palletising

Case Story

Let the robot do the heavy work

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A globally leading company in producing the highest quality batteries for all kinds of vehicles has production plants in many different countries. Handling batteries at the end of the production line is a heavy and monotonous task. Batteries can weigh up to 23 kilos and have to be put on a pallets for onward transportation. Although it can be done very efficiently by hand, from a viewpoint of good ergonomics and personnel care, you do not want to continue this method of working.

However, is there an alternative solution? Until recently nobody was convinced that this could be done automatically – that is until the customer met CSi. CSi's Sales Manager convinced the customer it could be possible.

KEY DATA

- ✓ Segment: Automotive Parts
- ✓ Country: Czech Republic
- ✓ Equipment: end of line robot palletising
- ✓ Handling 420 car batteries per hour from fout production lines



A few weeks later, it was proven by demonstrating the handling of car batteries on a standard i-Pal installation.

Seeing this, the customer did not hesitate and directly ordered 4 palletising cells with the request to deliver them as soon as possible

The standardised concept of the i-Pal palletising cell makes it possible for CSi to deliver.

Firstly: as it is a standardised cell there are always machines available for customer testing. CSi even has an extensive Test & Demo Facility where the different standardised solutions are available for testing and demonstration.

BENEFITS

- ✓ Eliminating handling of heavy products: ergonomics
- ✓ Short term effect: very short time from order till commissioning
- ✓ Little production disturbances: installation and commissioning in a few days
- ✓ High reliability for a smooth production and material handling process

TECHNICAL HIGHLIGHTS

- ✓ Modular and standardised concept with options and variances
- ✓ In accordance with CE standards 2012
- ✓ The standard cell can easily be extended by adding e.g. a slip sheet buffer for adding a sheet in between layers
- ✓ Another option is an automatic pallet destacker suitable for a stack of 15 empty pallets



Secondly: the concept does not require engineering (time), selection of components or other special actions. CSi just orders the next batch of robot cells from their production facility in Romania with the options required by the customer. There they are manufactured, assembled and tested against the highest standards at lowest possible costs.



Thirdly: the installation and commissioning is done in an extremely short time. Only one or two days are required to install the robotic cell. The process and product standardisation guarantees this timing. The production disturbances are therefore reduced to an absolute minimum. After just a short time the benefits of the investment are visible.



The i-Pal concept can palletise all types of products (light or heavy, small or large, rectangular ,round or square, high or low etc.) at the lowest possible cost. There are no competitors with both an extensive standardisation, therefore eliminating expensive engineering, and an efficient production plant in a low cost country, again minimizing production and assembly costs. With CSi's standard solutions the customer can profit from the highest Return on Investment in palletising while at the same time doing the best for their employees.

If you think you may have an ergonomic improvement requirement like our customer, bear in mind that the lack of ergonomics in a workplace can lead to the following costs:

- Costs for long term health and safety of employees
- Absenteeism: the i-Pal works continuously 24 hours/day, 7 days/week and doesn't need coffee or lunch breaks -boosting of company morale due to reduction of monotonous tasks
- Higher product quality, no errors are made

INNOVATIONS

- ✓ Complete standardised robot cell for palletising
- ✓ Standard tool also suitable for handling heavy products
- ✓ Absolute minimum time for installation and commissioning