

# WOODHANDLING

Transporting, turning, swivelling: intelligent vacuum lifting technology for the wood working and furniture industry.



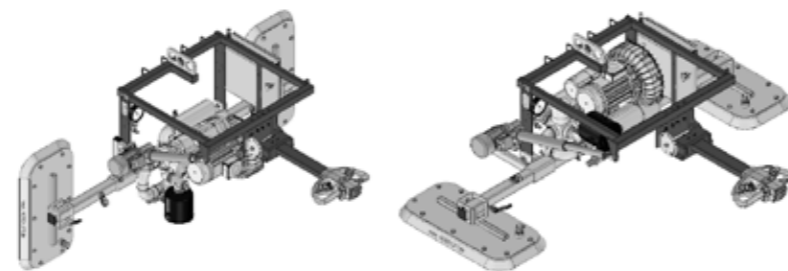
**LIFTING**  
**FIXING MOVING**  
VACUUM LIFTING TECHNOLOGY

# AEROPORO

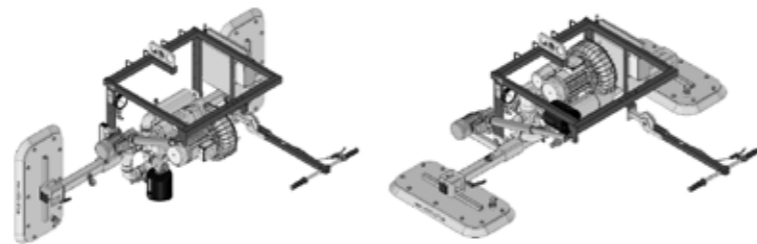
## NO UPPER LIMIT: THE VACUUM LIFTING DEVICE FOR WOOD PLATES

The **AERO-PORO** is perfect for furniture manufacturing, joinery, carpentry, any kind of woodworking or woodtrading companies where sheets or panels have to be moved regularly. With this device panels up to approx. 5.10 x 2.50 m are lifted effortlessly by only one person - regardless whether these panels are porous or airtight.

### AERO PORO 300/2L-90°-P-NB



**Suction/Release/Swivel**  
with ergonomic handle with lifting magnet [Article No. 1030782]



**Suction/Release/Swivel - radio controlled**  
with angle function handle and latch pin [Article No. 1030783]  
or  
**Suction/Release/Swivel/Crane - radio controlled**  
with angle function handle and latch pin [Article No. 1030784]

- Recommended wherever you need to transport or swivel large, heavy and porous panels, e.g. panel boards, MDF, HDF or OSB boards, solid wood panels, multiplex panels, hard wood boards, prefabricated wooden parts, gypsum fibre-board, polystyrene boards, plastic boards and much more.
- Thanks to flexible installation to various cranes and rail systems you are able to use your existing infrastructure.
- An extendible and two-hand control handle with angle function guarantees an ergonomic position of the worker and a good view onto the item.
- Due to the high-capacity vacuum blower with a trailing flywheel, that generates vacuum, the AERO-PORO even lifts panels that are porous and very heavy.
- The crane control can be integrated into the device. Therefore all functions (lifting, lowering, moving, suction, release, 90° swivelling) can be operated comfortably and safely.

## TECHNICAL SPECIFICATION



Device	Article No.	Net Weight (kg)	Total height (mm)	Length main beam (mm)	Lifting capacity* (kg)	Goods to be transported min. - max. length (mm)	Goods to be transported min. - max. width (mm)
<b>AERO PORO 300/1L-P</b> with rigid handle	1030768	144	795	-	300*	900 - ca. 4100**	500 - ca. 2100**
<b>AERO PORO 600/2L-P</b> with rigid handle	1030771	190		2000	600*	1600 - ca. 5500**	
<b>AERO PORO 900/3L-P</b> with rigid handle	1030772	210			900*		
<b>AERO PORO 300/2L-90°-P-NB</b> with rigid handle	1030769	215			300*		
<b>AERO PORO 450/3L-90°-P-NB</b> with rigid handle	1030770	260		720	450*		
<b>AERO PORO 300/2L-90°-P-NB</b> Suction/Release/Swivel with ergonomic handle with lifting magnet	1030782	215	ca. 735	2000	300*	1600 - ca. 5500**	500 - ca. 2100**
<b>AERO PORO 300/2L-90°-P-NB</b> Suction/Release/Swivel radio controlled with angle function handle and latch pin	1030783	205					
<b>AERO PORO 300/2L-90°-P-NB</b> Suction/Release/Swivel radio controlled with angle function handle and latch pin	1030784						

