

AERO-LIFT WOODHANDLING



furniture partitions kitchen
construction solid structural timber
prefab house **transport** solid wood
laminated timber sandwich panels plywood
particle board plants **turning** lumber
carpenters window installation caravan
roofers **swing** boards
vehicle construction door makers
veneering truck and trailer
stair builders OSB panels pallets



AERO-LIFT VACUUM TUBE LIFTER

Lumber transport – great flexibility!



Protects people & materials

Wood is an extremely sensitive material that must always be handled with care in order to prevent scratches or damage, regardless of its stage of processing.

The vacuum tube lifter from AERO-LIFT not only helps preserve materials but also protects your employees and finances.

The one-hand operation for the „suction-lift-lower-release“ function makes work quick and simple – without requiring much effort and with an amazing feeling of lightness.

You will look forward to the moment, when you attach the lifter to a wooden panel and lift it for the first time. As if on its own, it floats in the air to be turned and guided and transported in a flexible manner.



Quick overview of all benefits

The most important arguments for deciding in favor of a vacuum tube lifter from AERO-LIFT are:

- ✓ **Easy-to-use ‚suction-lift-lower-release‘ function**
- ✓ **One-hand operation directly from the handle by one employee only**
- ✓ **Absolutely material-friendly handling thanks to vacuum**
- ✓ **Turned and swivelled manually or pneumatically**
- ✓ **Maximum safety thanks to top-notch quality and processing**
- ✓ **All vacuum tube lifters certified according to EN 14238**





Specifications

Vacuum tube lifter for horizontal transport

Item No.	Type	Load-bearing capacity	min. size (mm)	max. size (mm)
1080501	MULTI-LIFT 50	50 kg	250 x 350	3000 x 1500
1080506	MAXI-LIFT 75	75 kg	250 x 350	3000 x 1500
1080507	MAXI-LIFT 100	100 kg	350 x 650	4000 x 2000
1080508	MAXI-LIFT 150	150 kg	350 x 650	4000 x 2000
1080509	MAXI-LIFT 200	200 kg	350 x 650	4000 x 2000
1080510	MAXI-LIFT 250	250 kg	420 x 800	4000 x 2000
1080511	MAXI-LIFT 300	300 kg	420 x 800	on request

Vacuum tube lifter manual 90°-slewing

Item No.	Type	Load-bearing capacity	min. size (mm)	max. size (mm)
1080512	MAXI-LIFT 75-90°-Man	75 kg	420 x 320	2500 x 1250
1080513	MAXI-LIFT 100-90°-Man	100 kg	350 x 650	3000 x 1500
1080514	MAXI-LIFT 160-90°-Man	160 kg	420 x 800	3000 x 1500

Vacuum tube lifter pneumatic 90°-slewing

Item No.	Type	Load-bearing capacity	min. size (mm)	max. size (mm)
1080512	MAXI-LIFT 75-80°-Pne	75 kg	420 x 320	2500 x 1250
1080513	MAXI-LIFT 100-80°-Pne	100 kg	350 x 650	3000 x 1500
1080514	MAXI-LIFT 160-80°-Pne	160 kg	420 x 800	3000 x 1500

Quick and effective handling of wooden panels and elements:

Worktops
Lumber (edged / unedged)
Tabletops

Coreboards
Joists
Laminates

AERO-LIFT TIP

Further information relating to the AERO-LIFT vacuum tube lifters can be found in the corresponding brochure or at aero-lift.de.

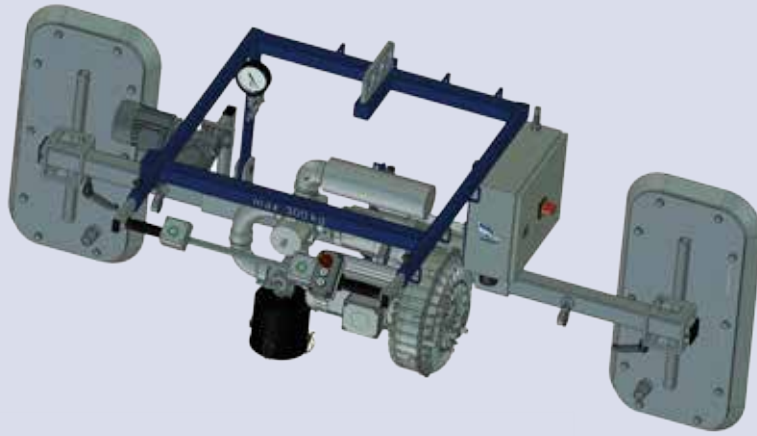


AERO-LIFT AERO-PORO

Convenient handling of wooden panels!



