

## Vacuum Load Lifting Devices

The FEZER vacuum load lifting devices convince by their robust design, their long-life cycle and above all by their easy handling combined with high safety features.

They increase the efficiency and profitability of production processes as well as work safety and ergonomy. Using vacuum load lifting devices relieve the operators and prevent a high illness rate caused by overwork.

FEZER vacuum load lifting devices support your daily work, increase the productivity and work safety combined with comparably low investment costs. Look and see.

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# Vacuum Load Lifting Devices

## Introduction

### Areas of Application

The individual device series is designed for various applications and ensure a process-safe and economical production run. With the help of vacuum technology workpieces can not only be easily and fast engaged but also be transported damage-free and safely. For these reasons the lifters are being used in many fields of industry:

- Handling of aluminum, steel, glass, chipboard and plastic plates
- Handling of coils and split strips
- Transport of wood, gluelam beams, chipboards, MDF and OSB plates
- Feeding of CNC, punching and nipple machines
- Commissioning, putting into and out of storage
- Used in roller mills, automobile industry, wind energy, aeronautics, stone and concrete industries

### Unique Safety Concept

All device series are absolutely safe, reliable and correspond to the current DIN EN 13155. Largely dimensioned vacuum safety tanks and integrated warning units ensure the highest operational safety, also in case of a power failure.

Additionally all manually operated FEZER lifters are equipped with the unique „Main Switch Supervision“. This feature sends out a warning signal should loads become engaged solely by the remaining vacuum in the tank while the main switch is off. This supervision sets new standards on vacuum load lifting devices when it comes to operational safety.



**FEZER**  
Simply move more.

### VacuBoy in Action

- 1 Feeding a laser cutter with the help of a VacuBoy
- 2 Transport of metal sheets by a VacuBoyMini in power-independant battery design
- 3 VacuBoy for commissioning steel sheets
- 4 VacuBoy VB-180E for turning over furniture parts



### Basic Equipment

FEZER vacuum lifters convince by their clever design. The lifters can be adjusted to individual customer's requirements and desires easily and problem-free. The devices have very high safety and comfort features as a standard:

#### Safety:

- Main switch supervision on lifters with handslide valves (warning signal when loads are engaged with turned-off main switch)
- Large-dimensioned safety tank integrated in the lifter's main beam
- Non-return valve between vacuum generator and safety tank
- Manual vacuum control by lockable handslide valve
- Vacuum gauge with „red-green“ area for visual supervision
- Acoustic warning unit for decrease of vacuum and power failure
- Large-dimensioned vacuum filter to protect the valves and pumps

#### Comfort:

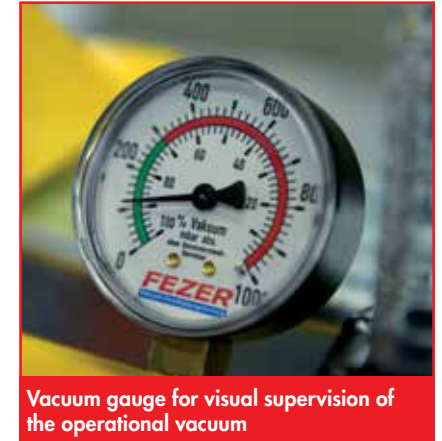
- Push-buttons with emergency-off on lifters with electrical movements (swivelling, turning over, or rotation)
- Various suction pads for smooth, rough or grooved surfaces
- Movable suction pads to adjust to varying workpiece dimensions



Main switch surveillance by vacuum switch in distribution line



Acoustic warning unit goes off in case of vacuum decrease or power failure



Vacuum gauge for visual supervision of the operational vacuum



Non-return valve to prevent a venting via the pump in case of a power failure



Vacuum safety tank for short suction times and safety in case of power failure



Manual vacuum control via handslide valve with arrest



Large-dimensioned dust filter with exchangeable filter cartridge



Manipulating handle with push-buttons and emergency-off on lifters with electrical movements



Suction pads with cross clamping piece to adjust on the cross beam



Mounting element with clamping screw to adjust the cross beam



Manifold selection of suction pads for different surfaces



Powerful, robust and low-maintenance pumps for highest safety



### Options

The lifters can be additionally equipped with a multitude of options to meet your individual safety and comfort requirements:

