## TUBE**LIFTER**



Boxes, bags, barrels, panels and much more: efficient and gentle material handling with vacuum tube lifter.



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

## TUBELIFTER



MAXI-LIFT with swivelling unit for plates up to 300 kg



LEX-LIFT for the picking of boxes



MULTI-LIFT vacuum gripper suction cup for wooden strips

## FREE OF DAMAGE AND ERGONOMIC: EXPERTS FOR EVERY APPLICATION

You will feel as if you are able to defy gravity when you use an AERO-LIFT vacuum tube lifter. One employee is able to effortlessly lift, move, swivel and pivot heavy and large loads. That turns the vacuum tube lifter in flexible and material-friendly all-rounders - in almost every industry or for every material.

#### YOUR ADVANTAGES

- Reduced handling time, maximized number of cycles and increased productivity
- Safe and damage-free handling of goods due to vacuum lifting technology
- Minimized effort thanks to intuitive tool operation by one person
- Compliance with ergonomic working positions and long-term reduction of illness-related deficits
- Increased employee motivation
- Shorter set-up times due to tool-free changing of suction cups and load pick ups (with the optional quick-change clutch)
- Maximum flexibility due to modular design

#### PRODUCT OVERVIEW

From a small box to a large and heavy plate - with the AERO-LIFT vacuum tube lifter any handling task is a breeze. With load capacities from 30 to 300 kg, the tube lifter's applications know almost no bounds.

MINI-LIFT 30 30 kg

FLEX-LIFT 35 35 kg

MULTI-LIFT 50 50 kg

MAXI-LIFT 75 75 kg

MAXI-LIFT 100 100 kg

MAXI-LIFT 200 20

MAXI-LIFT 300 30



#### Highest safety standards guaranteed: Proven AERO-LIFT quality since 1992

Every AERO-LIFT vacuum tube lifter complies with the current safety requirements according to EN 14238 for "manually controlled load manipulating devices". Thus, our devices offer the highest level of safety for loads up to 300 kg. Even in the event of a power failure, a check valve prevents a sudden lowering of the load. In addition, a standard safety interlock is installed in each device to prevent incorrect operation.



SAFE HANDLING
MAXIMUM MOBILITY
UP TO 300 KG
VORKING EFFICIENTLY

## CARRYING CAPACITY COPING WITH EVERY REQUIREMENT

## AERO-LIFT vacuum tube lifter are the best solution for every handling task.

Whether boxes, sacks, barrels or wood panels. Whether chests, cabinets or boxes. Whether in the food industry, in the chemical production or in logistics. AERO-LIFT vacuum tube lifters ensure efficient material flow in numerous branches and applications. This saves time, secures the material and protects the employee through an ergonomic way of working and creates processes economical and efficient.

#### Examples of goods

- Boxe
- Barrels, buckets and canisters
- Sacks
- Boxes and housings
- Wooden panels and furniture parts
- Metal sheets
- Glas
- Plastic sheets or parts

### Examples of industries

- Logistics and mail order companies
- Wood working and furniture industry
- Chemicals and pharmaceutical
- Food industr
- Electrical engineering
- Plastic processing

### FLEX**LIFT**



Handling barrels with one-hand control



Picking of boxes



Hook pick up for canisters

## QUICK, SIMPLE, ERGONOMIC: VACUUM TUBE LIFTER FOR LOADS UP TO 35 KG

Whether sacks, buckets, barrels or boxes - with the **FLEX-LIFT** loads up to 35 kg can be easily lifted, moved and turned. This ensures fast, fatigue-free and ergonomically correct working.