Diverse wooden panels max. 20,000 x 2,500 x 90 mm, 3000 kg



No upper limit!

How do you normally transport large OSB or particle boards? That usually requires multiple employees and work steps in order to transport heavy and bulky goods from A to B.

Thanks to AERO-PORO vacuum lifters from AERO-LIFT, such problems are now history!

Now your existing crane can be made much more effective by adding an AERO-PORO lifter. The crane operator can now lift, transport, swivel and deposit workpieces all on his own. Safely without damage and assistance.

Tailored to your requirements, our AERO-PORO lifters are able to transport very large panels with ease and can even generate a reliable vacuum when handling porous materials.



Quick overview of all benefits

Here you will find out how you can make your handling process of lumber more effective with AERO-PORO:

- ✓ **Use your existing transport infrastructure**
- ✓ **Handling of workpieces by the crane operator on his own**
- ✓ **Absolutely material-friendly handling thanks to vacuum**
- ✓ **Trouble-free lifting of porous materials as a result of a high-performance blower**
- ✓ **Maximum reliability due to flywheel mass and electronic warning devices**
- ✓ **The vacuum lifter complies with the latest safety standards according to EN 13155**





Specifications

AERO-PORO horizontal transport

Item No.	Type	Load-bearing capacity	min. size (mm)	max. size (mm)
1030768	AERO 300/1L-P	300kg	900 x 500	4100 x 2100
1030771	AERO 600/2L-P	600kg	1400 x 850	5500 x 2100
1030772	AERO 900/3L-P	900kg	2500 x 850	5500 x 2100

AERO-PORO 90°-slewing

Item No.	Type	Load-bearing capacity	min. size (mm)	max. size (mm)
1030769	AERO 300/2L-90°-P-NB	300kg	1400 x 850	5600 x 3200
1030770	AERO 450/3L-90°-P-NB	450kg	2500 x 850	5600 x 3200

Recommended wherever there is a need to transport or swivel large, heavy and air-permeable panels:

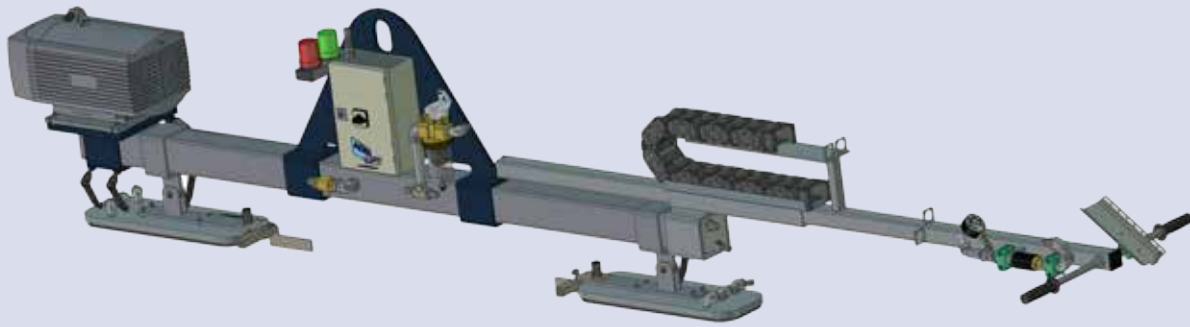
- Particle boards
- MDF boards
- Multiplex panels
- Hard wood boards
- Prefabricated wooden parts



AERO-LIFT **AERO-TIMBER**

The work horse for heavy wooden planks!





