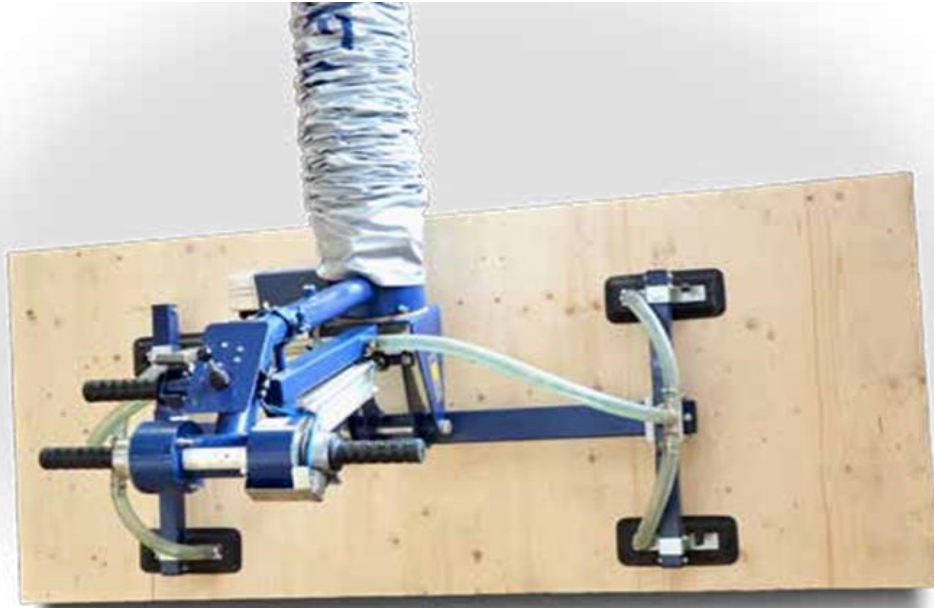


## Vacuum Lifting



Furniture, partitions, solid structural timber, kitchen, prefab house, construction

**transport,** solid wood, laminated timber, sandwich panels, plywood,

particle board plants, **turning,** carpenters, window installation, caravan

roofers, **swing,** boards, vehicle construction, door makers, veneering, truck and trailer, stair builders, OSB panels pallets

Lift Hold & Separate



Magnetic solutions for all industries

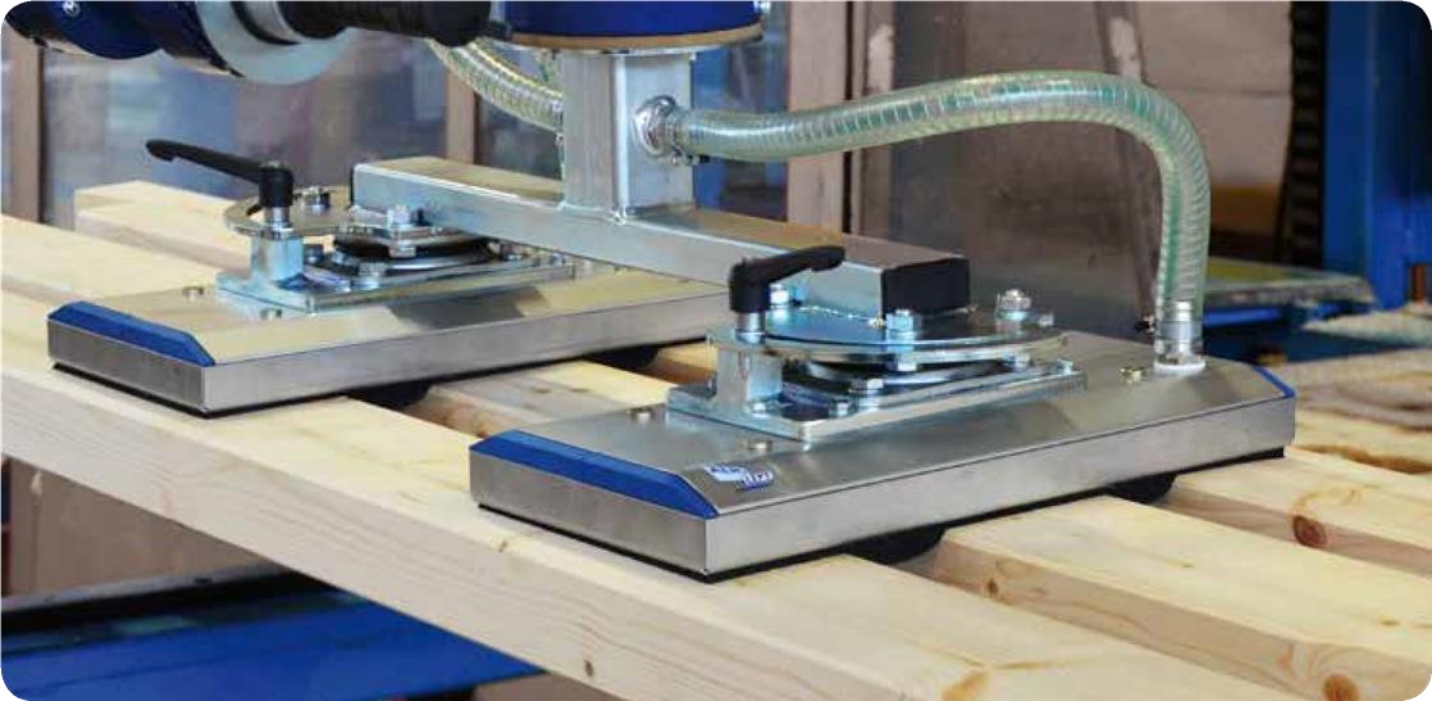
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## Vacuum Grippers

