



# Tubes of Personal Lubricant

## ERECT | PACK | SEAL

This personal lubricant manufacturer and returning Pearson customer was in need of a solution that would automate the case erecting, packing, and sealing functions of their line, currently staffed by a team of four human operators. They were ready to invest in an automated solution they could count on, as sustaining staff levels was becoming increasingly difficult.

The solution would need to be flexible enough to handle product pack variations, with minimal disruptions to production for changeovers between runs. The customer also hoped to improve operator proficiency across all the equipment, and intended to integrate a uniform palletizer into the line in the future, ideally sourced from the same vendor.

And one final request... a custom powder coat? Because the machine would need to match their existing purple equipment.

### Products:

- Tubes of personal lubricant

### Required Rates:

- 120 loose tubes per min
- 73 bundles per min

### Objectives:

- Eliminate the need for (4) dedicated operators on the line
- Minimal downtime for changeovers
- Operational consistency
- Ability to source a palletizer from the same OEM in the future
- 3 year ROI

### Challenges:

- Product variation includes individual nested tubes and shrink-wrapped 3- or 6-pack products



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Web: [PearsonPkg.com](http://PearsonPkg.com)

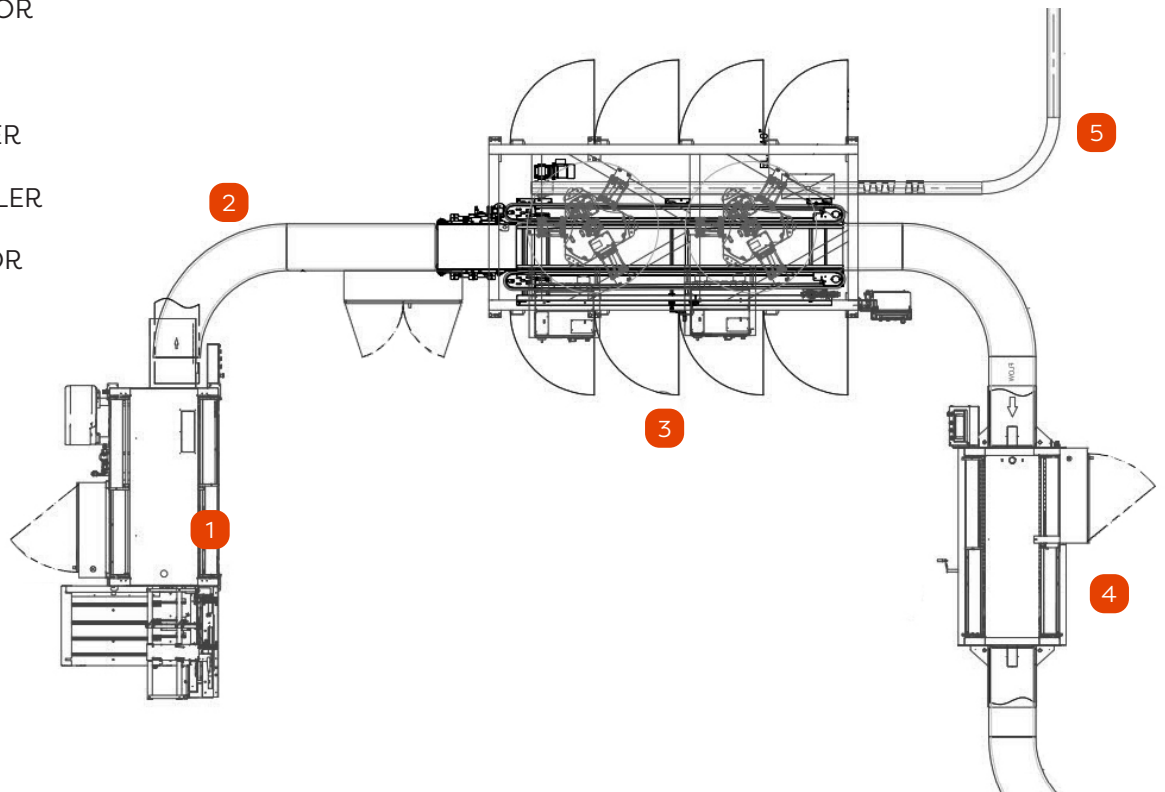
## Solution:

A CE35-T tape Case Erector forms boxes, which transport via conveyor to a RTL-MX Robotic Top Loader. As the lubricant tubes enter the cell, a 2D vision system identifies the location of the products and two FANUC M3iA/6S Delta robots equipped with vacuum end-of-arm tooling pick the appropriate product counts and place them horizontally into cases. Filled cases move to the CS25-42T case sealer, where they are securely closed.

Automating the erect, pack and seal functions of the line reduces the manual labor headcount, while a uniform Human Machine Interface (HMI) across all machinery simplifies operation and learning for new staff. Changeovers between loose and bundled product runs require a swap out of the end-of-arm tooling, and can be completed in less than 10 minutes. No tools are required, and the HMI provides a step-by-step guide and changeover map for reference.

Additionally, the customer would have the ability to purchase a similarly-operated and simple-to-integrate robotic palletizer from Pearson in the future. Did we mention the machines were also the perfect shade of **PURPLE**?

- 1 CE25-T CASE ERECTOR
- 2 CASE CONVEYOR
- 3 RTL-MX CASE PACKER
- 4 CS25-42T CASE SEALER
- 5 PRODUCT CONVEYOR



## Achievements



### Labor Reduction

Freed 4 dedicated operators for other tasks



### Minimal Downtime

10 minute tool-less changeovers with guided instructions



### Improved Usability

Operator comprehension & efficiency from equipment continuity



### Future Expansion

Ease of future palletizer integration