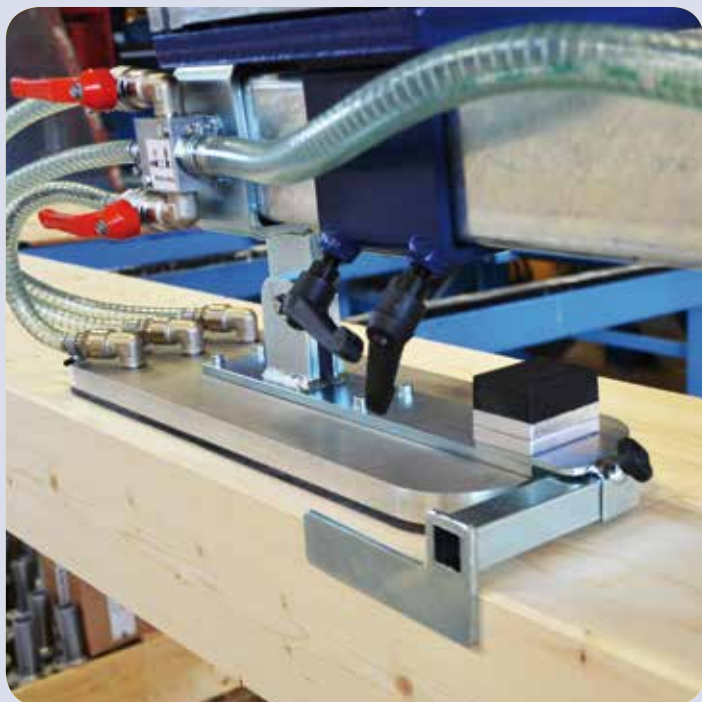
An all-rounder for cranes!

Transporting very long and very heavy wooden planks has always been one of the most challenging tasks when it comes to handling wood. AERO-LIFT makes this difficult task seem like child's play with its AERO-TIMBER vacuum lifter.

With the AERO-TIMBER mounted on your crane, only one person is needed to transport extra-long planks to wherever they are required.

The blockable, three-chamber suction plates ensure that planks of various widths and weights can be processed without any changeover.

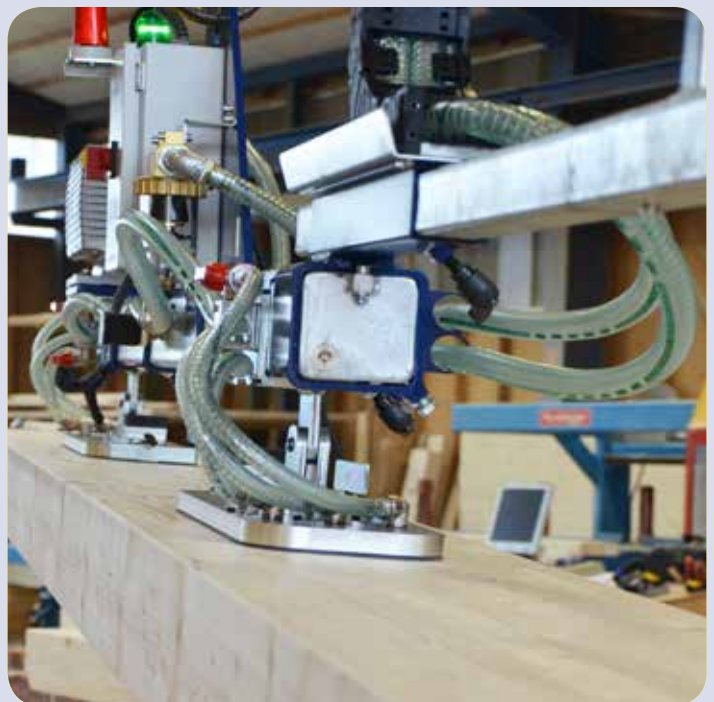
Thus, a centuries-old problem vanishes practically into thin air.



Quick overview of all benefits

AERO-TIMBER offers maximum reliability and many other advantages over conventional wood handling processes:

- ✓ **Minimized risk even with heavy and hard-to-manage materials**
- ✓ **Best quality – from the cross-beam to the suction plates – always ensures a good feeling during transport**
- ✓ **Powerful pump made in Germany always provides sufficient vacuum**
- ✓ **A pull-out operating handle ensures that the employee always has an optimum view of the workpiece and an ergonomic working position**
- ✓ **Safety due to an electronic warning device with monitoring of vacuum level and power supply**





Specifications

AERO-TIMBER

Item No.	Type	Load-bearing capacity	min. size (mm)	max. size (mm)
1030741	AERO 300 2M 3K St	300kg	1420 x 80	6000 x 400
1030743	AERO 300 2M 3K	300kg	1420 x 80	6000 x 400
1030742	AERO 500 4M 3K St	500kg	2850 x 80	8000 x 400
1030744	AERO 500 4M 3K	500kg	2850 x 80	8000 x 400

