



Automatic transport of tobacco bales. JT International Germany GmbH

KÖHL Maschinenbau AG realized an extremely efficient system for JTi for the transport and storage of tobacco bales. First, the tobacco bales are separated from the cartons. A divider separates the tobacco bales vertically. These are stored on special stainless steel pallets in the high-bay racking systems. Because of the very different qualities, the tobacco bales must be supplied to the process in such a way that the required production mixture can be produced accordingly.

Intelligent Solutions: From supplying to conveying to storing.

The tobacco bales on the special pallets are supplied to two production lines. Every one of the special pallets is equipped with a transponder. The product data are scanned in by means of a barcode scanner and submitted to the warehouse management system.

The jack-up platform is centrally suspended and either raised or lowered via two frequency-controlled lift chains. The vertical conveyor is designed for a frequency of 90 pallets per hour. Accumulating systems are utilized as roller conveyors. The accumulation is realized by means of electromagnetic intermittent sprockets. One light pushbutton and one intermittent sprocket are installed per segment. The overall length of the roller conveyor is realized by means of a continuous tangentially operating chain.

Double-strand chain conveyors are used for cross conveying of the pallets. The chains of the dimension 1" DIN 8187 are equipped with bridges that are covered with Vulkolan. This provides for antislipping transport of the stainless steel pallets. The pusher system operates electro-pneumatically by means of guides with integrated pneumatic cylinders.

Two-mast designs are utilized for the storage and retrieval units for the high-bay warehouse. Since the pallets have a continuous bottom, a telescope platform grabs the pallet from underneath. Two downholders secure and center the tobacco bale while being transported on the pallet. A large display shows all essential data for the entire order.



Motor driven empty
container storage.



The specially designed portal gripper removes the telescope carton from the tobacco bale.



The actual tobacco bale is fed to the divider and divided vertically at a precise 50:50 ratio.



The pallets are lined up one after the other by means of accumulating roller conveyors as requested and supplied to the production in this sequence.



Two pneumatically operating pusher systems push the tobacco bale from the special pallet.