
>Low level depalletiser

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News Release

Low level depalletiser from APEX Automation and Robotics
Apex Automation and Robotics offers a range of automatic machines to handle various sizes and shapes of plastic bottles. This range extends to robotic systems for complex packing and palletising applications.

The ADP 260 is a full Automatic Depalletiser for plastic bottles of different shapes - including oval and square - that can run at a production rate of up to 8000 bottles/hr. It picks the bottles off a pallet, arranges them in a single file to feed the Filler and automatically stacks the empty pallets and layer pads.

The pallet is first loaded onto a powered chain conveyor. It moves to the Depalletising station where it is lifted up until the top layer is presented to the separation head. Each layer of bottles is swept across by a 2-axis gantry, then a vacuum head is used to pick up the layer pads and stack them.

The separated layer is dropped to the Filler level then transferred to a servo driven conveyor that indexes one row of bottles at a time. Each row is loaded onto the Filler conveyor by a 2-axis manipulator. When the pallet is empty, it is transferred to an automatic pallet stacker.

The system is controlled by a PLC and a user-friendly touch screen allows the operator to change the setup, run and troubleshoot the machine.

Safeguarding is provided to meet OH&S requirements.

A set of light curtains with muting sensors at the pallet loading side, and another set in front of the pallet stacker ensures the system runs uninterrupted when loading and unloading pallets.

Unlike similar machines that are tall and require bulky platforms and stairs for access, the ADP 260 Automatic Depalletiser operates at an ergonomic low level and requires very little setup time for product changeover. The conveyor entry and flow of product can be arranged to suit any factory layout.

Apex Automation and Robotics have ensured that this Depalletiser is designed to meet production requirements of 24 hrs a day, 7 days a week, resulting in considerable cost saving to the customer.