For moving large quantities in no time!





## The vacuum revolution!

Do you think that vacuum lifts are only designed to handle smooth, clearly defined materials? The VUSS vacuum grippers from Aero-lift prove otherwise. The latest generation of vacuum gripper with the patented vacuum valve system also allows for handling various goods or wooden elements with cut-outs or recesses without requiring any changeover.

The wood processing industry has been using vacuum lifting systems for many years to handle materials ranging from raw materials to the end products. The vacuum plates with the unique flow valves pose very flexible solutions for the wood processing industry. The vacuum systems are used both for handling unmachined materials like boards and/or planks as well as finished pieces of furniture – unpacked or packed in cartons.

The basic principle is simple. The robot attached the vacuum plate to the product to be transported instead of grabbing it. In such cases, robots do not have to recognize whether the products are holes, are slanted or comprise several parts. With the Aero-lift Vuss, which uses flow control valves to activate and deactivate many small suction points, a vacuum is generated and the goods are moved safely in a fully automated manner to their destination.

This allows you to move large quantities of materials of various lengths and shapes quickly and cleanly, thus saving you a lot of time when it comes to logistics and the loading of equipment or the automated stacking of materials in the panel form. Be it for automated operation, flange-mounted onto the robots arm or manually controlled at the tube lifter, the VUSS vacuum grippers provide reliability, flexibility and effectiveness for your application.

The vacuum grippers are ready to work even in dirty environments where the products to be moved are coated with sawdust and dust

## Quick overview of all benefits

Reasons why Aero-lift vacuum grippers are the ideal Solution for handling your lumber.

- ✓ **Patented vacuum valve system comprising a wide variety of different valves lowers energy consumption by 50%**
- ✓ **Modular setup, allows for individual, application specific vacuum gripper systems.**
- ✓ **High Cycles**
- ✓ **Reliable & stable lifting without loss of performance due to dirty conditions.**
- ✓ **No surface damage**
- ✓ **Flexibility - lifting various objects without tool changeover or reprogramming**
- ✓ **High quality product**
- ✓ **Lightweight construction**
- ✓ **Low overall height to ensure effective use - even in tight spaces**

## Wood Processing and Furniture

Individual solutions – for rotating, pivoting & turning

### Slewing & turning lifter

Be it manually slewing up to 90° by means of a pneumatic vacuum generation and the ecomatic automated energy-saving module or continuously variable turning up to 180° thanks to the electric motor, the slewing and turning lifters do not only make moving objects easy but also the ability to process both sides.

Whether checking both sides of a panel for damage during quality control or applying veneer to both sides of wooden panels the Aero-lift turning lifters make such tasks child's play thanks to the electric slewing gear. Panels weighing several hundred kilograms can be easily turned effortlessly at the press of a button.

The manual sliding valve with safety interlock and electronic monitoring of vacuum and power supply ensure absolute safety while on job.



