

AERO-LIFT VACUUM GRIPPERS



**Flexible Process Automation
With Vacuum Grippers**



A new dimension of vacuum grippers

Never before has material handling been so flexible!

Do you think that vacuum lifts are only designed to handle smooth, clearly defined materials? The VUSS vacuum grippers from AERO-LIFT prove otherwise.

This latest generation of vacuum grippers with the patented vacuum valve system also allows for handling different goods of various sizes and shapes – without requiring any changeover.

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

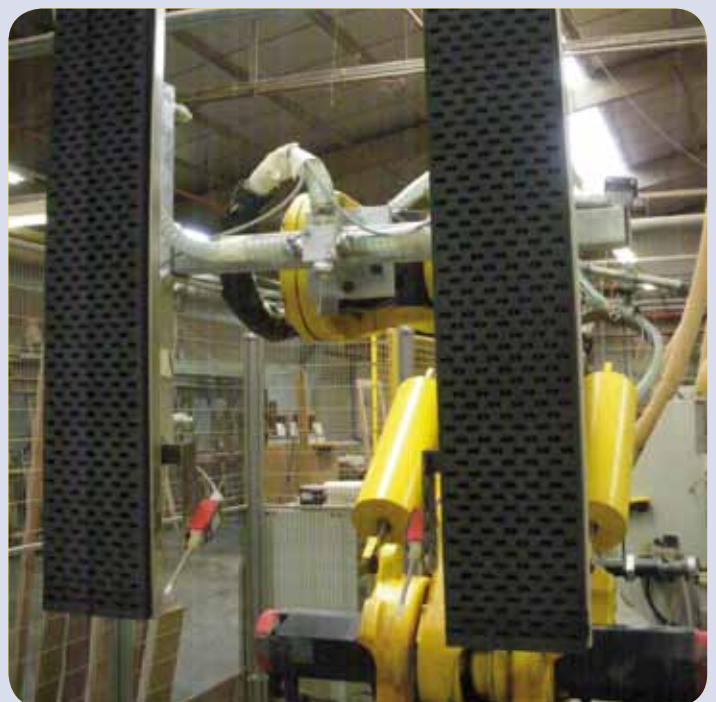
For instance, a large quantity of beverage cans can be transported without being damaged by the grippers. That includes fragile wood parts with cut-outs. Or constantly changing quantities of small electrical components packed in boxes that have to be sent quickly to dispatch for shipping.

The basic principle is really simple: The robot attaches a vacuum plate to the product to be transported instead of grabbing it. In such cases, it does not matter whether the products have holes, are slanted or comprise several parts. With the AERO-LIFT® VUSS, which 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 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.

By the way: the performance of vacuum grippers is not affected by dirty or dusty work areas.





