

VacuPowerlift Tireless and powerful

Setup and application

and easily adapted to a large number of different applications. Es- used in many industries and trades and combines safe handling and sentially, it consists of a rotary head with an integrated check valve, ergonomic operation for loads up to 300 kg. In doing so, it combines a telescopic lifting hose with multiple winding layers and a suction a simplification of the production processes with simultaneous high block, which together form the lifting unit. The control unit is attached efficiency and quick amortization of investment. to the suction cup and can be connected with extensions and joints.

The control unit is attached to the suction cup and can be connected Barrels and containers in the chemical and with extensions and joints. These not only have to function in terms of vacuum technology, but can also function pneumatically thanks to Board/sheet handling in wood and sheet metal processing an integrated compressed air feedthrough. There are also tilting and

Bricks and concrete components in the construction industry rotating devices that make handling much easier.

If all of this is still not enough, gripping devices and special applications tailored to your individual needs can be developed. In this way, your production process can also be optimized and your employees protected from long-term damage by ergonomically designed work-



For application videos, all technical data and more about the VacuQuickLift simply scan the QR code.

The VacuPowerlift is a modular product system and can be quickly The areas of application of the VacuPowerlift are almost unlimited. It is

- Cardboard boxes in shipping and logistics
- pharmaceutical industries

- Loading and unloading of CNC processing machines
- Sacks in agriculture and bulk goods

Assembly overview

Vacuum generator



Vacuum pumps

Dry-running vacuum pumps with 25-40 m³/h and mounted vacuum filters are available for the VPL 100-VPL140 series.



Additional silencer

24

Additional silencers can be screwed onto the exhaust side of the vacuum blower, which reduce the noise level by approx. 3-4 dB(A).



Silenced pumps

The dry-running vacuum pumps are also available in a silenced version, which ensures a significant reduction in noise.



Sound insulation box

The vacuum blowers can be installed in sound insulation boxes, which reduce the noise level by up to 10 bB(A). Also for retrofitting.



Vacuum blower

The robust and powerful side channel blowers are available in three sizes with suction volumes of 130-280 m³/h.



Vacuum filter for blowers

Large, powerful, high-flow vacuum filter to protect vacuum blowers from contam-

VacuPowerlift

Assembly overview

Lifting units



Rotary head

All rotary heads have a high-performance bearing and an integrated check valve that ensures slow lowering, e.g. in the event of a power failure.





Suction block

The robust and stable steel design ensures that the various gripping units are securely connected

25



Pneumatics module

With the integrated pneumatic feedthrough, pneumatic gripping devices and tilting devices can also be easily and safely supplied.



Assembly overview

Control housing and Grip options



Standard control box

With grab handle and control bar with intuitive, simple operation.



Universal control box

Version with several control options for a wide variety of functions depending on the requirement.



Rapid ventilation

26

Additional ventilation valve for faster ventilation and detachment with dense workpieces. Simple operation via hand lever.



Wireless control box

With an integrated push button for the optional radio remote control of the vacuum generator.

Pneumatics control box

Jointed extension

With integrated pneumatic manual valve

for easy control of pneumatic movements.

For an ergonomic both position when

handling workpieces from high and low



Rigid extension

For safe operation of large-format work-pieces.



Balancer

For balancing the control box with long extensions or heavier add-on options.



Additional functions



Quick-change coupling

Facilitates the replacement of suction cups for various applications during ongoing operation.



Pneumatic tilting unit

Device via one or two pneumatic cylinders for tilting workpieces up to 150 kg.



Balancing valve

A compensating valve is available for the use of mechanical gripping devices, which takes over the automatic regulation of the vacuum.



Continuous rotary unit

For layered, staggered restacking or simple turning of workpieces. Also optionally available with a locking module for 90° hold-open.



Pneumatic reversing unit

Compact and robust, pneumatic device for reversing workpieces by 180°. The height of the turning bracket is adjusted to the workpiece size.



Manual tilting unit

Simple and fast tilting device for tilting smaller workpieces up to approx. 35 kg.



Wall or column consoles

For floor-free installation of the vacuum generator on walls or columns.



Assembly overview

Gripper systems



Single suction pads

In round, flat or bellows design for drums, containers and small cardboard boxes.



Single suction pads

In a flat, rectangular design for workpieces with narrow suction surfaces.