\* Lift force at a vacuum of 20 %. The load capacity is reduced by 15 kg/10 mbar (1%) achieved end vacuum.  
\*\* Depending on the positioning of the suction plates (vertical or horizontal).



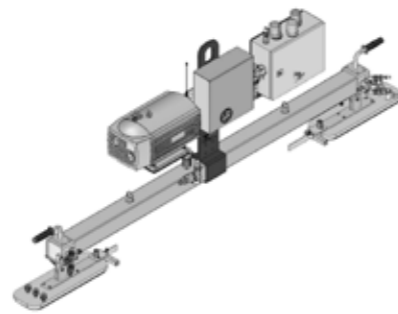
# AEROTIMBER

## ITS STRENGTH IS THE LENGTH: THE VACUUM LIFTING DEVICE FOR PLANKS

The **AERO-TIMBER** is designed for long material up to approx. 13 m in length and approx. 48 cm in width, e.g. glued-laminated timber, solid structural timber, rough sawn beams, but also unedged wood. Due to the three individually lockable vacuum chambers in each suction plate, frames from only 8 cm in width and not-edged wood with core cracks in the middle of the board can be lifted.



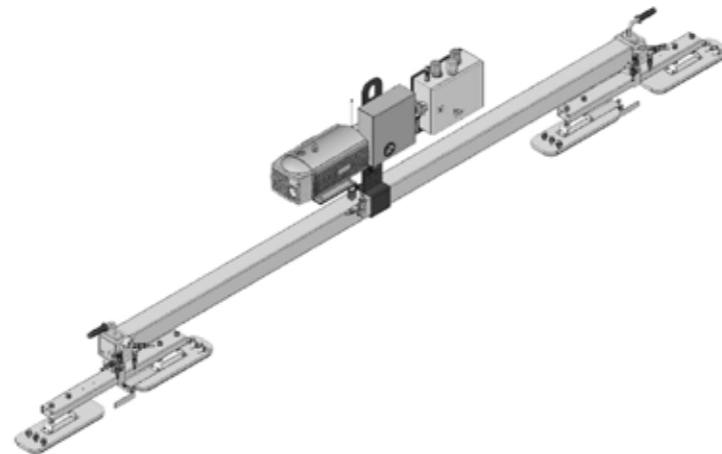
### AERO TIMBER 300/2M 3K



**Suction/Release radio controlled** [Article No. 1030785] or  
**Suction/Release/Crane radio controlled** [Article No. 1030786]



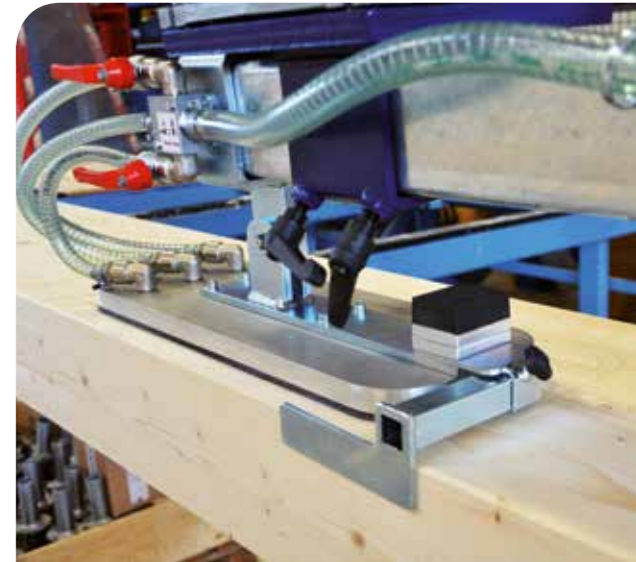
### AERO TIMBER 600/4M 3K



**Suction/Release radio controlled** [Article No. 1030787] or  
**Suction/Release/Crane radio controlled** [Article No. 1030788]