Recommended for the handling of long and heavy joists and planks:

Joists

Planks

Wood laminate beams

Wooden elements

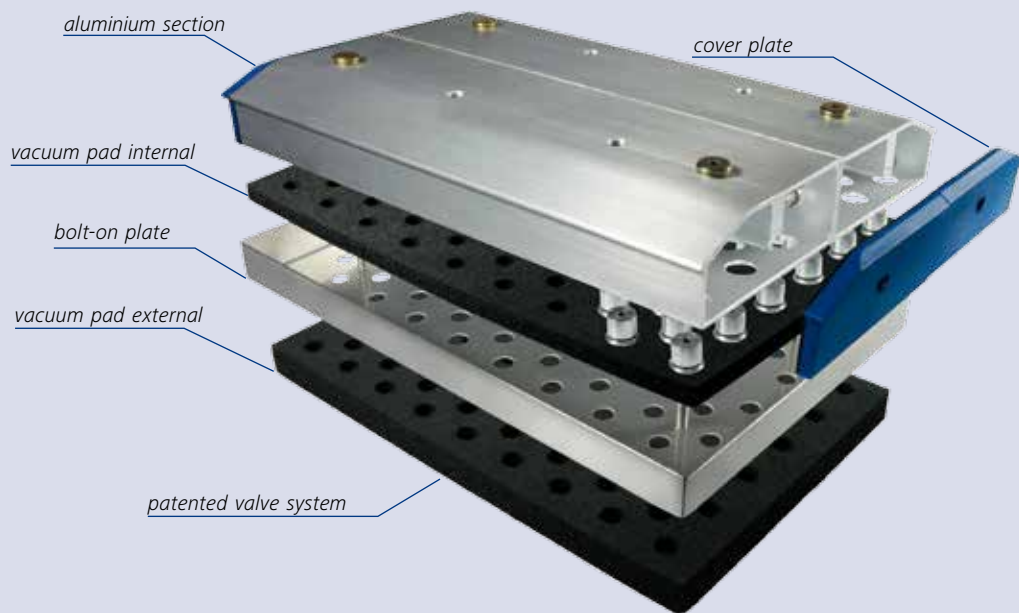
Block planks



AERO-LIFT 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. This latest generation of vacuum grippers 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 attaches a vacuum plate to the product to be transported instead of grabbing it. In such cases, robots do not have to recognize whether the products have 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 panel form. Be it for automated operation, flange-mounted on a robot's arm or manually controlled at the tube lifter, the VUSS vacuum grippers provide reliability, flexibility and effectiveness for your applications.

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 your energy consumption by up to 50%**
- ✓ **Modular setup allows for individual, application-specific vacuum gripper systems**
- ✓ **High cycles**
- ✓ **Reliable and stable lifting without any loss of performance due to dirty conditions**
- ✓ **Material-friendly lifting process that does not put stress on the objects being moved. Thus there is no surface damage!**
- ✓ **Flexibility – the system can lift various objects without having to be reprogrammed or tool changeover. For instance, not only the workpiece but also Euro pallets, paper as intermediate layers, etc., if necessary**
- ✓ **Only high-quality, durable materials are used, which also considerably decrease the time needed for setting up robots and make processes even more effective in addition to decreasing operating time**
- ✓ **Made in Germany. Optimum quality due to the materials selected and workmanship**
- ✓ **Lightweight construction to keep the acquisition costs of the robots as low as possible for you**
- ✓ **Low overall height to ensure effective use even in tight spaces**

VACUUM SOLUTIONS FOR WOOD PROCESSING AND FUR

Individual solutions – for rotating, pivoting and turning



Slewing and turning lifter

Be it manually slewing up to 90° by means of 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 from AERO-LIFT 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 easily be turned effortlessly at the pressure of a button.

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



Box module

Even finished products like cabinets, housings and boxes or preassembled 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 module's 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 to where they need to go.

The automatic warning module monitors the vacuum and the 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 (see pg. 3) with the considerably versatile characteristics of the patented VUSS vacuum grippers (see pg. 15) 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 vacuum lifters fail, our VUSS tube lifter with vacuum grippers can impress by showing off its strengths.