Bale suction pad

With two flat suction pads with a special, reinforced rubber design.



Sack suction cups

Made of plastic with two sizes for smaller and larger paper and plastic bags.



Double suction pad

With round and rectangular suction cups, ideal for cardboard boxes.



Quadruple suction cups

With round and rectangular suction cups, ideal for large sheet materials.



Canister grabber

Pneumatically equipped clamping gripper for the simultaneous transfer of up to 20 canisters at once.



Canister grabber

Simple hook gripper to grip under the canister tab with load balancing valve for vacuum control.



Box gripper

For pneumatic clamping and tilting of plastic boxes

VacuPowerlift

Assembly overview

Gripper systems



Barrel gripper

With pneumatic clamping and tilting device for emptying filled barrels.



Pallet gripper

With mechanical bottom grippers for handling pallets.



Magnetic gripper

With pneumatic control for handling perforated sheets.



Flat gripper

With surface suction pad and integrated ejector.



Combi-gripper

With needle and magnetic gripper for handling insulating material and perforated sheets. Control via 2 pneumatic valves.



Pneumatic gripper

With clamping device for moving hollow blocks.



Pneumatic gripper

With internal clamping jaws for moving



Suction pads for long goods

With a reinforced longitudinal beam design for handling long goods up to 6,000 mm.



Sextuple suction pad

For handling large and thin-walled sheet material.

28 29

Assembly overview

Stainless steel and ATEX version

The VacuPowerlift is also available in stainless steel and ATEX versions for the food, pharmaceutical and chemical industries. All components are manufactured and welded in V2A or, in the case of higher requirements, in V4A. For ATEX requirements, special blowers and electrically conductive device designs are available, which ensure safe operation in ATEX zones 21 and 22.



ATEX - Explosion protection. Our certificate Find out what exactly Atex is and how you can work safely and without compromise with our devices in our blog article.



Liftina uni

Rotary head and suction head as well as the control box are made entirely of stainless steel. For ATEX requirements, the lifting hose has a special, antistatic coating and has an open, internal copper wire insert.



ATEX lifting unit

For ATEX requirements, the lifting hose is designed with a special, antistatic coating and also has an open, internal copper wire insert. All components are connected in an electrically conductive manner and thus guarantee the required equipotential bonding.

VacuPowerlift

Assembly overview



Suction cups

A large number of suction cups are available, all of which are made of stainless



ATEX vacuum blower

Specially constructed vacuum blowers in ATEX design for the zones 21 and 22.



Ejector

pneumatic vacuum generator for EX zones
1 and 2



ATEX vacuum filter

Special stainless steel filter with internal filter cartridge and electrically conductive connection to the housing.



Accessories

The most common accessories, such as quick-change devices or operating handle extensions, are available in stainless steel

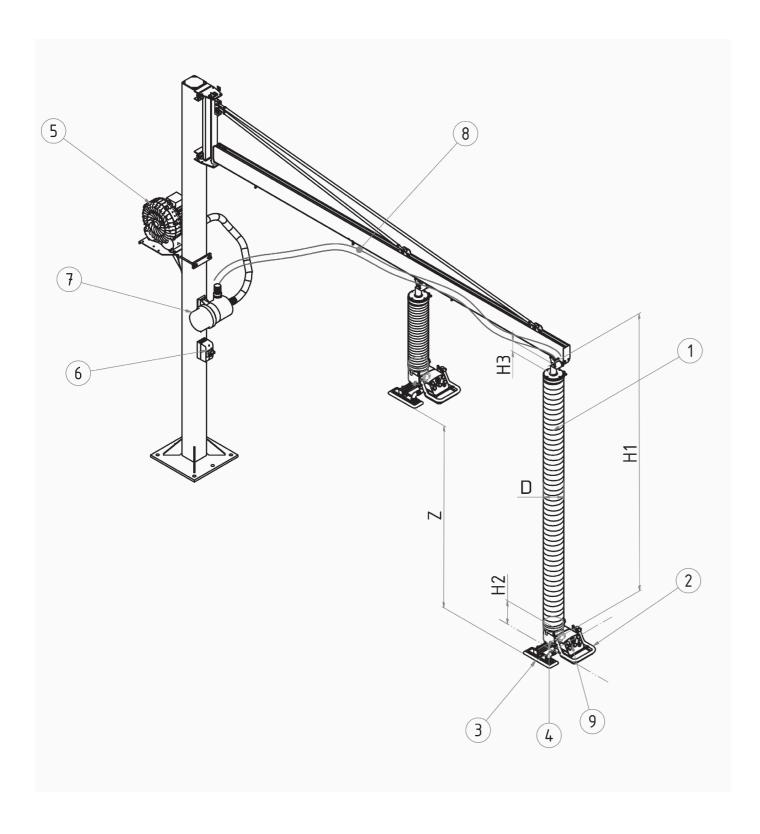


ATEX leaflet download

You can find all technical data and more in our ATEX flyer. You can easily download it via QR code scan. #Simplymovemore