## TECHNICAL SPECIFICATION



- Recommended for the handling of long and heavy joists and planks, e.g. wood laminate beams, wooden elements and block planks - no matter if the material is solid structured, rough or has cracks.
- The vacuum lifting device AERO-TIMBER minimizes risks such as material damages and staff's injuries even in case of transporting heavy, bulky and overlong wood material.
- A pull-out operating handle ensures that the worker always has an optimum view on the workpiece and an ergonomic working position.
- The lockable, three-chamber suction plates enable that planks of various widths and weights can be processed without any loss of time due to retooling.
- The powerful pump made in Germany always provides sufficient vacuum in order to handle heavy goods.
- An intelligent electronic warning device with monitoring of vacuum level and power supply guarantees maximum reliability and safety all the time.
- The crane control can be integrated into the device. Therefore all functions (lifting, lowering, moving, suction, release, 90° swivelling) can be operated comfortably and safely.

Device	Article No.	Net Weight (kg)	Unit width at the pump (mm)	Total height (mm)	Length main beam (mm)	Lifting capacity* (kg)	Goods to be transported min. - max. length (mm)	Goods to be transported min. - max. width (mm)
<b>AERO TIMBER 300/2M 3K</b> Suction/Release radio controlled	1030785	150	260	ca. 980	2200	300**	1200 - ca. 13000	80 - ca. 480
<b>AERO TIMBER 300/2M 3K</b> Suction/Release/Crane radio controlled	1030786							
<b>AERO TIMBER 600/ 4M 3K</b> Suction/Release radio controlled	1030787	255	280	ca. 1115	4000	600***		
<b>AERO TIMBER 600/ 4M 3K</b> Suction/Release/Crane radio controlled	1030788							

The middle suction chamber has a width of 80 mm.  
\* Lift force at a vacuum of 60%. If the outer suction chambers are closed, the carrying capacity of the unit is \*\*120 kg, \*\*\* 240 kg.



# VACUUM TUBE LIFTERS

## LESS STRAIN ON MAN AND MATERIAL: WOODHANDLING WITH VACUUM TUBE LIFTERS

Wood is an extremely sensitive material that must be handled with care in order to prevent scratches or damages, regardless of its stage of processing. The **vacuum tube lifters** from AERO-LIFT do not only gently handle materials but also protect your employees, improve the flow of materials and therefore creates an added value.

- Recommended for wooden panels, worktops, lumber (edged or not edged), tabletops, coreboards, joists, laminates and much more.
- Handling materials with vacuum is **highly gentle** to the sensible commodity wood - no matter if it is processed or rough.
- Just one person can lift, fix and move workpieces **without effort** and in an ergonomic kind of way - with an amazing feeling of lightness.
- The **two-hand operation handle** for the „suction-on-lift-lower-release“-function makes work quick and simple.
- Turning and swivelling of goods to be transported can be done **manually or pneumatically**, depending on the vacuum tube lifter's construction.
- An optionally integrated **quick-change clutch** allows a wide range of suction plates to be changed without tools within a few seconds. For example, a suction plate for panels can be replaced by a vacuum gripper plate (see next page). Two applications, one tool - without long times of retooling.
- A maximum of flexibility is given by intelligent **peripheral solutions** from AERO-LIFT. By using a pillar-mounted slewing crane, an articulated arm jib or a whole rail system, the vacuum lifters can cover wide working areas.