#### **APPLICATION EXAMPLES**

- Frequent and fast lifting and moving of goods up to 35 kg
- Suitable for workpieces such as barrels, boxes, buckets, canisters and much more
- Handling boxes in logistics, moving barrels and sacks in the food and pharmaceutical industry or for production processes e.g. in the woodworking industry

#### **FEATURES**

- Ergonomic, back-friendly and fatigue-free working
- One-handed control lever that supports the natural movement of the hand
- "Quick-release"-function for a simple and prompt suction and releasing
- Short cycle times and fast destacking of the goods to be transported through simple, repetitive movements
- Optional quick-change clutch allowing a wide range of suction plates to be changed without tools within a few seconds
- Safety check valve, prevents a load from being dropped in case of power outage
- Integrated vacuum indicator and optionally integrated radio remote control

#### **FLEX-LIFT STANDARD**



# HANDLE **VARIATIONS**

### FLEX-LIFT ERGO PLUS 🕕

The new FLEX-LIFT Ergo Plus has an angled handle that enables the operator to be in an ergonomically comfortable operating position, even at extreme heights, whether lifting or depositing goods.





#### **FLEX-LIFT VARIABLE**

As its name indicates, the FLEX-LIFT Variable can be variably and individually adjusted. The handle, which is adapted to the natural movement of the hand, is easy to swing in the direction of the operator and swivel by 180°. Therefore, it fits both right- and left-handed persons.





## MULTI**LIFT** MAXI**LIFT**



Handling of wooden plates



Handling of sacks in ex-protection area



Handling of wooden beams with vacuum gripper suction unit

## CARRYING CAPACITY UP TO 300 KG: STANDARD VACUUM TUBE LIFTER

Boxes, barrels, sacks and much more - the AERO-LIFT vacuum tube lifter MULTI-LIFT and MAXI-LIFT turn lifting and moving tasks into a breeze. Due to the intuitive operation handle lifting, fixing and moving goods is easy, fast and ergonomic. This relieves your employees, treats goods with care, improves the flow of materials and therefore creates an added value.

#### **APPLICATION EXAMPLES**

- Production processes in industry and craft, e.g. loading and unloading processing equipment
- Handling of goods in intralogistics or baggage and distribution logistics
- Suitable for workpieces such as heavy boxes, sacks, barrels, large plate materials out of wood, plastics and metal, coils, food, stone and concrete, pallets and planks, glass panes, solar panels and much more

#### **FEATURES**

- Two-hand grip for intuitive, continuous suction, lifting, lowering and releasing of the load
- Swiveling the load by 90 ° is optionally possible, mechanically or pneumatically
- Optional quick-change clutch allowing a wide range of suction plates to be changed without tools within a few seconds
- Numerous solutions for any handling task, e.g. suction cups for the food production or the ex-protection area or a vertical pick up unit for big barrels
- Powerful, two-stage high-performance vacuum blower
- Safety check valve, prevents the load from being dropped in case of power outage

#### Vacuum tube lifter for horizontal transport

Article No.	Туре	Load-bea- ring capacity	<b>min. size</b> (mm)	<b>max. size</b> (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	auf Anfrage

#### Vacuum tube lifter manual 90°-swivelling

Article No.	Туре	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 No.	Туре	Load-bearing capacity	<b>min. size</b> (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

# TECHNICAL SPECIFICATION



Two-hand grip with swivelling unit



Food safe suction cup for cheese



Vertical pick up of barrels

# MODE OF OPERATION

## MODULAR DESIGNED: THE FUNCTIONALITY OF VACUUM TUBE LIFTERS

Vacuum tube lifter systems are made up of a vacuum generator, a lift tube, a control element and a suction cup to pick up the load. The system is configurated individually to the customers requirements. On demand, AERO-LIFT provides numerous additional features and amplifies your vacuum tube lifter into a **complete system**.



#### **SUCTION AND LIFTING**

- The vacuum generator (a blower) continually evacuates air out of the system, so that negative pressure in the tubes is generated.
- The difference between the negative pressure and the ambient pressure pushs the work piece against the suction cup. This is what we colloquially call "suction".
- Once the load has been picked up, the flow rate provokes the lift tube's contraction. The workpiece is lifted.

#### LOWERING AND RELEASING

- Operating the control handle, a valve opens and atmospheric air enters the system. The generated vacuum slowly reduces and the lift tube lowers.
- Operating the control handle conversely, the valve closes, the blower evacuates air again and vacuum is generated. The tube lift lifts again.
- In order to release the load, the system is ventilated to the maximum. The vacuum is dissolved and the good is detached.

