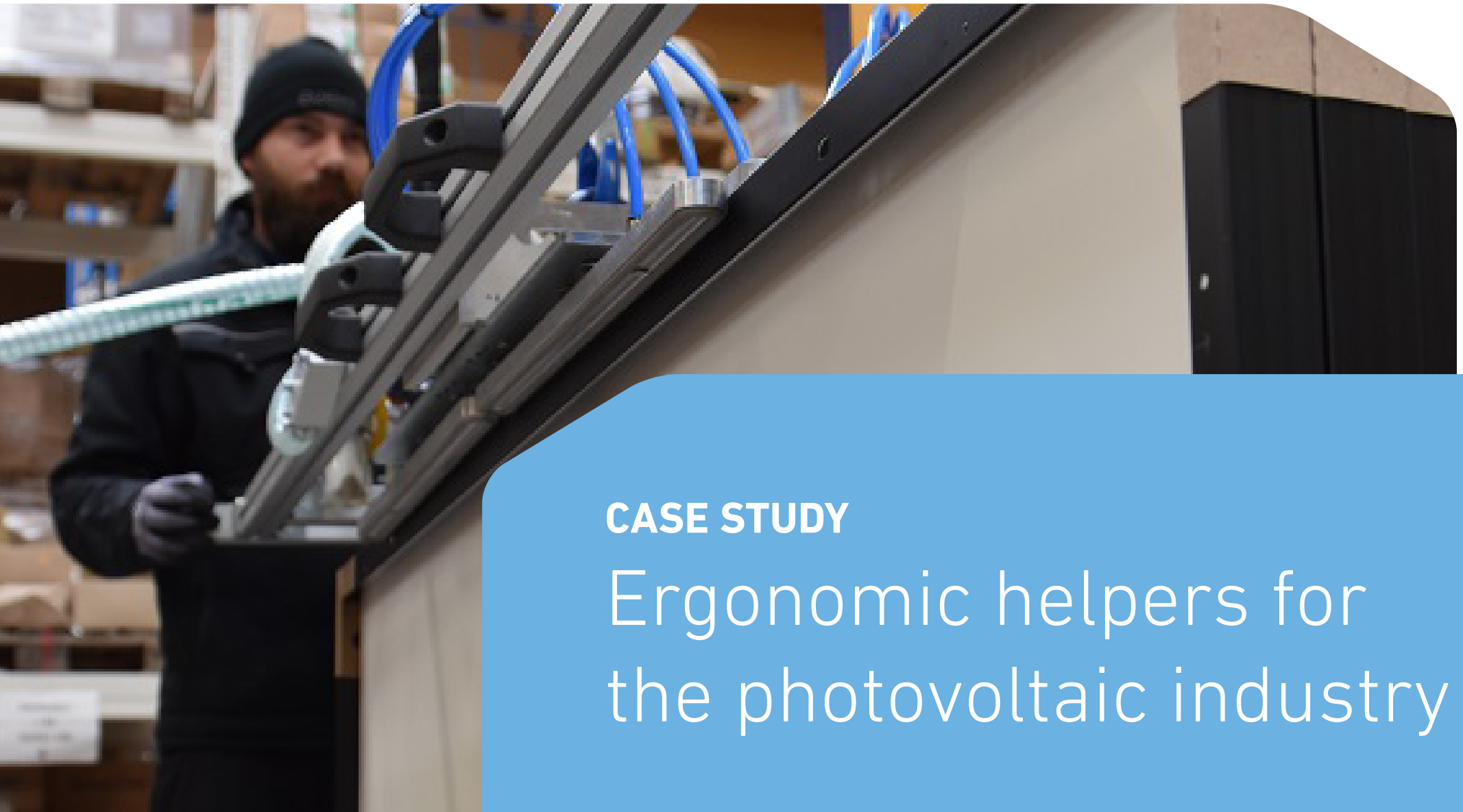


moving limits



CASE STUDY

Ergonomic helpers for
the photovoltaic industry



As process optimizers with high safety standards, the AERO-LIFT vacuum lifting devices are indispensable in the sheet metal and wood industry. The vacuum lifting specialist from Baden-Württemberg/Germany also offers smart solutions for the handling of PV modules, as shown by the successful example of ezee Energy.