## TECHNICAL VARIATIONS



### Vacuum tube lifter for horizontal transport

Article 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°-swivelling

Article 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 80°-swivelling

Article Nr.	Type	Load-bearing capacity	min. size (mm)	max. size (mm)
1080515	MAXI-LIFT 75-80°-Pne	75 kg	420 x 320	2500 x 1250
1080516	MAXI-LIFT 100-80°-Pne	100 kg	350 x 650	3000 x 1500
1080517	MAXI-LIFT 160-80°-Pne	160 kg	420 x 800	3000 x 1500





# VACUUM GRIPPER

## MOVING LARGE QUANTITIES IN NO TIME: FLEXIBLE HANDLING WITH VUSS

The latest generation of **vacuum gripper** with a patented vacuum valve system allows handling of various goods or wooden elements with cut-outs or recesses without requiring fo retooling.

- Recommended for work pieces with holes and slots such as stair cases or pallets as well as for lifting and moving several goods at the same time. Even more boards, planks or pieces of furniture - unpacked or in boxes - are moved with vacuum gripper systems.
- Offers a maximum of **flexibility**: the system lifts various objects without having to be reprogrammed or a tool changeover. Not only the workpiece but also Euro pallets, paper as intermediate layers etc. can be handled.
- VUSS is the abbreviation for „Vacuum Unit Sensing System“. The principle is simple: The suction plate gently attaches to the product instead of grabbing it. Therefore, e.g. robots do not have to recognize whether the products have holes, are slanted or comprise several parts. The AERO-LIFT VUSS 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.
- The **smooth suction plates** adapt themselves to the material without pushing it. They are resistant towards wear and tear and easy to change.
- A **low overall height** ensures effective usage even in tight spaces.
- Overall, VUSS system solutions offer the following **advantages**: shortened set-up time, healthy employees, measurable cost savings and an increased added value.



# INDIVIDUAL SOLUTIONS

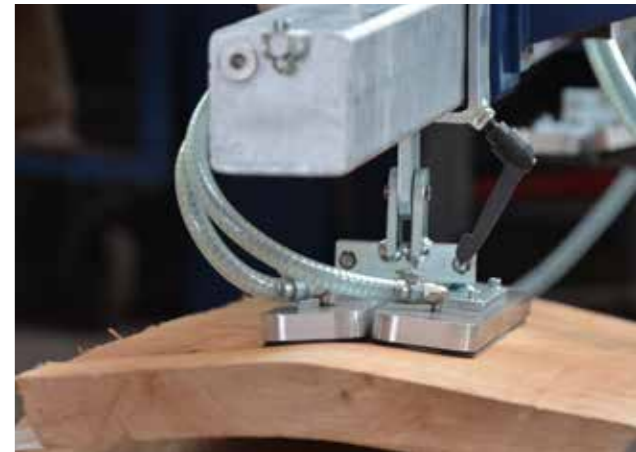
## SWIVELLING AND TURNING LIFTERS

Be it manually swivelling 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 swivelling and turning lifters from AERO-LIFT do not only make moving objects easy but also enable 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 these tasks as easy as winking. Panels weighing several hundred kilograms can effortlessly be turned by pushing a button. The manual sliding valve with safety interlock and electronic monitoring of vacuum and power supply ensure absolute safety while on the job.



## HANDLING 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- AERO-LIFT invented two slim, swinging and hanging suction plates for rough wood. That allows an adjustment to the deformed work piece. Even highly deformed wood can be transported easily, quickly and precisely with vacuum technology.



## VACUUM BOX GRIPPER

Even finished products like cabinets, housings and boxes or preassembled parts (e.g. in the mobile home industry) can be grabbed gently on the sides. A convenient and damage-free handling of components via crane to its final assembly or to the packaging for shipment is ensured. Furthermore, it does not matter whether the product to be transported is lying horizontally or stands upright. AERO-LIFT lifters seize the goods and move them to where they need to go. The „vacuum box module“ is individually adjusted to the component's construction, so that the device is mutably applicable on different goods.