## SOLUTIONS FOR EVERY TASK: INDIVIDUAL LOAD PICK UPS

The right **load pick up** for every requirement: Whether uneven work-pieces, bad filled sacks or boxes with strappings - the right load pick up enables to lift and move even such workpieces. Due to an optional quick-change clutch a wide range of suction plates for different loads can be changed without tools within a few seconds.

# SUCTION CUPS LOAD PICK UPS



Drum lift, attached at the top



Drum lift with hook



Vacuum gripper for wood with gaps



Sack lift (in V2A steel design)



Box lift 50 kg



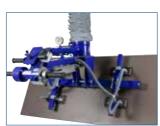
Box lift 35 ka



Box lift, attached to the top and laterally



Suction cup system for 4 boxes



Panel lift with pneumatic swivelling unit



Clutch for boxes, attached at the top



Clutch for boxes, laterally attached



Suction cup for paper coils



Suction cup system for food (in V2A steel design)



Suction cup system for water cans



Suction cup for handling chimney flue tiles

### MORE OPTIONS

Further possibilities of load pick ups and suction cups on our website: www.aero-lift.de/en/products/tube-lifters.

# PERIPHERALS AND CRANES

Ceiling-mounted slewing crane



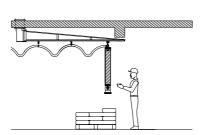
Pillar-mounted slewing crane



Aluminium easy-glide ceiling rails

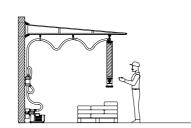
## MAKING MORE OUT OF TUBE LIFTER: COMPLEMENTAL PERIPHERALS

Making the most out of vacuum tube lifter with suitable **peripherals** and cranes. Articulated arm jibs for unfavorable room conditions or modular rail systems frame a flexible, cost-effective working area. AERO-LIFT provides complete solutions by displaying individually constructed pillar-mounted slewing cranes, jibs mounted to ceilings or walls or a clamping bracket connected to existing supports.



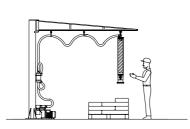
#### Ceiling-mounted slewing crane

mounted to the ceiling



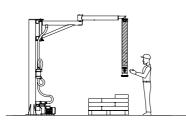
#### Wall-mounted slewing crane

mounted to the wall or to an existing pillar



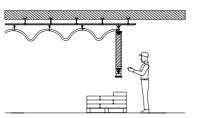
#### Pillar-mounted slewing crane

mounted to a pillar, optional with mobile base, provides swivelling range of 270°



### Pillar-mounted slewing crane with articulated arm jib

enables tracing countours in adverse area settings, maximum usability of ceiling height



#### Ceiling rail system

out of alumium easy-glide ceiling rails, designed as a modular system, enables area-wide and lownoise material transport

## MORE OPTIONS, MORE FLEXIBILITY: COMPONENTS FOR VACUUM TUBE LIFTER

The modular design of AERO-LIFT vacuum tube lifter can be enlarged with numerous additional features in order to get a maximum of functionality and efficency. No matter what task should be done - we advise you and find the best vacuum tube lifter solution for your company. More options can be found on our website: www.aero-lift. de/en/products/tube-lifters.

### ADDITIONAL OPTIONS

- Sound-proofing enclosure for reducing blower sound to 65dB/A
- Two-component seal for uneven surfaces
- Extended, continuously adjustable manipulation handle for an ergonomically comfortable operating position, even at extreme working heights
- Rigid extended control handle for large-scale transportgoods
- Mechanical or pneumatic swivelling unit
- Rotating unit for 90° offset palletizing
- Radio remote control for switching on and off the blower
- Complete stainless steel version (V2A) for pharmaceutical and food industry
- Quality of food certificate for special seals (pharmaceutical / food industry)
- Quick-change clutch, allows a wide range of suction plates to be changed without tools within a few seconds
- Lift tube cover
- Special solutions for low overall heights

# ADDITIONAL **FEATURES**



Suction cups with quick-change clutch for different loads



Adjustable operating handle in V2A steel design

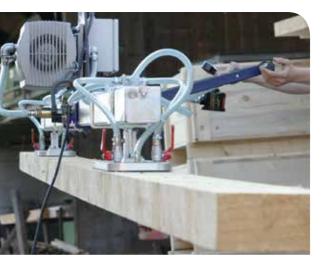


Operating knob in V2A steel design with wireless transmitter



Manual slewing by handwheel

## WOOD METAL GLASS **SOLUTIONS**







## 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 companies. Our solutions are deployed worldwide, where they ensure safe, efficient work conditions. Since our founding 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.