The company ezee Energy from Geislingen-Binsdorf is specialized in renewable energies. It offers well thought-out concepts for its partner companies in the solar, plumbing and heating trades, which it also supplies with the necessary products. Especially when it comes to separating of photovoltaic modules for the respective customers and installation teams, the need for supportive solutions increases, because there are several deliveries to be picked every day.



During the manual handling process, at least two people are usually required due to the weight of the individual modules and to protect the material. There is a risk that one of the unwieldy modules could fall down and break. In addition, there is the aspect of ergonomics. Reasons enough to think about optimising this workflow. Due to the neighbouring company locations, the solution was to knock on the door of the vacuum technology professionals next door.

After analysing the existing work process, the engineers from AERO-LIFT developed a special solution for the PV industry. With this, several photovoltaic modules can be sucked in from above at the same time and can, for example, be removed from or inserted into cardboard boxes.

Due to the soft, flexible seals of the suction plates, the modules are safely sucked in and can be transported from A to B without damaging the material. The distance between the individual suction plates can be adjusted variably. Conversion to solar modules of different widths is therefore done in no time. For common sizes, there are also special positioning aids that make conversion even more convenient.

Each suction plate row can be shut off individually via a manual slide valve. This means that 1-6 modules can be flexibly handled with the same setup. The units are designed and manufactured in accordance with the current safety standards as per EN 13155 and ASME B30, as well as tested and documented in accordance with the valid accident prevention regulations BGR 500 and Machinery Directive 2006/42/EC/ Appendix IIA.



It is now unthinkable for all of us to carry out this activity without the support of vacuum lifting technology.

The managing director of eze Energy agrees that this is an all-round satisfactory solution: „The vacuum lifting technology has significantly improved our processes, and the risk of back pain is now fortunately a thing of the past for us,” says Reiner Stauss. „It is now unthinkable for all of us to carry out this activity without the support of vacuum lifting technology.” Sebastian Scherer, contact person at AERO-LIFT Vakuumhebetchnik, is also satisfied: „We are always happy when we can make our customers' work easier and safer with the help of our solutions. Many companies in the PV industry have already been able to make their work much more comfortable and ergonomic thanks to our vacuum lifting devices. We are constantly working on new concepts for this, which can of course be customised.”

The final acceptance test is carried out according to VDE 0113 and EN 60204. AERO-LIFT also has a solution for swivelling modules: Using a specially designed vacuum lifter, the solar panels can be rotated by 90° and transported both horizontally and vertically. This also makes it possible to efficiently move individual modules. Thanks to a mobile light gantry crane, the picking stations at eze Energy can be flexibly relocated in the halls without requiring any structural measures. The formerly tiring and unpopular picking work is now comfortable, faster, more efficient and, above all, can be carried out by only one employee.

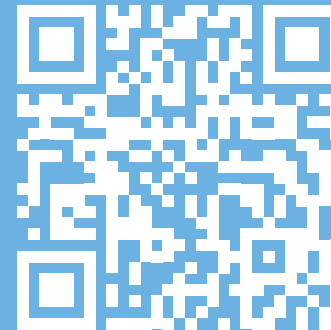


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Are you looking for an efficient and ergonomic handling solution specifically for your challenge? Then AERO-LIFT is the right choice for you.

We would be happy to use our experience from numerous industries and areas of application to bring your company forward together! Contact us with your enquiry without obligation:



AERO-LIFT Vakuumtechnik GmbH has been internationally successful in the field of vacuum handling technology for over 30 years. The family business was founded in Geislingen-Binsdorf/Baden-Württemberg, where the company's headquarters are still located today. With several strategic business fields, AERO-LIFT is broadly positioned: From tube lifters, vacuum lifters, large-area grippers for automation technology to components, crane systems and services, the customer gets everything from a single source. This broad spectrum requires great innovative strength and flexibility. A wide variety of customers from the construction and trade, automotive, chemical, food, energy, logistics, metal and woodworking industries benefit from the broad expertise and the Swabian inventive spirit. With the help of solutions from the vacuum specialists at AERO-LIFT, they improve their workflows, efficiency and production flow, relieve and motivate their employees and thus meet the requirements for health protection and ergonomics. For more information on AERO-LIFT's vacuum lifting technology, please visit www.aero-lift.de/en.

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