



AMAZON OPERATIONS UNVEILS EUROPEAN INNOVATION LAB DEVELOPING NEW TECHNOLOGIES THAT ENHANCE EMPLOYEE SAFETY AND WELLBEING

May 20, 2021

- Following the successful implementation of Robotic Drive Units at dozens of sites, Amazon reveals new ergonomic technologies in development to further support frontline employees and help keep them safe
- Innovations include automatic sort stations, tote lifters, and remote guided vehicles
- Some of the Lab's advanced technologies are already deployed across European facilities, with others currently being tested for potential future rollout

20th May 2021. LONDON. Amazon today unveiled its European Operations Innovation Lab, designed to enhance the employee experience through the development of advanced technologies that support safer ways of working.

The technologies being developed by the Lab follow the successful implementation of more than 350,000 drive units across the world. The mobile drive units and four-sided yellow shelving towers – which were first implemented by Amazon in 2012 and came to Europe in 2014 – are now commonplace at Amazon facilities, supporting employees by bringing items to them, reducing the amount of walking required. Robotic Pallet Movers have also been introduced to enhance the employee experience and wellbeing by removing the need to carry heavy loads and reduce the need for repetitive tasks. Now the company is working on new technologies with similarly beneficial properties.

Based in Vercelli, Northern Italy, the Lab brings together a high-tech collection of the company's latest innovations for Amazon Operations – the company's supply chain and logistics arm. Since introducing the first robotics technologies almost ten years ago, Amazon has created more than one million new roles. In the UK alone, Amazon employs 45,000 people, with many working at Amazon Operations, helping pick, pack and ship customer orders.

The Lab focuses on testing and developing future technologies to help enhance safety in its facilities in Europe while also supporting employees in their daily work. The new support technologies include:

- **ITEM SORTERS:** A fully-automated single-item sortation system that reduces muscle strain by removing the need for an employee to rummage through a tote (a large box) to look for items.
- **PALLET MOVERS:** A large robotic arm that eliminates the need to use forklifts to carry pallets, and automatically moves multiple items from one location to another.
- **TOTE RETRIEVERS:** A machine that lifts totes and places them on conveyors automatically.
- **AUTOMATED GUIDED VEHICLES:** Support robots - similar to Amazon Drive Units - that seamlessly drive around the site carrying items for people, reducing the amount of walking required and alleviating the need from employees to push and pull carts and totes. These robots have sensors and follow pre-programmed routes to avoid bumping in to people or machinery.
- **ROBOT SORTERS:** Smaller robotic arms that eliminate repetitious tasks for employees, such as lifting, stacking, and turning, allowing employees to focus on the kind of work robots can't do.

Automated Guided Vehicles have already been deployed for use in Italy, and are being implemented also in Poland and the UK; **Tote Retrievers** are being rolled out in Poland and the UK; **Item Sorters** and **Pallet Movers** are in use in Italy, Spain, Germany, Poland and the UK; and **Robot Sorters** are used in Italy, Spain, Germany, and will be deployed in Poland, France and the UK later this year.

Once deployed, the new technologies are maintained by Amazon's Reliability Maintenance Engineering team to ensure ongoing safety, with comprehensive training provided to all employees at a site when new innovations are introduced.

Joshua Yorke, an apprentice and engineering safety co-ordinator at Amazon Durham, said: "Amazon is an incredibly safe place to work thanks to the technology that is utilised. New ways of working incorporating advanced technology have been introduced in all areas and none more so than safety. A good example of this was through the development of the radio-transmitting vest to keep us safe when entering the robotics floor. I think Amazon is a pioneer in technological advancement within the distribution and logistics industry and I am excited to see what new technology will be developed to continue to keep all employees safe at work whilst enabling us to deliver for our customers."

Stefano Perego, VP Amazon's Fulfilment Centre Operations in Europe, said: "We prioritize the safety of all our employees and are constantly looking for ways to further improve safety measures in our facilities. In fact, we want to become the safest place on Earth to work – right across our business. That's why we continue to invest in technologies and training for our people. And, as we introduce new advanced technologies to support our employees, we continue to hire and provide great jobs to people and communities that need them."

He added: "Since introducing Amazon Drive units to our global Operations back in 2012, our employee base has grown significantly. And it continues to grow today. That synchronicity between people and robotics, where technology enhances the employee experience, is one of the great successes

of the Amazon story.”

Stefano La Rovere, Head of EU Advanced Technology at Amazon who leads the scientists and engineers at the Lab, said: “We work closely with health and safety experts and scientists, conduct thousands of safety inspections each day in our buildings, and have made hundreds of changes as a result of employee feedback on how we can improve their well-being at work. As soon as we deploy a new technology and train our people, the ongoing feedback from our employees helps us refine and improve, with our people at the heart of helping develop the right technology for their part of the business.”

Amazon also confirmed that its new Operations site in Doncaster would be the next area where Tote Retrievers, Item Sorters and pallet Movers would be deployed later this year.

Dan Fell, Chief Executive Officer of Doncaster Chamber of Commerce, said: “Through our partnership on fulfilment centre tours at the height of the pandemic, Amazon has demonstrated to members of the Doncaster Chamber of Commerce and others across the UK how people and technology can work hand-in-hand in the workplace to create a positive, and most importantly, a safe workplace for the benefit of both businesses and their employees.”

About Amazon

Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking. Amazon strives to be Earth’s Most Customer-Centric Company, Earth’s Best Employer, and Earth’s Safest Place to Work. Customer reviews, 1-Click shopping, personalised recommendations, Prime, Fulfilment by Amazon, AWS, Kindle Direct Publishing, Kindle, Career Choice, Fire tablets, Fire TV, Amazon Echo, Alexa, Just Walk Out technology, Amazon Studios, and The Climate Pledge are some of the things pioneered by Amazon. For more information, visit amazon.co.uk/about and follow @AmazonNewsUK.

For further information please contact:

Amazon UK Press Office
Email: pressoffice@amazon.co.uk