30 31

Technical specifications



VacuPowerlift

Technical specifications

- Lifting unit consisting of rotary head, lifting hose and suction head
 In the event of a power failure, a safety valve in the rotary head lets loads that have been suctioned drop slowly and in a controlled manner to the ground.
- Control unit with operating handle and control bracket for "lower", "lift" and "release" functions With intuitive operation in a noise-optimized design.
- 3 Suction pads or gripper unit with individual adjustments
 With a safety factor of 2.5, they ensure the necessary support for safe handling of the loads.
- 4 Accessories
- Robust and powerful vacuum generators and blowers
 Ensure the build-up of the required vacuum and fast handling processes.
- Motor protection switch or radio remote control
 Protect the vacuum generators from overload and offer the option of remote control via the control unit.
- Z Large dimensioned vacuum filters with replaceable cartridges, the vacuum generators protect against dirt and damage.
- Feed hose
 Connects the vacuum generators to the lifting unit. Lengths of up to 50 meters and more are possible.
- Adjusting screw for working height
 As a result, loads that have been suctioned can be brought to a predefined height in order to carry out further work processes.

| Туре | Load dense/porous | Workpiece dimensions | | Vacuum generator | Lifting speed | Bauhöhe | Control- unit | Rotary head | Dia- meter | Stroke | Own weight* |
|----------|----------------------|----------------------|-------------|---------------------|---------------|-------------|------------------|----------------|---------------|-------------|----------------|
| | (kg) | min (mm) | max (mm) | | (m/min) | H1 (mm) | H2 (mm) | H3 (mm) | D (mm) | Z (mm) | (kg) |
| VPL100 | 30/25 | 200×200 | 2.000×1.000 | T4.40 | 25-55 | 2.715/4.215 | 120 | 95 | 100 | 1.700/2.500 | 6-10 |
| VPL120 | 40/35 | 200×200 | 2.000x1.000 | T4.40 | 25-55 | 2.715/4.215 | 120 | 95 | 120 | 1.700/2.500 | 6-10 |
| VPL140 | 50/40 | 500x500 | 2.000×1.000 | SKV300 | 30-60 | 2.715/4.215 | 120 | 95 | 140 | 1.700/2.500 | 8-12 |
| VPL160 | 65/50 | 500x500 | 3.000×1.500 | SKV300 | 30-60 | 2.730/4.230 | 120 | 110 | 160 | 1.700/2.500 | 8-12 |
| VPL180 | 85/65 | 750x750 | 3.000×1.500 | SKV400 | 30-60 | 2.730/4.230 | 120 | 110 | 180 | 1.700/2.500 | 12-16 |
| VPL200 | 110/90 | 750x750 | 4.000x2.000 | SKV400 | 30-60 | 2.730/4.230 | 120 | 110 | 200 | 1.700/2.500 | 12-16 |
| VPL230 | 140/120 | 750x750 | 4.000×2.000 | SKV400 | 30-60 | 2.730/4.230 | 120 | 110 | 230 | 1.700/2.500 | 14-20 |
| VPL250 | 200/160 | 750x750 | 4.000×2.000 | SKV400 | 30-60 | 2.730/4.230 | 120 | 110 | 250 | 1.700/2.500 | 14-20 |
| VPL2x230 | 250/200 | 750x750 | 4.000x2.000 | SKV500 | 25-50 | 2.730/4.230 | 120 | 110 | 2x230 | 1.700/2.500 | 30-36 |
| VPL2x250 | 300/250 | 750x750 | 4.000×2.000 | SKV500 | 25-50 | 2.730/4.230 | 120 | 110 | 2×250 | 1.700/2.500 | 30-36 |

^{*}depending on the suction cups and accessories used

32 33