

Flexible Process Automation with Vacuum Grippers.

For moving large quantities in no time!



The vacuum revolution!

Do you think that vacuum lifts are only designed to handle smooth, clearly defined materials?

The VUSS vacuum grippers from Aero-lift prove otherwise. The latest generation of vacuum gripper with the patented vacuum valve system also allows for handling various goods of various sizes and shapes with cut-outs or recesses without requiring any changeover.

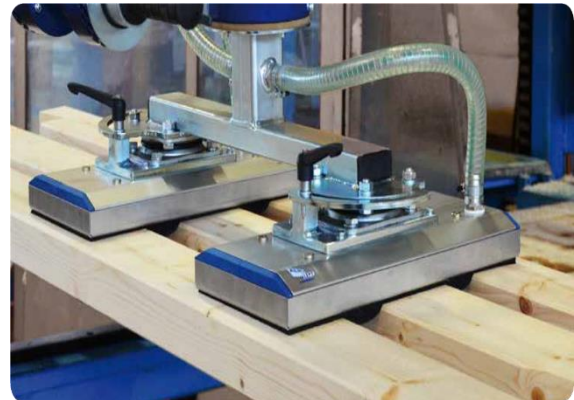
The wood processing sector, food logistics or pharmaceutical industry, VUSS vacuum grippers help improve the workflow significantly at different locations in the material handling process.

For instance, a large quantity of beverage cans can be transported without being damaged by the grippers. That includes fragile wood parts with cut-outs. Or constantly changing quantities of small electrical components packed in boxes that must be sent quickly to dispatch for shipping.

The basic principle is really simple. The robot attaches the vacuum plate to the product to be transported instead of grabbing it.

In such cases, it does not matter whether the products have holes or slanted or comprise of several parts. The VUSS system 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.

This allows you to move large quantities of materials of various lengths and shapes quickly and cleanly, thus saving you a lot of time when it comes to logistics and the loading of equipment or the automated stacking of materials in the panel form.



Flange-mounted on a robot's arm for an automated operation or manually controlled at the tube lifter, the VUSS Vacuum grippers provide reliability, flexibility and effectiveness for your applications.

The vacuum grippers are ready to work even in dirty environments as they are not affected by dirty or dusty work areas.

Quick overview of all advantages.

- ✓ **Patented vacuum valve system comprising a wide variety of different valves lowers energy consumption by 50%**
- ✓ **Modular setup allows for individual, application specific vacuum gripper systems.**
- ✓ **High Cycles**
- ✓ **Reliable & stable lifting without any loss of performance due to dirty conditions.**
- ✓ **No surface damage – Material friendly transport process that does not put stress on the objects being moved.**
- ✓ **Flexibility – lifting various objects without tool changeover or reprogramming. For instance, not only workpieces but also Euro pallets, paper as intermediate layers etc. if necessary.**
- ✓ **Improved value creation, measurable cost savings and shortened changeover times thanks to intelligent system solutions.**
- ✓ **High quality product, optimum material quality, convincing solution competence and cooperative support.**
- ✓ **Lightweight construction to keep the acquisition costs of a robot as low as possible.**
- ✓ **Low overall height to ensure effective use – even in tight spaces**
- ✓ **Suited for automated operations with robots and for manual use by an employee.**



VUSS enables a high level of efficiency

Vacuum gripper in detail:



Valve Technology

- ✓ There is an appropriate valve for almost every product to be moved. That minimises air consumption and thus decrease your energy costs.
- ✓ Valves are designed for a quick and easy changeover in order to keep set-up times short.
 - ✓ No bypass holes
- ✓ No blockages of valves due to dirt particles
 - ✓ All parts are easy to access

Suction Cups

- Stable and reliable handling for every application:
- ✓ UV-resistant for use outdoors
 - ✓ non-aging as well as moisture and temperature resistant
 - ✓ High wear resistance
 - ✓ Short reset times for high number of cycles
 - ✓ Quick replacement of suction cup mat
 - ✓ Var. hole patterns depending on the product to be moved

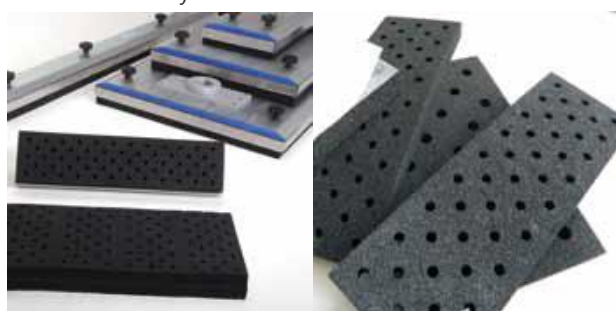
Recommended areas of use of VUSS Vacuum Gripper

- ✓ Fully automated palletizing, picking, depalletizing and sorting products
- ✓ Metalworking industry
- ✓ Chemical and plastics industry
- ✓ Furniture and woodworking industry
 - ✓ Package handling
- ✓ Food processing and pharmaceutical industry
 - ✓ Packaging industry

Easy Replacement Valve



Wide Variety of sizes and variations



Exterior seal & diverse valves



Maximum flexibility – Applicable in many industries:

A small selection of possibilities.

Gaps – no problem



High hygiene standards



No Changeover times



Significantly improves workflow



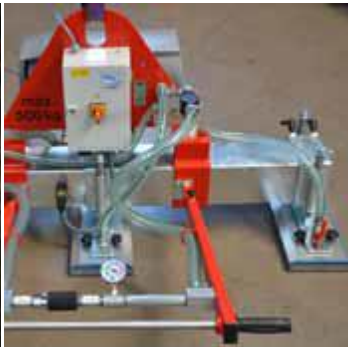
Effortless: Heavy planks



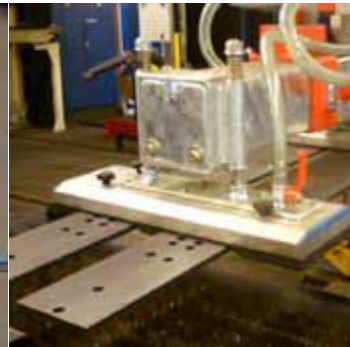
Large quantities



Manual use



Cut-outs or recesses



Wood Processing Industry	Food Industry	Other Industries
<p>The wood processing industry has been using vacuum lifting systems for many years to handle materials ranging from raw materials to the end products.</p> <p>The vacuum plates with the unique flow valves pose very flexible solutions for the wood processing industry.</p> <p>The vacuum systems are used both for handling raw materials such as boards and or planks as well as finished pieces of furniture – unpacked or packed in boxes.</p>	<p>Vacuum lifting systems have become widely accepted in the food processing industry in particular. Cost effective operation, high standard of hygiene and damage-free transport of fragile objects are convincing arguments.</p> <p>We offer solutions even for heavy or complicated lifting needs, eg in dairy operations, slaughterhouses, canneries, packaging systems for fish products or beverage logistics.</p>	<p>Lifting systems equipped with VUSS vacuum grippers are implemented in a wide variety of industries for instance:</p> <ul style="list-style-type: none"> - Automobile - Electrical - Sanitary equipment - Metal industry - Automation equipment - Furniture / kitchen industry <p>Be it an incomplete pallet of cans or a lose stack of wood boards or individual workpieces of varying sizes. Thanks to the vacuum grippers, you will be able to easily handle both uneven, textured surfaces and products of various dimensions. The more than 100 possible variations offered by the gripper system ensure an easy adaption to your materials and requirements.</p> <p>Simply combine with your existing robots to create an optimum overall solution for your company.</p>