



# Vaculex and Microlex

Efficient, versatile and user-friendly vacuum tube lifters









Components. Systems. Solutions.

Air Incorporated • 8 Forge Parkway, Franklin, MA 02038-3135 1-800-341-2800 (or 508-528-3020) Fax 508-528-7050 E-Mail: sales@airinc.net • Website: www.airinc.net



Our vacuum tube lifters are designed for lifts between 5 and 200 kg. They are simple to install, very easy to use and can be adapted to lift virtually any object.

# Good ergonomics is good economics

Repeated lifts do not have to be heavy to be both dangerous and costly. Most often, vacuum tube lifters lead to an increased work rate and better productivity. Costs for extended periods of sick leave are reduced and rehabilitation periods are avoided. Our tube lifters minimize that type of problem and also reduce the risk of accidents that can injure the user as well as damage the goods.

### Lift almost everything

With a vacuum tube lifter you can lift boxes, sacks, drums, sheet metal, computers, crates, barrels, TVs and much more – depending on equipment and accessories. The design consists of a pump, vacuum hose, lift tube, control unit and finally a suction foot or possibly a gripping tool which is adapted to your needs.

### Very easy to use

A vacuum tube lifter uses vacuum to grab hold of and lift the load in a single action; the controls are very easy to use and the vacuum tube lifter gently follows your own body movements, as if the lifted object were weightless. With a bottom swivel or an angle adaptor you can rotate or turn the lifted object any way you like, for instance in assembly work.

### Vaculex as a lifting tool in window production.

Lifting vertical glass panes for placement in horizontal window frames. The panes are turned 90 degrees using an angle adaptor.

### Unique safety

Since the suction foot is always dimensioned in accordance with the vacuum lift tube, you don't risk dropping lifted objects that are too heavy. If the weight is too much, the tube lift will simply not lift it. This reduces the risk of personal injury and damaged goods. If the vacuum pump should stop, the depression is retained so that the load can be lowered in a controlled manner. If you are lifting with fixed gripping tools, Vaculex can also be fitted with our patented protection valve.

### Easy to install and service

The power source can either be an electric vacuum pump or a pneumatic vacuum pump. The system is normally installed in a jib or bridge crane, such as our light profile system, AluRail.

The installation is simple and is adapted to your particular lifting needs.

The vacuum tube lifters are made of extremely hard-wearing parts which seldom require service and repair.

Vaculex as a lifting tool at a bakery. Lifting sacks of wheat from pallet to mixer.

#### Microlex as a lifting tool in engineering industry.

Lifting plastic crates with customized fork tool. The crate is turned over and emptied using a ball-bearing fitted swivel.

Microlex as a lifting

Lifting metal ingots from conveyor belt to pallet.

The suction foot has no problem holding against

the uneven surface of the metal, thanks to a special sealing gasket.

tool at a foundry.







#### Microlex as a lifting tool in the food industry.

Stacking boxes on pallets with customized suction foot in combination with customized control unit.



#### Vaculex as a lifting tool in the auto industry.

Handling of air pressure chamber for brake system in busses. Curved suctio n foot matches the radius of the chamber.



### Vaculex and Microlex

Vaculex is our most heavy-duty vacuum tube lifter – a strong, versatile and user-friendly model for use with two hands and for lifts between 30 and 200 kg.

Vaculex is available in six lift tube sizes, between 100 mm and 200 mm, with five different vacuum pumps and many accessories and suction feet for a virtually infinite number of combinations.

Normally, Vaculex is driven by an electric vacuum pump for best performance and flexibility but we can also provide pneumatic vacuum pumps if required.

Microlex is a small, handy model, very easy to use because it can be operated with one hand. For loads between 5 and 30 kg.

With a pneumatic vacuum pump the unit is very easy to install, since the pump is mounted on the top swivel. A number of electric vacuum pumps are available, if required.



#### Suspension eye.

Available in various models, to suit most of the jib or bridge cranes on the market.

#### Highest quality lift tube.

Our lift tubes, designed and manufactured to our own specifications, are of the highest quality. Long lasting and therefore supplied

with a 3-year warranty.

#### Effective protective stocking.

Our standard protective stocking is excellent protection against external abrasion of the lift tube.

#### Efficient air filter.

Our standard filter canister increases the lifetime of the vacuum pump. As an option, an extra large air filter is available for dusty environments.