#### Making more out of wood: Solutions for the wood working industry

Wood is a valuable and sensitive resource. For handling in craft, automation and robotics vacuum systems have to flexible. Our wood specialists AERO-PORO for porous sheet materials and AERO-TIMBER for long-material up to 13 m are all-round talents. Whether for loading machines, handling wooden panels and Euro pallets, moving door leaves or prefabricated components out of wood - with AERO-LIFT lifter this is material-friendly and fast. Examples of handling solutions for wood processing can be found at:

www.aero-lift.de/en/branchs/wood-working/

#### Capacity up to 60,000 kg: Solutions for the metal industry

Our standard lifting devices ace when loading and unloading processes machines or when re-positioning sheets of various formats up to 2,000 kg. Pivoting or turning with AERO-LIFT vacuum lifter also ensure process-reliable material flow optimization. Gentle giants are our heavy load units, which safely move metal sheets up to 60,000 kg. Further special devices manage complicated handling tasks effortlessly and quickly, for example for shaped sheet metal elements or coils. Discover the right solution for your production on our website: www.aero-lift.de/en/branchs/metal-industry/

#### Highest safety guaranteed: Solutions for the glass industry

Glass is a sensitive and at the same time expensive material. Therefore, special care is required when handling glass panes and windows. AERO-LIFT offers material-gentle handling solutions for outdoor as well as indoor use. The CLAD-LIFT (picture) is the ideal construction site helper when it comes to inserting glass and window panes. Thanks to its suspension on the crane our CLAD-TEC also reaches high heights on the construction site. For the production of glass and windows our AERO Window safely and gently lifts, fixes and moves the goods. More information at <a href="https://www.aero-lift.de/en/goodsload/glass/">www.aero-lift.de/en/goodsload/glass/</a>.



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

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

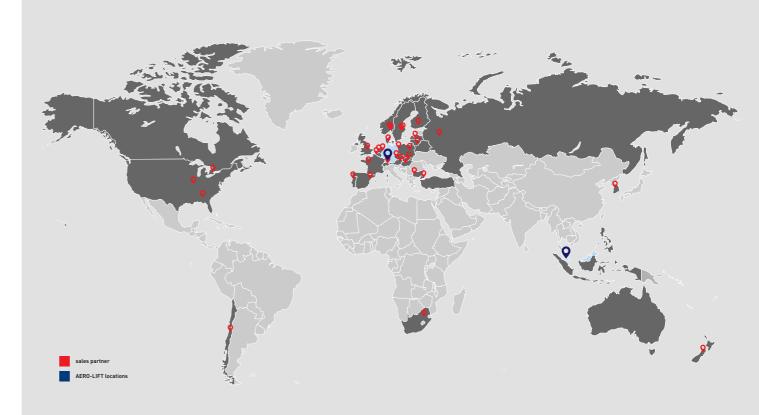
Our worldwide sales network of local field representatives and trade partners ensures quick and competent information and advice - wherever you are.

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.

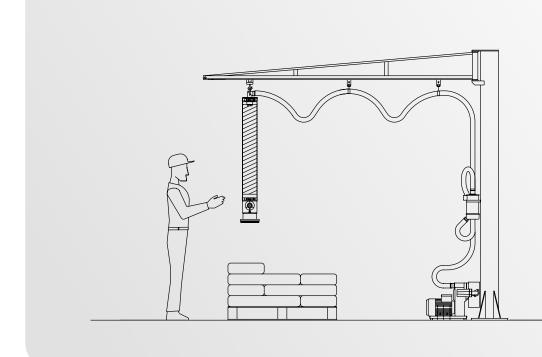
## Find your local AERO-LIFT sales partner now:

www.aero-lift.de/en/company/ distribution-partner/international/









- 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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