# CLADBOY2.0 CLADTURN CLADBOARD

## LIFTING, MOVING, BENEFITTING: AERO-LIFT PROFESSIONAL EQUIPMENT

When it comes to safe lifting and moving, AERO-LIFT is the first choice of many skilled tradespeople and construction companies. Our solutions are deployed on construction sites worldwide, where they ensure safe, efficient work conditions. Founded in 1992 our focus has always been on know-how and quality German engineering - and you can count on this advantage for years to come.

### More robust and more versatile than ever before: CLAD-BOY 2.0.

The CLAD-BOY 2.0 is extremely easy to operate by remote control. It can lift and move different loads without any modification or retooling. This translates to plenty of time saved as well as improved safety. Indeed, the CLAD-BOY 2.0's flexible suction plate automatically adapts to any cargo, thus ensuring safe transportation at all times. Lifting panels of 400 kg and length of 18 m (roof) or 14 m (wall) has never been this easy.



### Turning heads: The CLAD-TURN.

The CLAD-TURN lets you place sandwich panels and trapezoidal sheets up to 18 m in length on the roof or a wall. Now, here is the trick: You can pick up panels and sheets directly from their stack and position them as desired with no manual effort. Indeed, the CLAD-TURN can take elements weighing up to 400 kg and rotate them electrically by up to 180°. Precise rotations in positive or negative positions are likewise possible. As a result, working with the CLAD-TURN is not only quick and efficient, it also greatly reduces your work.



### Setting the project in motion: The CLAD-BOARD.

Glass panes, windows, sheets or sandwich elements up to 400 kg on walls: the CLAD-BOARD lifts and moves anything. It can rotate 360° in both directions and can pivot from horizontal to vertical - and vice versa. The unprecedented suction plate with four independent suction chambers always moves your cargo safely and accurately.



## WE ARE HERE FOR YOU: AERO-LIFT SALES INTERNATIONAL

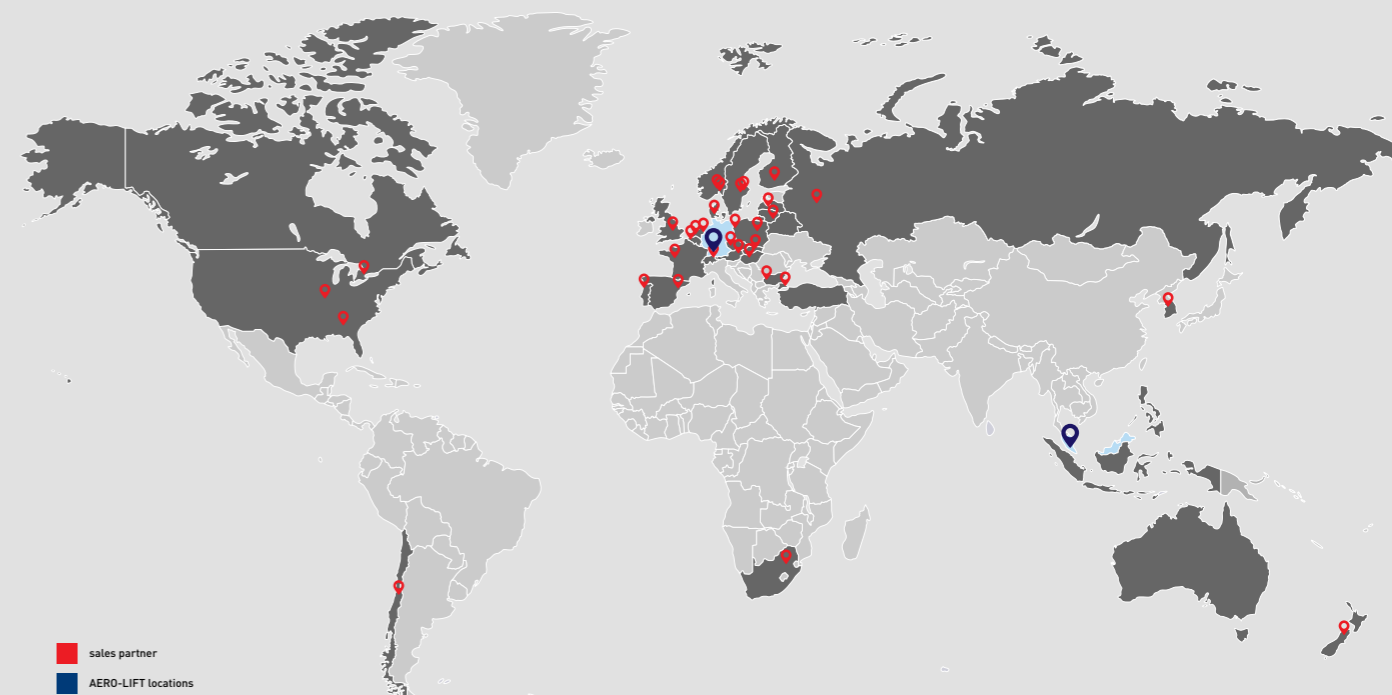
**Represented in over thirty countries:  
Supporting you all over the world.**