### Control unit with sound insulation and ergonomic handles.

Microlex is one-hand operated and Vaculex is two-hand operated.

#### Vacuum pump

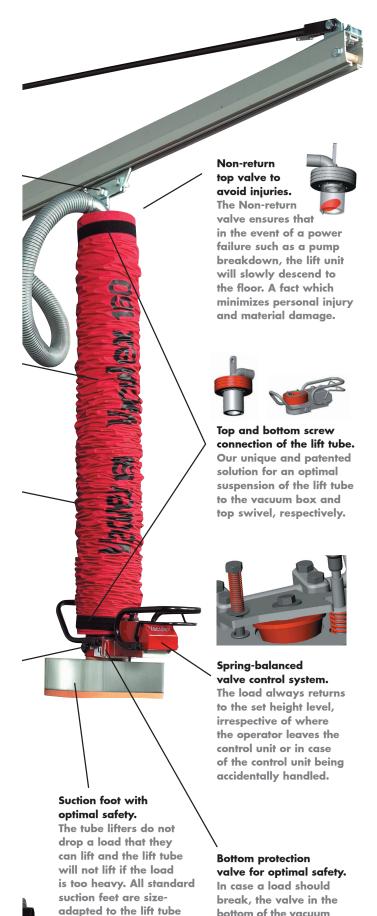
#### - electric or pneumatic.

Various sizes of electric or pneumatic vacuum pumps are available. Microlex is equipped with a top swivel integrated ejector pump. All vacuum pumps are equipped with an efficient silencer as standard. The electric vacuum pumps for Microlex are equipped with a sound reduction box as standard. Available as an option for Vaculex electric pumps.









that is being used, with

a safety factor of at least

goods are attached to the

2.5. This means that the

foot with a suction force

2.5 times greater than

the lifting capacity of

the lift tube.

head minimizes the risk

of injury or damage, by

opening instantaneously

and thus decreasing the

lifting force to

a minimum.

#### Life of the units

Vaculex and Microlex are basically impossible to wear out. We offer a three-year guarantee on all parts, including lift tube, except for wearing parts such as rubber sealing gaskets, filter inserts, drive belt for pump etc. Our first tube lift was installed more than ten years ago and is still in daily use.

### Safety

User safety is a key issue for us. For instance, we have a patented separate protection valve for fixed tools such as hooks or scissor grips. The valve prevents the lift from moving upward at high speed. Instead it stops almost immediately if the load breaks or is inadvertently released.

# Modular system for a secure investment

The tube lifters are based on a modular system for maximum flexibility and a secure investment. For instance, the lift tube can be changed depending on the lifting capacity required. With the Vaculex you can also change between an extended control unit and a short, normal one.

### High-demand environments

We have adapted our lift units to function in the most varied environments. They are available in acidproof versions in class A4 for chemical, food or pharmaceutical industry. For work in explosive environments we have specially-adapted vacuum pumps or as an alternative we also offer a pneumatic vacuum pump.



# Vaculex A selection of accessories



Yoke foot with two adjustable feet. Suitable for cardboard boxes with divided lid, materials in sheet form, etc. A large range available.



Yoke foot with four adjustable feet. Suitable for long, thin materials like steel sheets, board sheets etc. A large range available.



Curved suction foot. For lifting tubular frames, axles, drums etc.
Available in customized sizes.



Angle adaptor. Suitable for moving, for instance, sheet metal from a horizontal to a vertical position or vice versa.



Sound reduction box.

Available for all electric pump sizes.



Large dust filter. Useful in dusty environments.

### Accessories.

Vaculex have a large selection of standard accessories, which allows us to customize an appropriate solution to the most varied requirements. Since our systems are modular, it is also easy to make additional acquisitions at a later stage.

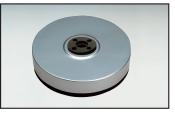
### Suction Feet

The suction foot is one of the most important parts of the complete solution. Vaculex have a large number of different suction feet to suit most types of materials. If a standard suction foot is not suitable, we can always offer a customized solution.

# Microlex A selection of accessories



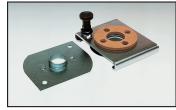
Yoke foot with two adjustable feet. Suitable for cardboard boxes with divided lid, sheets etc. A large range available.



Round suction foot. Suitable for handling cans, drums, stones, bricks etc. Several diameters available.