Handling of trimmed timber

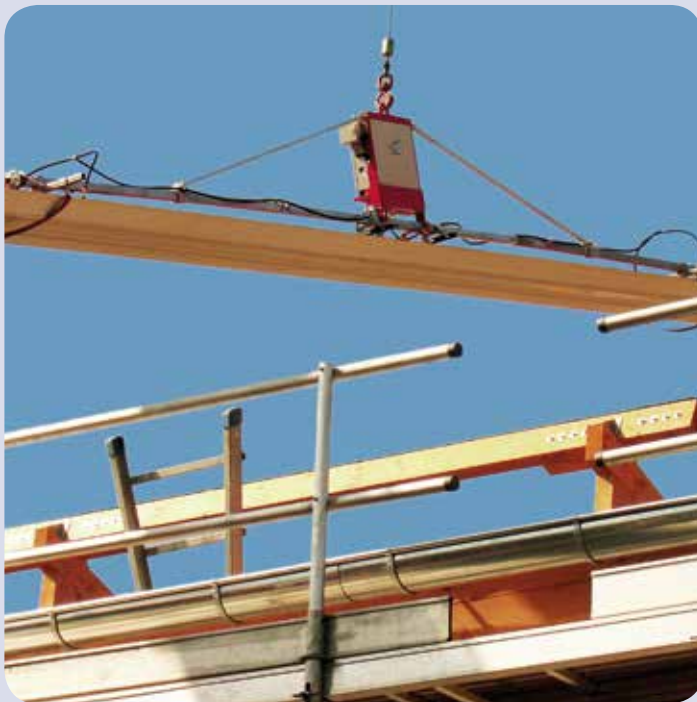
Wood is a natural product which changes after sawing. When storing, the wood still swells and forms into a bowing. Simple standard suction plates can not lift such asperity anymore.

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

AERO LIFT CLAD-BOY®
PARTNER OF
CRAFT INDUSTRIES

AERO-LIFT CONSTRUCTION SITE SYSTEMS

High-tech assistance designed for outdoors



AERO-LIFT TIP

Further information relating to the AERO-LIFT CLAD-BOY® can be found in the corresponding brochure or at aero-lift.de.

CLAD-BOY®

Never before was it so easy to install roofing and wall elements quickly, efficiently and in a material friendly manner than with AERO-LIFT's CLAD-BOY®.

The mains-free vacuum lifter is able to work all day long thanks to its high-performance battery.

The AERO-LIFT panel lifter, CLAD-BOY® model, satisfies the latest safety regulations according to EN 13155 for vacuum lifters used on building sites and thus ensures maximum safety for the installation of roofing and wall elements.

The compact, rugged design suited specifically for building sites and space-saving transport make the CLAD-BOY® a good assistant that you can take wherever you like and is even available for rent from AERO-LIFT.

The basic unit can be used for installing both roofing and wall elements.

Quick overview of all benefits:

- ✓ Safe, material-friendly handling
- ✓ Maximum installation output yet with reduced manpower
- ✓ Functionally relevant structural components protected or reinforced
- ✓ Energy-saving, vacuum-controlled motor circuit and vacuum monitoring with digital vacuum sensor
- ✓ UV-resistant suction plates with very high service life
- ✓ Elasticity even at minus temperatures!

Especially useful:

- ✓ Space-saving transport thanks to special Storeboy
- ✓ Individual accessories in the equipment box of rugged quality suited for construction sites
- ✓ Tool-free adaption options
- ✓ Special long-lasting rechargeable battery for up to 100 work cycles and built-in charger
- ✓ Possible with a load-bearing capacity of up to 800 kg



CLAD-LIFT

The revolution in window installation!

With the aid of these window robots, you can install windows, glass panels, doors and roofing and wall elements quickly, precisely and back-friendly.

The CLAD-LIFT is very maneuverable and suited for various terrains thanks to the front drive wheels. The powerful electro-hydraulic system has a continuously variable speed regulation of all functions and is suited for heavy duty in the industry and on construction sites. The simple control panel with coiled cable and ergonomic control handle with safety buttons make the CLAD-LIFT an extremely effective mobile vacuum lifter.

