

Yaskawa showcases Neocortex robotic work cell for material handling

December 09, 2016 Abdul Montaqim



Yaskawa (<https://www.yaskawa.com/pycprd/home>) has introduced a new robotic work cell developed in partnership with Motoman and [Universal Robotics \(http://www.universalrobotics.com/\)](http://www.universalrobotics.com/).

Yaskawa says the Neocortex Goods to Robot Cell is a “complete, pre-engineered adaptive picking solution”.

The system is the result of a collaboration between Yaskawa America, Motoman Robotics Division and Universal Robotics.



Yaskawa says the solution is designed to automate any high-mix, high-volume application where manual labor is currently required, such as random bin picking, order fulfillment, machine tending or line loading.

Built on Universal’s Neocortex and Spatial Vision 3D software platform, this solution features a Motoman MH12 robot, gripper, 3D vision guidance, industrial PC, sensors, communication protocols, human machine interface and safety barriers.

Neocortex, an artificial intelligence platform, is highly flexible with unparalleled real-time recognition. It can identify a diverse mix of boxes, bottles, tubes and bags. There is no limit to the number of parts or SKUs it can identify.

Neocortex enables the high-speed, six-axis MH12 robot to pick incoming products from totes, bins, trays or cases. The robot then places the product in bags, boxes or cartons for shipping.

With the ability of 800 picks per hour (average) with peaks up to 27 picks per minute, the Neocortex Goods to Robot Cell can increase accuracy and throughput over manual fulfillment.

Roger Christian, divisional leader, new market development, says: “This is an example of Yaskawa Motoman’s leadership commitment to pioneering new solutions for difficult applications.”

“This collaboration with an industry innovator, brings a pre-packaged solution to the industry for material handling applications previously not possible. Universal’s Neocortex artificial intelligence brings great handling flexibility to our high-speed MH-series robots, and delivers it in a compact pre-engineered cell.”

Hob Wubbena, vice president at Universal Robotics, says: “Customer interest, even prior to release, has been outstanding.

“Until now, no one has been able to combine high-speed handling with high variability of thousands of items, and deliver it in one easy-to-use robotic cell.”

The compact cell is delivered on a 4-ft x 4-ft platform, easily placed in a human-scale workspace by a forklift and operational within one day.