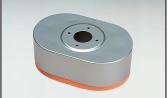
Bottom Swivel. To rotate the goods 360° while keeping the control unit in a fixed position. Useful when placing cartons in a certain pattern on a pallet etc.



Quick disconnection. Bayonet joint type. Upper and lower part. For fast and simple change of suction feet/tools.



Cross yoke foot, (H-shaped), with four adjustable feet. Suitable for large steel sheets, board sheets etc. A large range available.



Oval suction foot. Principally for handling sacks but also suitable for plastic shrink-wrapped goods. Available in several sizes.



Rectangular suction foot. For handling goods with sealed surfaces such as cardboard, sheet metal, plate, etc. Many sizes available.



Round suction foot. Suitable for handling cans, drums, stones, bricks etc. Several diameters available.



Bottom Swivel. To rotate the goods 360° while keeping the control unit in a fixed position. Suitable when placing boxes in a certain pattern on a pallet.



Quick disconnections. Bayonet joint type. Upper and lower part. For fast and simple change of suction feet/tools.



Flexible extended control unit. Useful when stacking goods high up on a pallet etc. Available in various lengths.



Rigid extended control unit. Useful when handling wide goods.

Available in various lengths.



Protection valve. For safe lifts using fixed hooks/tools. Fitted between the lift tube and the vacuum head. Immediately eliminates the de-pression inside the lift tube, if the load is released inadvertently.



Universal joint. Fitted in between the lift tube and the vacuum head. Keeps the lift tube in a vertical position if load becomes unbalanced.



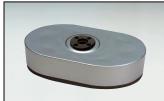
Release valve for standard control unit. Facilitates load releasing when large suction feet are used, for instance during vertical handling.



Release valve for extended control unit. Facilitates load releasing when large suction feet are used, for instance during vertical handling.



Rectangular suction foot. For handling goods with sealed surfaces such as cardboard sheet metal, plate etc. Many sizes available.



Oval suction foot. Principally for handling sacks but also useful for plastic shrink-wrapped goods. Available in several sizes.



Fixed yoke suction foot with bellow cups. Useful for rough surfaces or on surfaces with differences in levels. Various models available.



Angle adaptor. Suitable for moving, for instance, sheet metal from a vertical to a horizontal position or vice versa.



Protective valve. For safe lifts using fixed hooks/tools. Fitted between the lift tube and the vacuum box. Immediately eliminates the depression inside the lift tube if the load is released inadvertently.



Flexible extended control unit. Useful when stacking goods high up on a pallet etc. Available in various lengths.



Rigid extended control unit. Useful when handling wide goods.

Available in various lengths.



Release valve. Facilitates load releasing when large suction feet are used, for instance during vertical lifts. Available for standard as well as extended control unit.



### Vaculex TP



- Extremely fast
- Ergonomic
- Safe
- User-friendly
- Light and flexible
- Higher productivity
- Less parcel damage
- Low investment
- Low service cost

### Adaptation for right or left handed persons

Detach the release button and insert into the anchorage point on the opposite side, dependant on if the operator is right or left handed.



#### Control lever

Attach the suction cup onto the load. When decreasing pressure on the control lever the lift raises. Lower the lift by increasing pressure on the control lever. Without load the lift is raised to its pre-set balancing position.



#### Rotating the load

The entire control unit with load can be rotated. When the load needs to be twisted into a confined space, rotate the load when the control unit is held stationary.



### Express Parcel Handling

Vaculex TP – is a unique, brand new vacuum lift specially designed for the express parcel handling type of work. It is extremely versatile and handles a great variety of parcels in size, shape and weight. You attach parcels from any side and rotate either the lift or the load 360° to fit where needed.

Lifting fast in poor posture does not require heavy weights to cause pain and strain injuries. Vaculex TP is very user-friendly and does not require any training downtime to operate. It is so light and easily managed that working speed and productivity are maintained or in many cases increased, which is usually the contrary when using a lifting aid.

Typical customers within this segment are logistics, transportation, warehouses, mail order, air cargo and other businesses where frequent, and fast lifting takes place.

#### Gripping angles

The load can be attached from any side. When gripping from the side, angle the suction cup forwards.



#### Release button

Press the release button and the load will be released. This is useful when you don't want to wait for the parcel to reach solid support.