The CLAD-LIFT pays for itself in no time as a result of the time and manpower saved and its outstanding maneuverability in spite of heavy loads and good handling characteristics. The CLAD-LIFT is available in many variations with a load-bearing capacity from 350 kg up to 1000 kg.



CLAD-TEC

Fast window transport - even at great heights!

What would a wooden window frame be without the suitable pane? With the aid of our mains-independent vacuum lifter, you can transport glass panes on construction sites even at great heights.

The pivoting and slewing vacuum lifter is a tremendous aid when it comes to installing heavy and unwieldy glass panes. The UV-resistant suction plates ensure a scratch-free transport. The powerful vacuum unit, a dual-circuit system and an acoustic warning system guarantee maximum safety when used on construction sites.

Powerful batteries and a built-in charger allow for a flexible, mains-independent use of the vacuum lifter at the installation site. The lifter can be easily transported as a compact unit thanks to the removable suction plates and extensions and reassembled in practically no time. The CLAD-TEC is available with a load-bearing capacity of 500 and 1000 kg.

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 a vacuum tube lifter even in spite of unfavorable space conditions. The maximum height can be utilized 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 aluminum 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 aluminum 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 coupling system, the lifter can be easily detached and reattached to the crane. The electric chain hoists are available with a wide variety of load-bearing capacities and hoisting speeds. The crane control can also be integrated in the operator's console of the vacuum lifter.

AERO-LIFT TIP
 Are you interested in our extensive range of components?
 Request our component catalog at www.aero-lift.de

AERO-LIFT COMPONENTS

The flexible modular system for every demand



Vacuum suction cups

Flat, oval and bellows suction cups for handling wooden parts.



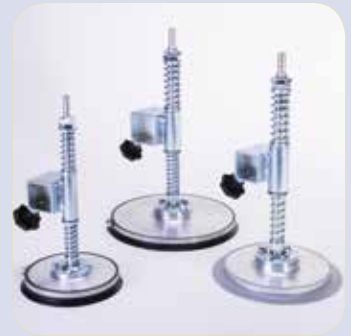
Vacuum generators

Vacuum pumps, vacuum blowers and vacuum ejectors for generating vacuum for the handling of parts in the wood processing industry.



3-chamber suction plate

Oval suction plate with blockable suction chambers for different material widths.



Suction plates

For the transport of lumber and furniture elements during production and shipping.



Suction plate with separating air equipment

with separate vacuum and compressed air chamber for porous goods requiring careful handling like particle boards, MDF boards and fiber boards to facilitate separation.



Warning modules

Electronic monitoring of vacuum level and power supply for vacuum lifting equipment.



Vacuum valves

Electromagnetic valves, pulse valves or mechanically actuated valves for the gripping / releasing functions or for activating the suction plates.



Vacuum filter

To remove dirt and dust from the suction air and to protect the valves and vacuum generator from soiling.

AERO-LIFT Vakuumtechnik GmbH

Tested quality made in Germany



Lifting equipment & components

For more than 25 years, AERO-LIFT Vakuumtechnik GmbH has been manufacturing lifting equipment designed to transport very large loads with the aid of a vacuum in a manner that is safe for materials and employees.

In this regard, we do not only rely on standard products but also offer variations and special solutions that are optimally suited to your task. From miniature electronic components to heavy-weight aircraft elements, from rock slabs to flour sacks – lifting equipment from AERO-LIFT can be used to lift, rotate and move almost all types of materials.

Our product range also includes a large number of components such as seals, ejectors and valves that can be used to optimally equip your machinery used, e.g., in factory automation.



Production & service

AERO-LIFT Vakuumtechnik GmbH is a capable, medium-sized company. The people living in the Swabian Alb region, not far from the famous Hohenzollern Castle (photo), are known for their diligence, ingenuity and precision. These virtues are an integral part of our company – and our aim is to live up to this reputation and improve ourselves on a daily basis.

That explains why the products of AERO-LIFT are of the highest standards, made in Germany, with a high level of vertical integration in the region. When selecting materials and suppliers, we attach great importance to optimum quality and a common goal - to impress our customers!

Contact our technical sales personnel, should you have any questions relating to our products and industry solutions.

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AERO-LIFT

We are here to help you –
even locally!

AERO-LIFT international



To locate a representation or a contact person for your area –
in Germany as well as in many countries around the globe, visit www.aero-lift.de.

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