#### Safety:

- Optical warning unit with large green and red lamp for „ready for operation“ and „malfunction“ and acoustic howler on power failure
- Disposal stands to protect the suction pads when lifter is set down

#### Comfort:

- Electrical vacuum control with two-hand operation via push-buttons
- Switching automatic with alternate suction and release activation
- Universal holder for crane pendants with Velcro fastener
- Electrical control functions by push-buttons for crane movements
- Vacuum-controlled motor switch to save energy and reduce the noise level

#### Further Options:

- Swivel feature with angle adjustment of the manipulating handle
- Water separator for use on water jet machines
- Battery pack for operation independant of power
- Air pack with pneumatical warning unit for compressed air operation



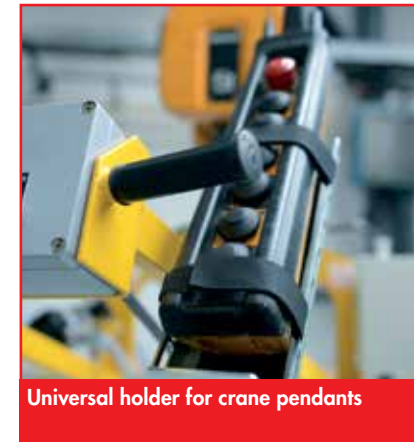
Optical warning unit with green and red lamp and howler for power failure



Electrical vacuum control via solenoid valve



Switching automatic with automatic suction and release on setting down



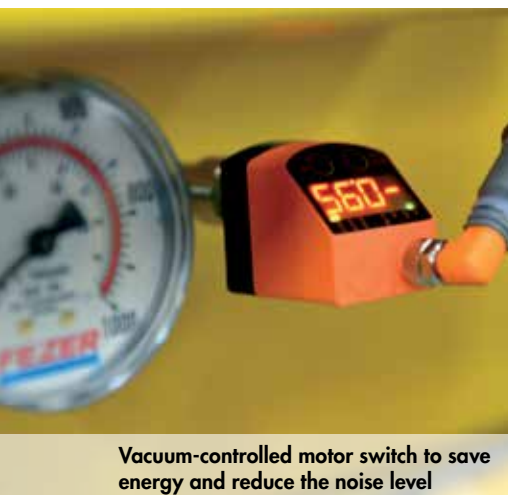
Universal holder for crane pendants



Direct control of crane movements via push-buttons on the manipulating handle



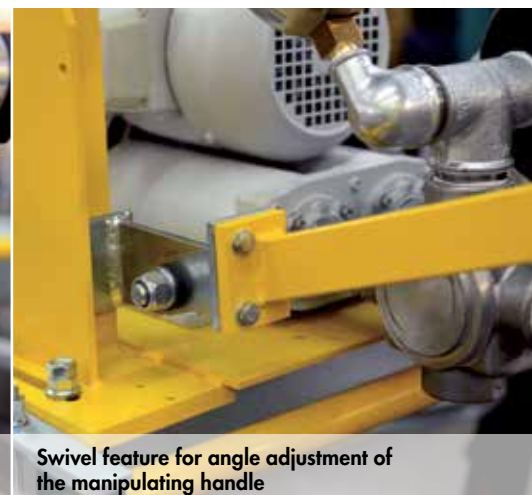
Disposal stands for safe parking of the lifter and protection of the suction pads



Vacuum-controlled motor switch to save energy and reduce the noise level



Water separator with manual drain for outdoors use or on water jet machines



Swivel feature for angle adjustment of the manipulating handle



Ball valves to switch individual suction pads on and off



Air Pack: strictly running on compressed air via ejector and pneumatical warning unit



