, wear, design, drive output) and are fully adjusted to customer needs.
The system was designed with a special view to economic efficiency in terms of investment and operating costs. In the supply silos, bridge formation of the bulk material is prevented by the tried and tested SHW relief systems.

The system downstream of the supply silos was designed to ensure that 50% of the maximum fuel consumption is ensured at unilateral supply.

SHW-SHS stands out on the market with its integrated concept from planning, to delivery, to commissioning and after-sales service. It is available to the customer as a competent partner across the entire product life cycle.