### Box Module

Even finished products like cabinets, housings and boxes or pre-assembled parts as for instance in the mobile home industry can be "grabbed" gently on the sides and transported via crane to final assembly or packaging for shipment.

The suction plates can "grab" the sides of the components as a result of the modules specific configuration. That ensures a convenient and damage-free handling of components.

In this case, it does not matter whether the product to be transported is lying horizontally or is upright. Aero-lift lifters can grab the parts and move them where they need to go.

The automatic warning module monitors the vacuum and power supply. The vacuum box module can be easily adjusted to the size of the objects to be moved for different internal components.



## Furniture Industry

### Tube lifter with VUSS vacuum gripper

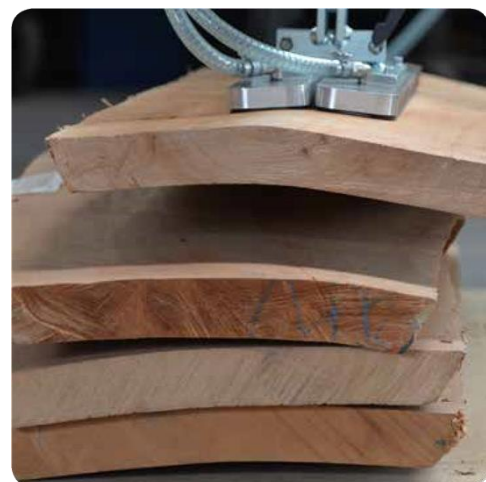
The ingenious combination in individual handling of lumber! Aero-Lift combines the advantages of a flexible tube lifter with the considerable versatile characteristics of the patented VUSS vacuum grippers and has thus developed a unique unit for the quick processing of wood parts of diverse quantities, dimensions and shapes. For instance, the VUSS tube lifters offer the optimum solution for stair builders when it comes to handling stringers with milled out portions. A variety of wood and furniture elements can be transported without requiring any additional refitting, as the VUSS adapts to the contours of every workpiece. There is no set up time necessary thanks to alternating the suction system. A safe and reliable handling is ensured by the patented valve system, even if the products to be moved have holes or milled out portions. Where other vacuums fail, our VUSS tube lifter with vacuum grippers can impress by showing off its strengths.



### Handling of trimmed timber

Wood is a natural product which changes after sawing. When storing, the wood still swells and forms into a bowing. Simple standard suction plates cannot lift such asperity anymore.

So, what could we do? Aero-lift invented two slim, swinging and handling suction plates from the standard one for rough wood. That allows the adjustment to the deformed workpiece. Even highly deformed wood can be transported easily, quickly and precisely.



## Aero-Lift Peripherals

Additions that make our lifting equipment even more effective.

### The pillar-mounted slewing crane:

An Aero-Lift pillar mounted slewing crane with an electric chain hoist connecting the vacuum lifter enables to reach a great working area and disposes of a slewing area of 270°. We also can offer you a complete solution consisting of the pillar mounted slewing crane with an electric chain hoist and the fitting vacuum lifting device. There is a variety of crane systems with different carrying capacities and extension length.



### The articulated arm jib

An articulated arm jib with pillar, wall or floor mounting allows for navigating around unwanted contours such as columns or machines in the work area and can enable the use of vacuum tube lifter even in spite of unfavourable space conditions. The maximum height can be utilised as a result of the special design of the articulated arm jib. Hoses hanging down and preventing work are no longer necessary thanks to the vacuum line integrated in the jib arm.



### The rail system

Low-friction aluminium profiles and a carriage made of high performance plastic for quiet and smooth running even with heavy loads. If convenience and smooth action are important, we can integrate running gear to facilitate movement on a rail system. The low net weight and the high load bearing capacity of aluminium profiles make the rail system an optimal solution for transporting loads with the aid of a vacuum lifter or vacuum tube lifter.



### The electric chain hoist

In addition to vacuum lifters, we also deliver the appropriate hoisting gear. The electric chain hoist is equipped with a plug-in connector for connecting a vacuum lifter. With this plug-in coupler system, the lifter can be easily detached and re-attached to the crane. The electric chain hoists are available in a wide range of load-bearing capacities and hoisting speeds. The crane control can also be integrated in the operator's console of the vacuum lifter.