Our worldwide sales network of local field representatives and trade partners ensures quick and competent information and advice - wherever you are, at any time.

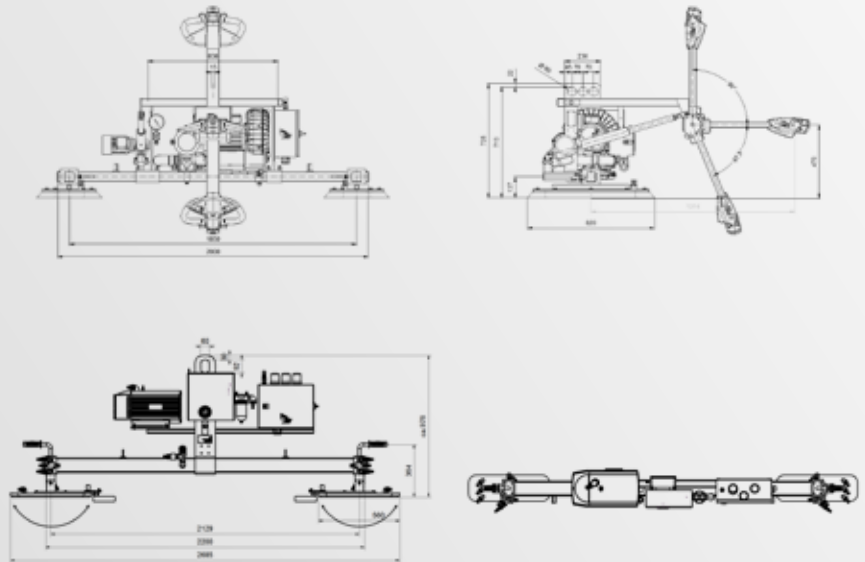
Locate your nearest AERO-LIFT sales partner in the map below or use the QR-code to our website and find your local contact person.

**Find your local AERO-LIFT  
sales partner now:**

[www.aero-lift.de/en/company/distribution-partner/international/](http://www.aero-lift.de/en/company/distribution-partner/international/)



■ sales partner  
■ AERO-LIFT locations



- > AERO-LIFT vacuum lifting devices are designed and built in compliance with the applicable safety standards according to EN 13155 and ASME B30 and are tested and documented according to the applicable accident prevention regulations BGR 500 and the machinery directive 2006/42/EG, annex II A.
- > The final acceptance tests are carried out in compliance with VDE 0113 and EN 60204.
- > We offer to determine the maximum load-bearing capacity for your very special cargo by a representative sample test at AERO-LIFT.
- > All welding work is carried out according to the applicable standards in a professional way.
- > Verifiable statics are given.

Data, specifications (in particular with regard to load capacities), figures, descriptions and dimensions are for illustration and information purposes only and are not binding. They were checked with great care. We are not liable for incorrect or incomplete specifications as well as errors or literal mistakes. Subject to change. Subject to production- or material-related variations in dimensions. April 2019.

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