**Press release**

**March 2025**

**Exoskeletons: full support for every challenge**

Pain, muscle tension and fatigue are part of everyday life for many employees. Exoskeletons relieve the body during strenuous activities, such as overhead work. They enable people to tire less and work without discomfort. Schmalz is expanding its portfolio of manual handling equipment with two versatile models.

Musculoskeletal disorders account for round 18 percent of all sick days in Germany. Employees suffer from pain that limits their ability to work or often leads to absences. Companies have to compensate for this. The use of exoskeletons can significantly reduce complaints and absenteeism by relieving staff. Ergonomically designed workplaces have been shown to be a decisive factor in reducing the number of sick days and thus increasing operational efficiency. Powerful exoskeletons transform physical strain into almost effortless movements, while drastically reducing the risk of injury.

**Two solutions, many possible applications**

Schmalz is expanding its handling portfolio with two exoskeleton models for typical lifting tasks in logistics and manufacturing. The forward bend exoskeleton MATE UBA supports the lower back when lifting and placing goods - especially during repetitive tasks, for example when employees are picking from low rack levels. Another example is the loading and unloading of sheet metal processing machines. For this, employees must place heavy sheets on pallets or pick them up from there. Thanks to the intuitive on/off function, employees can quickly and easily put the exoskeleton into operation and deactivate it just as easily after work.

The MATE UTA upper body exoskeleton makes overhead work such as installing plasterboard on ceilings or loading and unloading stacked freight containers easier. It specifically relieves the shoulder and neck muscles, supports the lifting of arms and distributes forces evenly. The highlight: the lightweight yet extremely resilient carbon fiber structure ensures that the wearer can hold the brace ergonomically and without fatigue.

The core mechanism in both systems is the so-called Torque Generating Box (TGB), which stores and converts potential mechanical energy to facilitate rotational movements. Unlike conventional handling solutions, the exoskeletons do not require any external energy source. They are lightweight, mobile, suitable for outdoor use and provide the body with purely mechanical support. The textile elements are washable, which maintains the system's longevity, enables hygienic multiple use and increases the wearer's comfort.

**Back health as a competitive advantage**

"Sizeable, automated handling devices are not practical or economically viable in every production environment," emphasizes Mattias Lindh, Head of the Handling business unit and member of the company management. "Exoskeletons, on the other hand, are flexible to use, can be individually adapted to different users and allow natural freedom of movement." The lightweight design and breathable materials ensure a high level of comfort without restricting mobility. The "MATES" keep the wearer's back free for challenge every. In this way, the focus remains on the individual as a worker - strengthened, not replaced

With the exoskeletons, Schmalz is expanding its portfolio in manual lifting technology. This allows the company to further expand its position as a comprehensive provider of ergonomic handling solutions – from dynamic lifting systems to precise process automation to body-worn lifting solutions – and thus offers one of the most comprehensive portfolios on the market. “Our aim is to provide the best possible handling solution for every application and thus sustainably strengthen our customers' competitiveness,” explains Mattias Lindh. “By expanding our portfolio, we will be able to meet this demand even better in the future.”

The proven vacuum lifters and manipulators already ensure efficient workflows, and now there is a further way to relieve the burden of physically demanding tasks. “Thanks to the combination of technology, ergonomics and productivity, companies receive comprehensive solutions from a single source – for more efficiency and less strain in their daily work,” says Mattias Lindh, summing up.

Schmalz will be presenting the two exoskeleton models at in March LogiMAT in Stuttgart and at BAUMA in Munich in April.

**Schmalz at the LogiMAT: Hall 7, Stand C05**

**Schmalz at BAUMA: Hall B4, Stand 325**

(4,323 characters incl. spaces)

**Service for the editorial team**

**Meta-Title**: Exoskeletons from Schmalz make manual handling easier

**Meta description:** Schmalz is expanding its portfolio of manual handling equipment with two versatile models. They enable people to work longer with more strength and without discomfort.

**Social media:** Long-term health pays off – for employees and employers alike. Exoskeletons help to prevent muscle tension and chronic back problems. This means that skilled workers can remain operational for longer, and companies benefit from a stable, motivated staff. Schmalz is presenting two models that support employees in overhead or lifting work: the upper body exoskeleton MATE UTA and the forward bend exoskeleton MATE UBA**.**

**Pictures:**

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|  |  | **Picture 1:**  With the MATE UBA forward bend exoskeleton, employees can lift even heavy goods with little fatigue. |
|  |  | **Picture 2:**  Unlike conventional handling solutions, requires neither exoskeleton an external energy source. |
|  |  | **Picture 3:**  The MATE UTA upper body exoskeleton supports overhead and upper body work. |

Pictures: J. Schmalz GmbH

**You can the high-resolution images download here.**

**About the company**

Schmalz is one of the market leaders in vacuum automation and ergonomic handling systems. The internationally positioned company's products are used in applications logistics as well as in the automotive industry, the electronics industry and furniture production. The broad spectrum in the Vacuum Automation business unit includes individual components such as suction cups or vacuum generators, complete gripping systems and clamping solutions for holding workpieces, for example on CNC machining centers. In the handling business unit offers, Schmalz with vacuum lifters and crane systems. innovative handling solutions for industry and trade With the Energy Storage business unit, the company is designing another mainstay in the field of stationary energy storage systems.

The combination of comprehensive consultation, a high focus on innovation and first-class quality safeguards sustainable added value for customers. Intelligent solutions from Schmalz make production and logistics processes more flexible and efficient - and at the same time fit for the advancing digitalization.

#### Schmalz is represented in all major markets with its own locations and trading partners in around 70 countries. The family-owned company, headquartered in Glatten in the Black Forest, at employs round 1,800 employees at 31 locations worldwide.

#### Contact for questions

J. Schmalz GmbH

Marketing Communication

Johannes-Schmalz-Str. 1

72293 Glatten, Germany

T: +49 7443 2403-506

[presse@schmalz.de](mailto:presse@schmalz.de)

[www.schmalz.com](http://www.schmalz.com/)

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