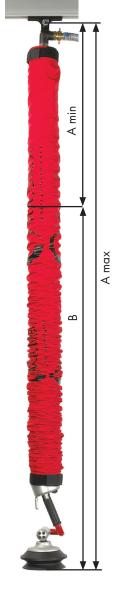
### Release the load with the control lever

When the control lever is fully pressed the load will be released when it has reached solid support.



# Technical specifications

<u> </u>	
Lift unit	
Total length extended, see figure - A max	2.9 meter/115 inches
Total length contracted, see figure - A min	1.2 meter/47 inches
Vertical movement (lift height), see figure - B	1.7 meter/68 inches
Weight complete (802, weight of pump not included)	5.7 kg/12.6 lbs
Weight complete (with mounted L150 vacuum pump)	8.3 kg/18.3 lbs
Recommended weight range for carton boxes	0-35 kg/0-77 lbs
Recommended weight range for non porous surface	0-45 kg/0-99 lbs
Suction bellows cup diameter	150 mm/6 inches
Safety Factor (suction force vs. lifting force)	2.3 times
Lift tube diameter	100 mm/4 inches
Sound level 1 meter from manouvre handle	802: 54-65 dBA/902: 54-65 dBA/ L150: 60-65 dBA
Electric pump Vaculex 802 and 902 mounted in silencing box (pict.1)	
Voltage	802: 190-255/330-440 V at 50 Hz 802: 190-290/330-500 V at 60 Hz 902: 190-255/330-440 V at 50 Hz 902: 190-290/330-500 V at 60 Hz
Power	802: 1.25 kW 50 Hz, 1.5 kW 60 Hz 902: 2.4 kW 50 Hz/3.0 kW 60 Hz
Size (mounted in silencing box) h*b*d meters/inches	5.4*8.15*5.15/21.2*32.1*20.3
Weight	76 kg/167.2 lbs
Sound level 1 meter from silencing box	902: 63 dBA 802:54 dBA
Compressed air driven vacuum pump (venturi pump) Vaculex L150 (pict.2)	
Working air pressure	6 bar
Air consumption	630 litre/minute at 6 bar • 22 cfm at 85 psi
Sound level 1 meter from vacuum pump	65 dBA





Picture 1





### What do we stand for?

Vaculex AB is a world-leading manufacturer of lifting aids based on vacuum technology. Our aim is twofold: to facilitate your work in a purely physical sense - with a focus on efficiency, ergonomics and safety; and to make it easier for you, before, during and after purchase, by way of our knowledge, experience and positive approach.





### Vaculex TL



### Loose loaded sack handling

Vaculex vacuum tube lift – Vaculex TL, is a unique lifting aid, specially designed for handling of loose loaded sacks. Typical customers within this segment are laundry shops, the chemical industry, the food industry and other businesses where frequent lifting of loose loaded sacks takes place. This type of repetitive lifting is hard and demanding on the body and muscular skeletal injuries are common.

An investment in Vaculex TL is a small but extremely effective measure in reducing sick leave and rehabilitation costs. In addition a more safe and healthy working environment attracts and maintains good quality employees.

Vaculex TL is the best investment choice as our vacuum tube lift addresses all the vital factors. Vaculex TL is tremendously user-friendly and does not need any time-consuming training to operate. It is so easily managed that working speed and productivity are maintained or in many cases increased, which is usually the contrary when using a lifting aid.

- Ergonomic
- Less risk of strain injuries
- Quick to learn
- User-friendly
- Increase productivity
- Low investment cost
- Low service cost





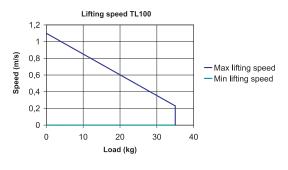


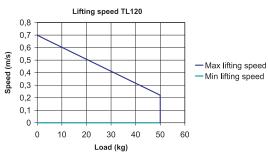
#### Handling loose loaded sacks

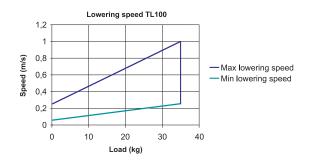
The loop is made by feeding the string through the black holder. Hold up one corner of the sack and put the loop around it. Use the black holder to tighten the loop. Pull the on/off control to lift the sack. If the sack is to be emptied, lift the sack upside down with the opening facing downwards. Lower the sack by pulling the on/off control once more. The speed of the vertical movement can be adjusted.

