

Plants for difficult to handle bulk materials

Leutkirch, Germany YEAR OF CONSTRUCTION 2013

DESCRIPTION

After many successfully completed projects in this location, SHW-SHS received the order for a fully automatic truck acceptance in a large wood processing factory. This was implemented in close coordination with the operator.

The objective was automated transport and storage of chopped wood material for further use for chipboard production or combustion of the material to produce energy in the form of electricity or steam.

Individual machines were sensibly linked into a functional overall system in this based on their tasks. Grid chips, or alternatively wood chips, are delivered by truck, accepted on acceptance conveyor belts, pre-sorted by the disc sifter and transported to the bucket elevator by tandem screw.

The storage silo is filled via bucket elevator to permit interim storage of the bulk material in the silo. Removal from the hopper uses a large recirculation screw on a trough chain conveyor.

The bulk material is taken over by a downstream facility at the output point.

The system comprises:

- Housing with extraction to minimise dust formation during unloading of the trucks
- Acceptance conveyor with 2 m width in belt design
- Disc sifter for separating coarse goods downstream of the acceptance conveyor
- Tandem screw as supply element to the bucket elevator

- Bucket elevator 30 m to handover
- Screw conveyor for supplying the concrete silo Ø18 m
- Large recirculation screw for removal from the silo
- Trough chain conveyor for further transport of the bulk material to downstream facilities
- Entirely independent automation system

The system was designed for low dust and low noise to meet locally required dust and noise emission values alike.

All components were customised to the customer's needs in their designs (material selection, wear, design, drive output).

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