Quick overview of all advantages

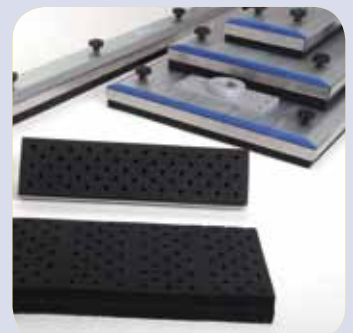
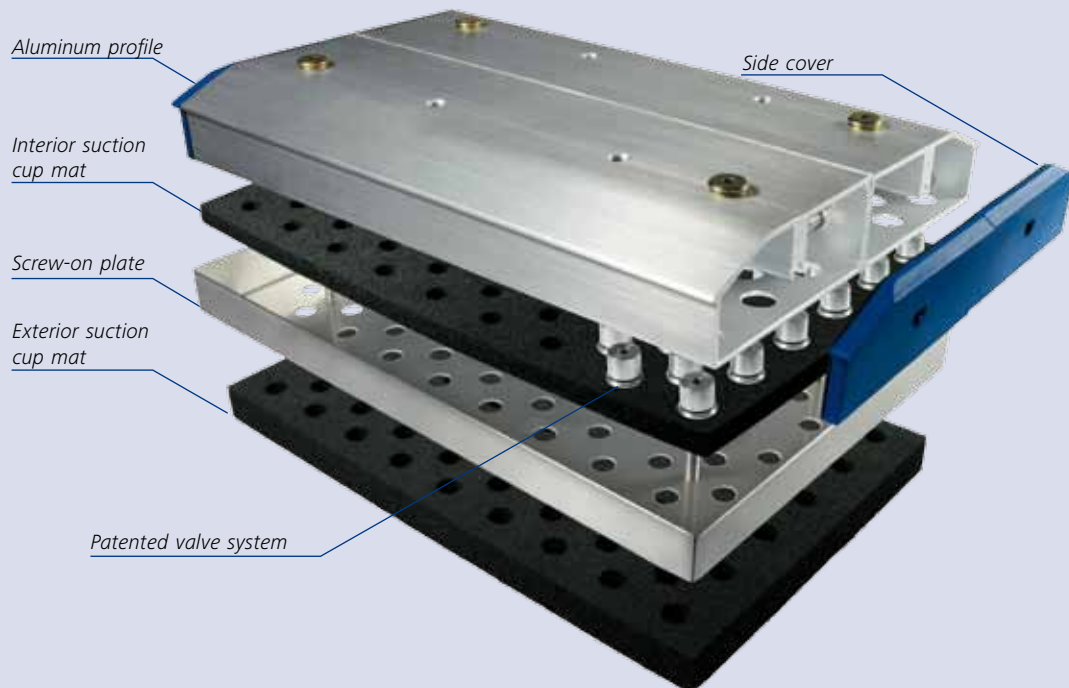
Reasons why AERO-LIFT vacuum grippers are the ideal solution for your material handling process:

- ✓ **Patented vacuum valve system comprising a wide variety of different valves lowers your energy consumption by up to 50%**
- ✓ **Modular setup allows for individual, application-specific vacuum gripper systems**
- ✓ **Large number of cycles**
- ✓ **Reliable and stable lifting without any loss of performance due to dirty conditions**
- ✓ **Material-friendly transport process that does not put stress on the objects being moved. Thus there is no surface damage!**
- ✓ **Flexibility – the system can lift various objects without having to be reprogrammed or tool changeover. 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**
- ✓ **AERO-LIFT „Made in Germany“ – innovative technology, 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

AERO-LIFT vacuum gripper in detail



Valve technology:

- ✓ There is an appropriate valve for almost every product to be moved. That minimizes air consumption and thus decreases your energy costs.
- ✓ Valves are designed for a quick and easy changeover in order to keep set-up times short
- ✓ No bypass holes
- ✓ No blockage 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 of products
- ✓ Metalworking industry
- ✓ Chemical and plastics industry
- ✓ Furniture and woodworking industry
- ✓ Package handling
- ✓ Food processing and pharmaceutical industry
- ✓ Packaging industry



Maximum flexibility – Applicable in many industries

A small selection of possibilities



Gap in the middle? Not a problem!



High hygiene standards



No changeover times



Significantly improves workflow



Effortless: Heavy wooden planks



Large quantities, careful handling



Manual use



Workpieces with cut-outs or recesses

Wood processing industry

The wood processing industry has been using vacuum lifting systems for many years to handle materials ranging from raw materials to the end products.

The vacuum plates with the unique flow valves pose very flexible solutions for the wood processing industry.

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.

Food industry

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.

AERO-LIFT Vakuumtechnik offers solutions even for heavy and complicated lifting needs, e.g. in dairy operations, slaughterhouses, canneries, packaging systems for fish products or beverage logistics.

Other industries

Lifting systems equipped with VUSS vacuum grippers are implemented in a wide variety of industries, for instance:

- Automobile
- Electrical
- Sanitary equipment
- Metal industry
- Automation equipment
- Furniture / kitchen industry

Be it an incomplete pallet of cans or a loose stack of wood boards or individual workpieces of varying sizes: Thanks to the AERO-LIFT 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 adaptation to your materials and requirements.

Simply combine your existing robots with the AERO-LIFT vacuum grippers and create an optimum overall solution for your company. The AERO-LIFT pays for itself in no time!



AERO-LIFT

We are here to help
you, even locally!

AERO-LIFT international



To locate a representation or a contact person for your area - in Germany as well as in many countries around the globe, visit www.aero-lift.de

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