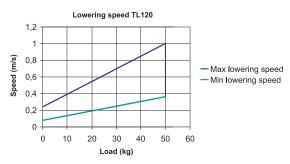
## Technical specifications

Lift unit	Lift tube length 2,5 m	3 m	4 m
Total length (excluding rope sling) not contracted	2700 mm	3200 mm	4200 mm
Total length (excluding rope sling) contracted	980 mm	1120 mm	1410 mm
Vertical movement (lifting height)	1720 mm	2080 mm	2790 mm
Weight complete (with compressed air driven L100 or L150 vacuum pump)	5.1 kg/11.2 Lbs	5.5 kg/12.1 Lbs	6.3 kg/13.9 Lbs
Lift capacity, L100 pump, Lift tube Ø 100 mm	0-35 kg/0-77 Lbs	0-35 kg	0-35 kg
Lift capacity, L150 pump, Lift tube Ø 120 mm	0-50 kg/0-110 Lbs	0-50 kg	0-50 kg
Lift tube diameter	100 mm and 120 mm	100 mm and 120 mm	100 mm and 120 mm
Compressed air driven vacuum pump (venturi pump)	Vaculex L100	Vaculex L150	
Working air pressure	6 bar	6 bar	
Air consumption where pump is running 50% of the time	225 litre/minute at 6 bar	315 litre/minute at 6 bar	
Sound level 1 meter from vacuum pump	60 - 65 dBA	60 - 65 dBA	









### What do we stand for?

Vaculex AB is a world-leading manufacturer of lifting aids based on vacuum technology. Our aim is twofold: to facilitate your work in a purely physical sense – with a focus on efficiency, ergonomics and safety; and to make it easier for you, before, during and after purchase, by way of our knowledge, experience and positive approach.



### Vaculex ParceLift

Unloading trucks and containers





Vaculex ParceLift – is a unique and ergonomic vacuum lift designed for the loading and unloading of loose loaded cargo into trucks and containers. Vaculex ParceLift handles a great variety of goods in size, shape and weight up to 40 kg. The Vaculex ParceLift can be fully integrated into many varieties of telescopic conveyors both factory fitted or retrofitted at customers premises. The Vaculex ParceLift maximises the available working height by sensing the available headroom and adjusting its height automatically making this the perfect solution for working in confined spaces with low headroom. It allows the user to grip an item from any side, turn it 360° and release it as required. Vaculex ParceLift creates the optimal working experience for the operator, it is easy to work with and requires minimal training. To ensure maximum performance the ParceLift has been engineered with low weight/high strength materials such as carbon fibre composites and aluminium. Vaculex ParceLift is easy to work with and your high working speed and productivity are maintained or increased, at the same time as the risk for work injuries is being reduced.

Typical users are within logistics, transportation, warehouses, mail order, air cargo and other businesses where frequent and fast lifting activities take place.

Vaculex is a world leading manufacturer of lifting equipment based on vacuum technology.

Vaculex develops and manufactures vacuum lifters for industries with high demands on ergonomics and efficiency.

#### **Benefits**

- Excellent Ergonomics
- Increases Productivity
- Improves Efficiency
- Removes the Risk for Injury
- Reliable and Safe
- User-friendly

#### References

#### Keith McLean, Warehouse Manager & Ian Lancaster, Logistics Manager, Draper Tools, UK.

"After seeing the solution the decision was easy. Our prime consideration has been a question of ergonomics rather than speed. Having said that we are using fewer people to unload a container so there is definitely a financial benefit too."

#### Gunnar Tunmats, Safety Officer and Operator, Posten Logistik Örebro, Sweden.

"Vaculex ParceLift is great to work with".

For more references, please visit vaculex.com.



