

Vacuum Handling in the Commissioning Department



Project information

Branch	Woodworking and sales
Area	Commissioning
Customer	dieda Systembauteile GmbH & Co. KG, Egenhausen (D)
Application	Commissioning and handling of cardboard boxes
Schmalz-products	Vacuum tube lifter JumboErgo 85
Customer benefits	<ul style="list-style-type: none">- Rationalisation- Reduced handling and transport times- Prevention of damage

The problem

In the commissioning department, wooden parts packed in cardboard boxes have to be moved from a conveyor belt and stacked on pallets. The unwieldy and heavy boxes should no longer be handled

manually by several persons, but moved ergonomically with the aid of a lifting device.

Requirements

- Easy operation
- Flexible handling of cardboard boxes with the dimensions 1500 x 300 x 200 mm to 2900 x 300 x 300 mm
- Box weights 20 to 80 kg
- Box properties: made of soft cardboard which can easily be deformed in spite of being hooped with plastic strips
- Very wide range of different boxes
- Low-cost solution

The solution

- A handling system with the vacuum tube lifter JumboErgo 85 for loads weighing up to 85 kg
 - Double gripper whose suction pads can be adjusted along the length of the beam in order to grip boxes of all sizes and - shapes
 - Vacuum generated by a high-power blower SBL (400 V)
 - Slewing column crane SKJ 110 for loads weighing up to 110 kg
- The slewing column crane can either be secured to the floor with anchor bolts or screwed to a base plat. It has a slewing range of 270° and jib with a length of 4 m. Persons can move freely within the working area of the crane.

Customer benefits

- Fewer personnel needed: all commissioning activities can be carried out by a single person
- Prevention of transport damage
- Ergonomical and safe working procedures
- Increased productivity
- Reduced handling and transport times
- Low-cost investment



The JumboErgo permits precise positioning of the cartons on the table.



The two suction pads can be adjusted longitudinally for safe handling of cartons of all sizes.



Soft or even deformed cartons are no problem for the Jumbo.