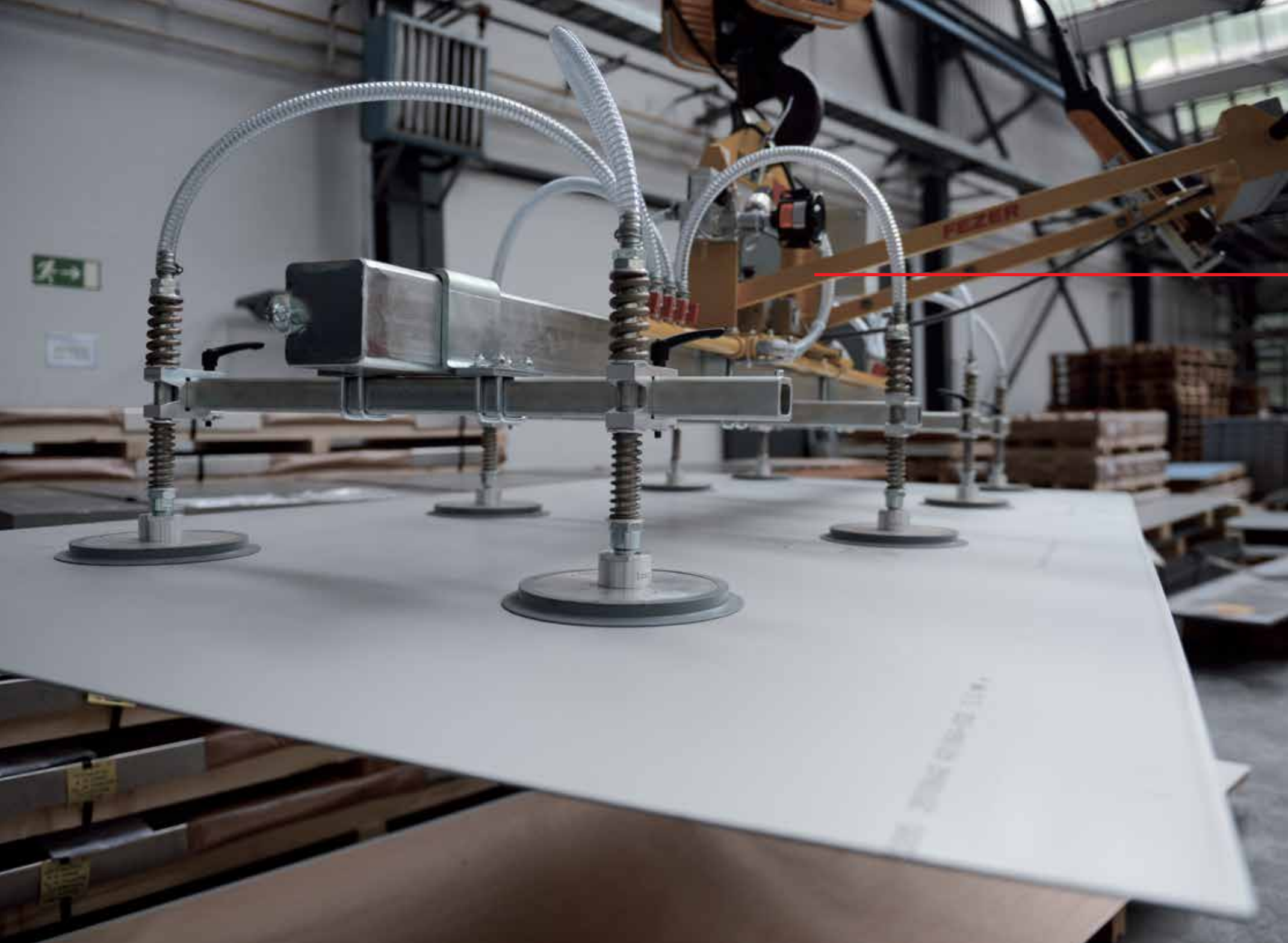
Battery Pack: power-independant operation via 24V pump and batteries



## VacuBoy

Standard vacuum lifters for handling plate materials with dense, flat or structured surfaces and a weight of up to 2.000 kg.

Depending on the requirements the designs vary from strictly horizontal, swivelling or turning over of workpieces as well as special designs for individual solutions.



