



COMAU AND IUVO DESIGN NEW WEARABLE ROBOTIC TECHNOLOGIES TO REDUCE FATIGUE AND IMPROVE ERGONOMICS DURING MANUAL LOAD HANDLING AT ESSELUNGA GROUP

The innovative exoskeleton will support the lumbosacral joint and reduce the burden on the back during lifting activities, thus improving working conditions and quality for operators

Grugliasco (Turin), February 9, 2022 – Comau and IUVO are developing an innovative wearable robotics solution to improve the ergonomics of operators engaged in manually moving loads at Esselunga, a leading large-scale retail trade company. The aim is to improve well-being by reducing lower back fatigue. The action of the exoskeleton will assist the back muscles that are typically stimulated during lifting and handling tasks, thus creating short- and long-term benefits through a significant reduction in physical effort and fatigue.

There are three protagonists of the project. Comau's role is to lead the engineering process related to the new exoskeletal device for lumbar support. IUVO's design team will specialize in the conception, development and testing of wearable robotic technologies. IUVO is a spin-off company of the prestigious university Scuola Superiore Sant'Anna whose majority share is held by the Comau group. Esselunga will instead be responsible for leading the validation process of the device by involving its operators from the beginning of the project. Testing of the first prototypes will begin in the first quarter of 2022, while the first lumbar exoskeletons will be available in the second quarter of 2022.

Giacomo Del Panta, Comau Chief Customer Officer, said, *“The collaboration with Esselunga, a reference point within Italy's large-scale retail trade sector, for the creation of an exoskeleton for lumbar support, confirms Comau's commitment to developing new technologies that ensure better ergonomics and operator well-being during heavy-duty tasks. Once again, Comau is leveraging technology to support mankind by reducing the physical impact of manual and repetitive operations. By paying attention to the health and well-being of operators, Comau confirms its pledge to sustainable and human-centered manufacturing processes.”*