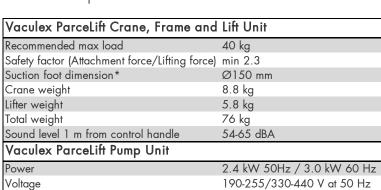






### Vaculex ParceLift

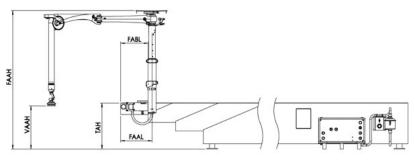
### **Technical Specifications**

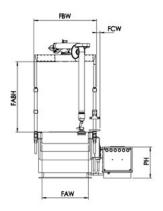


Sound Level 1 m from Pump unit

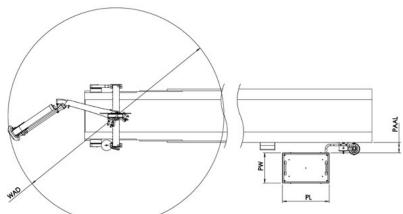
\* Several alternative suction feet are available

Pump Unit weight





**V**aculex



Dimension (mm)														
Model	WAD	FAW*	FBW	FCW	VAAH*	TAH*	FAAH*	FABH	FAAL	FABL	PL	PW	PH	PAAL
ACF0860		860	1161											
ACF0906		906	1227		Max		Max	Max						
ACF1060		1060	1427		1860		2515	1308						
ACF1106	4000	1106	1427	56	Min	800	Min	Min	601	528	870	560	575	min 300
ACF1260		1260	1627		1630		2043	836						
ACF1306		1306	1627											

190-290/330-500 V at 60 Hz

107 kg

63 dBA

Head Office Sweden

Vaculex AB
Aminogatan 20
SE-431 53 MÖLNDAL
SWEDEN
+46 (0)31 670100
info@vaculex.com

Sales Office UK
Vaculex UK Ltd
6th Floor Trigate
210-222 Hagley Road West
Birmingham B68 0NP
United Kingdom
+44 (0)121 359 3000
info.uk@vaculex.com

Sales Office USA

Vaculex USA ILC

605 Philip Davis Drive, Suite1
Charlotte NC 28217
United States
+1 704 527 5052
info.us@vaculex.com

<sup>\*</sup> depending on the dimensions of the telescopic conveyor belt



### Vaculex VL

# a safe, strongtube lifter that lifts almost anything

#### Vaculex VL is our most heavy-duty vacuum lifter

Vaculex VL tube lifter is a strong, versatile and user-friendly model for use with two hands and for lifts between 30 and 200 kg.

- Two hand operated Tube Vacuum Lifter.
- Handle loads between 30 and 200 kg.
- Very flexible to fit your specific needs.
- Available with a wide range of accessories.
- Increases productivity.
- Modular system which can be reconfigured for new tasks over time.
- Reliable and with low service costs
- Available in A2 Stainless Steel.
- Available in several ATEX certified versions.
- Available with Vaculex ATOP for increased energy efficiency and maximum comfort.

Vaculex is available in six lift tube sizes, between 100 mm and 200 mm, with five different vacuum pumps and many accessories and suction feet for a virtually infinite number of combinations. Normally, Vaculex is driven by an electric vacuum pump for best performance and flexibility but we can also provide pneumatic vacuum pumps if required.

#### Lift almost everything

With a vacuum tube lifter you can lift boxes, sacks, drums, sheet metal, computers, crates, barrels, TVs and much more – depending on equipment and accessories.

The design consists of a pump, vacuum hose, lift tube, control unit and finally a suction foot or possibly a gripping tool which is adapted to your needs.

#### Good ergonomics is good economics

Repeated lifts do not have to be heavy to be both dangerous and costly. Most often, vacuum tube lifters lead to an increased work rate and better productivity.

Costs for extended periods of sick leave are reduced and rehabilitation periods are avoided. Our tube lifters minimize that type of problem and also reduce the risk of accidents that can injure the user as well as damage the goods.





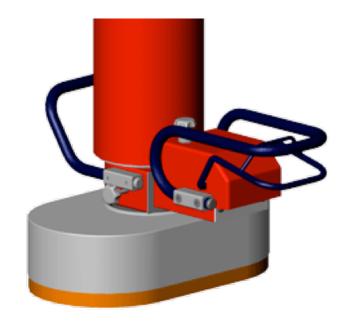




# Technical information

Maximum lifting capacity	200 kg/440 lbs
Lift tube sizes	100-200 Ø
Electrical vacuum pump	2,2-6,5 kW
Vertical movement (lift height)	
2,5 m lift tube	1,7 m
3,0 m lift tube	2,1 m
4,0 m lift tube	2,7 m
Installation height	
2,5 m lift tube	2,9 m
3,0 m lift tube	3,4 m
4,0 m lift tube	4,2 m
Safety Factor (suction force vs lifting force)	2.5 times











- Uniqe layout made for stacking goods between low and very high levels.
- Unmatched ergonomics for stacking.
- Configurable for handling of different goods such as boxes, sacks and sheets of metal etc.
- Configurable with most Vaculex accessories.



