

PALLETPOD – Fully Auto ROI



Customer: McEntire Produce, Columbia, SC

Producing chopped lettuce and other vegetables for restaurants and fast-food chains.

Their operation involved 2-3 men per line, (2 lines), palletizing boxes of chopped lettuce weighing up to 28 lbs., at a rate of 10-12 boxes / minute. Pallets stacks for some skews are 8' high. The processing lines are in a damp, cold environment, (40° F). They operate 2 shifts 6 days / week, reserving one day for deep cleaning of their processing equipment.

Manually palletizing in this cold, damp environment is a very demanding job, requiring 2 men and sometimes 3 men to keep up with production. Tall men (above 6ft.) were required because of the stacking height. This severely restricted their pool of potential employees to fill these jobs. Even though the environment was cold, the men palletizing the boxes were wearing tank top t-shirts as their work was very physical. Injuries such as back and shoulder strains were common, (2-3 per year), and there was a high amount of turnover.



McEntire's VP of Engineering had been considering 4 and 6 axis robot arm solutions to do this task but didn't have the space to accommodate two systems. A fully automated PALLETPOD with its compact footprint coupled with automated ⁽¹⁾pallet dispensing and infeed / outfeed pallet conveyor turned out to be the solution he was looking for. Space requirements for the POD is a fraction of a robot system that can stack to 8ft. and it could keep up with the production capacity.

One fully automated PALLETPOD was ordered initially to prove functionality, speed and reliability, a second unit was put into service 11 months later.

It is easy to see the justification for the purchase of these two PALLETPODS. Palletizing labor decreased by more than 75%. One operator is needed on each shift to service two PODS (keeping the pallet dispenser loaded and off-loading the full pallets). There have been no injuries related to palletizing in the area since the PODS were installed and stacking rates and consistency improved. Job turnover dropped significantly. They now employ machine operators versus palletizing personnel. The prospective employee pool is no longer restricted to physical ability and stature.

The Return On Investment (ROI) for these machines was achieved in less than 22 months, using labor savings as justification. Cost savings relative to injury avoidance was a major consideration, but the dollars associated with this was not needed in the ROI calculations.

Check out some video by clicking on the links below.

Want to know more? Email: info@roiindustries.com

VIDEO LINKS:

<https://www.youtube.com/watch?v=pf5DffjqVCs>

<https://www.youtube.com/watch?v=OGIhpZsbxHU>

<https://www.youtube.com/watch?v=F-1y3SHoSJE>

⁽¹⁾ The pallet dispenser delivered with this project can dispense GMA, CHEP and Plastic pallets, (not mixed).