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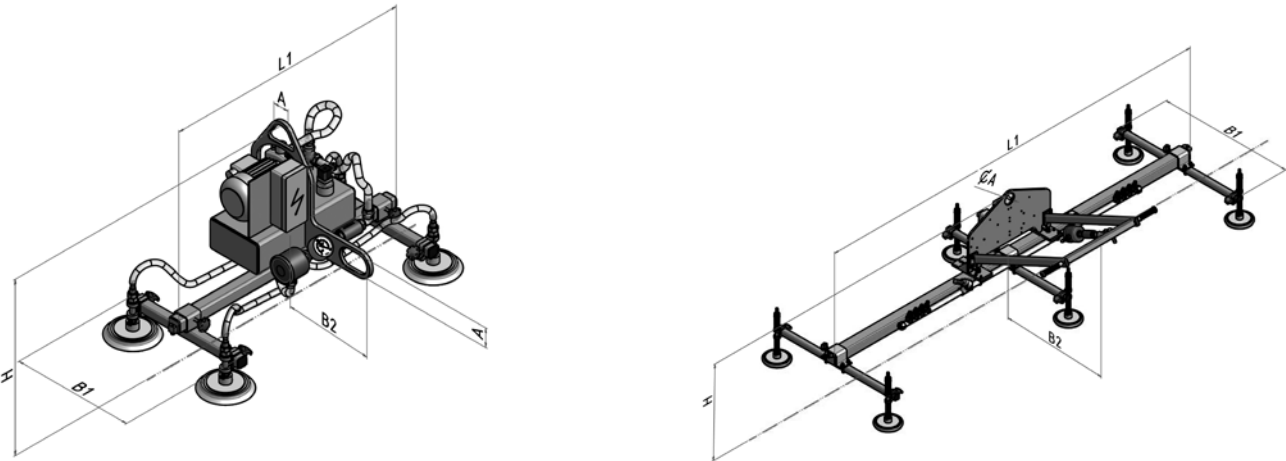
Vacuum Load Lifting Devices

VacuBoyAkku VB-Akku

Power-independant Operation

The VacuBoyAkku guarantees an absolutely self-sufficient operation around the clock. The power supply is via exchangeable batteries. A standstill of the lifters, to re-charge batteries, is no longer necessary. As a standard the lifters are equipped with a vacuum-controlled motor switch which saves the batteries and increases their operation time. Vacuum control is done by handslide valve with arrest.

- Vacuum supply by 24V pump
- Work capacity for approx. 150 suction operations
- Constant operational readiness by exchangeable batteries
- Option with electrical vacuum control or switching automatic



| Capacity<br>(kg) | Type      | Workpiece dimensions |             | Pump  | Number of<br>suction pads | L1<br>(mm) | B1<br>(mm) | B2<br>(mm) | H<br>(mm) | A<br>(mm) | Own<br>weight<br>(kg) |
|------------------|-----------|----------------------|-------------|-------|---------------------------|------------|------------|------------|-----------|-----------|-----------------------|
|                  |           | max (mm)             | min (mm)    |       |                           |            |            |            |           |           |                       |
| 125              | VBM-1/2/4 | 2.500 x 1.250        | 400 x 400   | T 4.2 | 1 ... 4                   | 250        | 250        | 270        | 450       | 60        | 20 ... 30             |
| 125              | VB 80     | 4.000 x 2.000        | 600 x 400   | T 4.2 | 4 ... 6                   | 1.800      | 800        | 650        | 470       | 80        | 40 ... 50             |
| 125              | VBM-2/4   | 2.500 x 1.250        | 1.000 x 400 | T 4.2 | 1 ... 4                   | 1.200      | 400        | 270        | 550       | 60        | 25 ... 30             |
| 250              | VB 80     | 4.000 x 2.000        | 600 x 400   | T 4.2 | 4 ... 8                   | 1.800      | 800        | 650        | 470       | 80        | 45 ... 55             |
| 500              | VBM-1/2/4 | 2.500 x 1.250        | 1.000 x 400 | T 4.2 | 1 ... 4                   | 1.200      | 400        | 270        | 550       | 60        | 30 ... 35             |
| 500              | VB 80     | 4.000 x 2.000        | 600 x 400   | T 4.2 | 4 ... 8                   | 1.800      | 800        | 650        | 470       | 80        | 50 ... 70             |

VacuBoy VB-Akku in Action

- 1 Feeding a laser cutting machine with steel sheets
- 2 Handling ceramic elements on a water jet machine
- 3 Transport of aluminium blocks up to 250 kg
- 4 Commissioning of steel sheets with four-pad attachment



## Vacuum Load Lifting Devices

### Application Examples



VacuBoy for feeding a laser cutting machine



Special design for lateral engagement of camper roofs with pneumatical adjustment and mechanical undergrippers



VacuBoy for commissioning steel plates up to 2.000 kg



1



2



3



4

## VacuBoy in Action

- 1 VacuBoyMini mounted on a pallet truck with 4-pad attachment for simultaneous transport of 4 drums
- 2 Swivelling VacuBoy for handling foil-wrapped sandwich elements
- 3 VacuBoyMini for power-independent operation via batteries for transporting small aluminum blocks
- 4 Strictly vertical lifter for handling camper fronts