

Helping hand Amazon launches cutting-edge warehouse robot in race to slash logistics costs



The US group says the Sparrow robotic arm is its first that can ‘detect, select and handle’ individual goods

DAVE LEE — BOSTON

Amazon has launched a new warehouse robot that can pick and sort millions of individual products, in a move that will automate more jobs as the US ecommerce giant faces pressure to cut logistics costs.

The group said the robot, named Sparrow, is its first with the capability to “detect, select and handle individual products in our inventory”, a task that had previously been the domain of Amazon’s warehouse employees.

Sparrow, a robotic arm that harnesses computer vision technology to identify and pick up small products, was unveiled in Boston yesterday.

The ecommerce group said the robot would “benefit” its employees, who could now focus on less repetitive tasks. It said 700 new “categories” of jobs had been created at the company related to robotics.

The new robot comes as Amazon is

under pressure to cut costs in its Online Stores division, on which founder Jeff Bezos built his empire, which has struggled to grow in 2022.

Last month, the tech group warned that consumer spending was in “uncharted waters” as it issued revenue forecasts well below Wall Street expectations, becoming the latest big tech company to warn of slower growth and higher costs.

The poor retail performance has led Amazon to backtrack on its logistics expansion plans. It has paused, or cancelled operating, at about 50 US warehouses, according to data from logistics analyst Marc Wulfraat. It has also reduced its workforce from a high of 1.62mn in March this year to 1.54mn at the end of September.

The belt-tightening brings to an end two years of pandemic-fuelled investment in logistics, during which time its delivery network doubled in size. This year, Amazon said it had reduced

its capital expenditure in logistics by \$10bn compared with 2021.

Amazon first introduced robotics into its warehouses in 2012 with the \$775mn acquisition of Kiva, a group that had produced a drive unit that could move stacks of shelves around a designated area. There are now 520,000 of these units in use in its global operation, the company said.

The ecommerce group processed approximately 5bn packages in 2021 — about 13mn a day — with 75 per cent being handled by its robots in at least one part of the delivery process.

While picking up small items is an easy task for humans, creating a system capable of handling a large variety of shapes, sizes and weights, without needing to be recalibrated, has proved a challenge for engineers.

Sparrow uses seven suction cups at the end of a robotic arm to grab items, sorting products to be sent to the next step in the packing process.