

# Plants for difficult to handle bulk materials

## MB24, Indonesia YEAR OF CONSTRUCTION 2014

### DESCRIPTION

SHW-SHS received the order for a fuel supply system in the largest Asian paper factory in Indonesia in 2013. The goal is supplying the bark arising as a waste in paper production to combustion, which saves fossil fuels (coal) in steam generation and improves the CO<sup>2</sup> balance.

SHW-SHS integrated the fuel supply system in a boiler system already in operation. For this, the existing system of a competitor was removed first. It was unable to store, transport, dose and introduce the complicated, long-fibre bark material (quick-growing tropical trees) into combustion.

The facility (paper factory) was measured by SHW-SHS with a 3D laser scanner. The holders served as a basis for the design and specific placement of the conveyor system in the existing building and the boiler steel structure.

The system comprises:

- Two silos with rotor unit and two removal screws
- Two tandem dosage screws with dosage containers and fill level measuring system
- Two trough chain conveyors to transport the coal and bark towards the boiler
- Two blade airlocks
- Two introduction screws

The fuel supply system was built in stainless steel design with wear protection according to static requirements and low-maintenance.

All components were 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. Precise dosage of the fuel is ensured by the installed rotor unit in cooperation with the tandem dosage screws. The system concept is redundantly designed. This way, failure of the supply line to the boiler can be compensated with the second supply line. It warrants high plant availability.

The system was designed and built to permit decades of operation.

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. We face great challenges and find the matching solution concept.