

Vacuum handling for more efficiency



Project information

Industry	Wood
Sector	Manufacturing furniture, etc.
Customer	Vöhringer GmbH, Trochtelfingen (D)
Application	Loading and unloading a two-place CNC machining centre
Schmalz products	JumboErgo 140 vacuum tube lifter used in combination with an aluminium crane system
Customer benefits	<ul style="list-style-type: none">- 50% increase in productivity- Health prophylaxis- Handling workpieces without damage- One unit for various plate surfaces and formats

The task

Until now, Vöhringer's Homag two-place machining centre was manually loaded with raw materials, and the milled wooden boards were manually removed. Depending on the format and weight of the workpieces, at least two people were

needed for this job. This led to high personnel costs and coordination difficulties. In addition, the machine could not be used to its full capacity. This resulted in machine downtime.

Requirements

- Increased productivity through reduced machine downtime and lower personnel costs
- Ergonomic and safe loading and unloading of machines
- Wooden boards and MDF sheets with a

- format of up to 3200 x 1400 mm, a thickness of up to 28 mm and a weight of up to 60 kg
- No damage to the workpiece surface during transport
- One unit for various formats

Solution

The JumboErgo 140 vacuum tube lifter for horizontal handling of loads up to max. 140 kg. The tube lifter is equipped with a double suction pad. The suction pads can be freely positioned along the longitudinal beam to suit the workpiece format. As a special feature, the unit has an elongated operating unit for ergonomic and accurate loading and unloading of the double machine table. The elongated operating unit also ensures that the user is a safe distance away from the table, which is

necessary to avoid work-related accidents.

Schmalz aluminium single-beam crane system for loads of max. 140 kg. This easy-to-move crane system enables ergonomic operation of the vacuum tube lifter. The crane dimensions of 7000 x 5000 m provide the large working area required for the application.



The JumboErgo vacuum tube lifter being used to load a CNC machining centre with chipboards



Removing a processed wooden board from the machine table using the vacuum tube lifter JumboErgo

Customer benefits

- Efficient loading and unloading of machines by one person, reduces machine downtime and increases productivity by 50%
- Ergonomic handling of plates ensures the safety of employees and reduces

- work-related accidents
- Damage-free pick-up and release of workpieces ensures high product quality
- Safe handling of unmilled boards and pre-cut parts with a single unit