



## COMAU INTRODUCES ITS NEW MATE-XB WEARABLE LUMBAR EXOSKELETON, DESIGNED TO REDUCE LOWER BACK STRAIN

- Developed with IUVO and in collaboration with Esselunga, both as an early adopter and a validation and testing partner, MATE-XB fully supports the lumbosacral joint during bending and lifting activities
- Able to support workers handling loads of up to 25kg, the fully passive exoskeleton helps ensure better safety and well-being for operators
- MATE-XB further confirms Comau's commitment to wearable robotics, as the company now covers upper and lower body support needs
- Sustainable, measurable ergonomic improvement facilitates long-term health benefits in addition to granting better quality and performance times

**Grugliasco (Turin), June 27, 2023** – Comau and IUVO, in collaboration with Esselunga, have developed a new wearable exoskeleton specifically designed to reduce lower back fatigue during lifting and repetitive tasks. Created with the aim of improving ergonomics for operators engaged in manually moving loads, it was tested at Esselunga Group, a leading large-scale retail trade company. Without using a motor or batteries, the exoskeleton provides passive assistance to the lower back muscles that are used during lifting and handling. It thus creates short- and long-term benefits for the wearer through the significant reduction in physical effort and fatigue. It also confirms Esselunga's attention to innovation and its commitment to continually improve working conditions by placing employees at the center of its mission.

The newest Comau wearable exoskeleton stores human energy in a spring. It accommodates the specific needs of workers engaged in moving cumbersome loads by supporting users when bending their backs and during repetitive lifting. Easy to wear and quickly adjustable to fit virtually any body frame, the lightweight carbon fiber structure is water, dust, and element resistant for both indoor and outdoor use, even in highly corrosive marine environments.

Perfect for logistics, fulfillment, manual palletizing & depalletizing, manual pick & place, bending and lifting from a floor level, MATE-XB replicates the user's physiological movements to provide optimal lumbar support without batteries, motors or other failure-prone devices. The intuitive and easy-to-use design grants full mobility of the entire body and features a quick on/off switching functionality, allowing users to regulate the exoskeleton without interrupting the task at hand.



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



*“Comau’s commitment to increased sustainability in the workplace extends to the development of innovative solutions that ensure ergonomics and well-being at an operator level, said Pietro Gorlier, Comau CEO. For the last six years we have been developing wearable robotic solutions together with IUVO, a spin-off company of Scuola Superiore Sant’Anna of which Comau holds a majority share. We believe the market for wearable robotics will expand at a 25% growth rate over the next 3 years, according to internal estimates based on market research data.<sup>1</sup> Collaborating with an authoritative Italian partner and leader in its market such as Esselunga in the design and validation phases has been key to ensuring that the wearability, features and functionality of MATE-XB are worker tested and approved before deploying the exoskeleton in other industry sectors.”*

#### ABOUT COMAU

Comau, a Stellantis company, is a worldwide leader in delivering sustainable advanced automation solutions. With 50 years of experience and a global presence, Comau is helping companies of all sizes in almost any industry leverage the benefits of automation. Backed by a continuous commitment to designing and developing innovative and easy to use technologies, its portfolio includes products and systems for vehicle manufacturing, with a strong presence in e-Mobility, as well as advanced robotics and digital solutions to address rapidly growing markets in industrial sectors. The company’s offering also extends to project management and consultancy. Through the training activities organized by its Academy, Comau is committed to advancing the technical and managerial knowledge necessary to face the challenges related to automation and leverage the opportunities of a constantly changing marketplace. Headquartered in Turin, Italy, Comau has an international network of 5 innovation centers, 5 digital hubs, and 12 manufacturing plants that span 13 countries and employ 3,700 people. Together with its wide network of distributors and partners, the company is able to respond quickly to the needs of its customers, no matter where they are located throughout the world.

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

<sup>1</sup> Frost & Sullivan report 2021 *Robotic Exoskeletons: Roadmapping and Impact Analysis Market Growth, Share & Size* (frost.com)



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



PRESS RELEASE

**Press Office - Headquarters**  
**Giuseppe Costabile**  
[giuseppe.costabile@comau.com](mailto:giuseppe.costabile@comau.com)  
Mob. +39 338 7130885

**Press Office - Comau US**  
**Amanda Konja**  
[amanda.konja@comau.com](mailto:amanda.konja@comau.com)  
Mob. +1 248 727 7531

**Burson Cohn & Wolfe**  
**Tiziana Capece**  
[comau@bcw-global.com](mailto:comau@bcw-global.com)  
Mob. +39.320 826 8223



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

**Made in Comau**