Easy handling for low and high stacking heights

#### Low and high stacking heights

Vaculex TS was developed to solve issues with handling goods between low and high stacking heights.

#### Easy to grip and release goods

Vaculex TS makes it easy to grip or release goods with a high level of control even at levels far above the operators head.

#### Unique design

The unique design of the Vaculex TS control handle also makes it possible to pick items at floor level without either kneeling or bending to reach the objects.

#### **Highly flexible**

The Vaculex TS is easily customized to fulfill your specific needs. The control handle principle for stacking can also be utilized on the Vaculex VL product series.





## Technical information

Maximum lifting capacity	65 kg/122 lbs
Lift tube sizes	60-120 Ø
Electrical vacuum pumps	0,75-2,4 kW
Pneumatic vacuum pumps	420 -630 NI/min at 6 bar
Vertical movement (lift height)	
2,5 m lift tube	1,7 m
3,0 m lift tube	2,1 m
Installation height	
2,5 m lift tube	2,8 m
3,0 m lift tube	3,3 m
Safety Factor (Attachment force/Lifting force)	min 2.5







### Vaculex ML

### small and handy



- Operated with one hand.
- Able to customize to fit customer specific needs.
- For handling of loads between 5 kg and 55 kg.
- Ergonomic and Safe
- Reliable and with low service costs.
- Modular system which can be reconfigured for new tasks over time.
- Available as either Electric or Compressed Air powered.
- Available with a wide range of different suction feet, vacuum pumps and other options.



#### Vaculex ML is small and really easy to operate

#### One hand operated

Vaculex ML is a one hand operated vacuum lifter which is easily customized to adapt to most handling situations with loads weighing between 5 and 55 kg.

#### Large possibilities

Vaculex ML offers large possibilities to choose between a range of different control handles, suction feet and other options to optimize the lifting system for your specific handling situation.

#### Easy to apply to your changing needs

Vaculex ML has a modular design which also makes it easy to reconfigure the lifting system if your needs are changing over time.

# Technical information

Maximum lifting capacity	55 kg/122 lbs
Lift tube sizes	60-120 Ø
Electrical vacuum pump	0,75-1,25 kW
Pneumatic vacuum pump	420-630 NI/min at 6 bar
Vertical movement (lift height)	
2,5 m lift tube	1,7 m
3,0 m lift tube	2,1 m
Installation height	
2,5 m lift tube	2,9 m
3,0 m lift tube	3,4 m
Safety Factor (attachment force/lifting force)	min 2.5







# Can you predict the risk of injuries?

Since Vaculex started operations almost twenty years ago, our aim has been to produce the most ergonomic, safe and dependable vacuum tube lifters in the world. We have focused on two things:

- Minimizing injuries caused by weights, poor working positions and high work rates.
- Increasing productivity.

Among other things, we have conducted a number of analyses on different types of lifts with the help of NIOSH (National Institute for Occupational Safety and Health – Michigan, USA), a method which analyses different lifts, weights and work rates. With the help of NIOSH we can easily predict where injuries will occur.

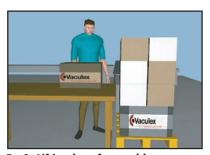
For instance it can be shown that light loads such as 10-15 kg (22-33 lbs), at a normal work rate, can cause serious repetitive strain injuries.

For detailed information on different lift analyses, contact your Vaculex distributor.



Ex 1. From pallet to table with a twist

10 kg (22 lbs) box, 1 lift/hour = 14% get injuries within 2 years. 15 kg (33 lbs) box, 1 lift/hour = 41% get injuries within 2 years.



Ex 2. Lifting box from table to high location with a twist. 10 kg box (22 lbs), 1 lift/hour = 25% get injuries within 2 years.

25% get injuries within 2 years. 15 kg (33 lbs) box, 1 lift/hour = 58% get injuries within 2 years.

### What do we stand for?

Vaculex AB is a world-leading manufacturer of lifting aids based on vacuum technology.

Our aim is twofold: to facilitate your work in a purely physical sense - with a focus on efficiency, ergonomics and safety; and to make it easier for you, before, during and after purchase, by way of our knowledge, experience and positive approach.



