

..... >New robot for packaging plastic bottles
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News release Apex Automation and Robotics introduces new robot for packaging plastic bottles

Packaging plastic bottles is a labour intensive operation and it presents some challenges for automation which include high production rates, complex packing configurations and light products that comes in all shapes and sizes.

Apex Automation and Robotics has worked closely with a plastic manufacturer to provide an automation solution for the packaging of their polyethylene bottles.

The system consists of a 6-axis industrial robot that has been optimised to keep up with two blow-moulding machines at a production rate of 3000 bottles/hour.

The specially designed robot head contains vacuum cups used to pick up a row of 8, 9 or 10 bottles at a time, then equally space them apart before placing them.

In the next cycle, the bottles are both spaced apart and rotated up side down before placing to maximise the utilisation of the pallet.

The robotic cell has category 4 light curtains and 3 safety zones so that the robot is never interrupted when part of the cell needs operator intervention.

The overall system is controlled by a PLC, interfacing with the robot controller and an operator display panel.

The software engineers at Apex Automation & Robotics have established a reputation for providing flexible and user-friendly programmes and this system is no exception.

Apex Automation and Robotics has made sure that the system is reliable enough to meet the production requirements of 24 hour a day, 7 days a week, resulting in considerable cost saving to the customer and an improved OH & S environment.