



BOX ERECTOR CASE STUDY

AT A GLANCE

CHALLENGES

- Labor shortage
- Effects of cold food storage environment (< 40°F) on cardboard and taping.
- Ease of use for non-technical workers

BENEFITS

- Increased productivity
- Reduced labor hours
- Reduced shipping damage
- Reduced repetitive strain

OBJECTIVES

On average, client needs approximately 300 volunteers per week to meet the demand for their services. The complete loss of volunteers during Covid made the need for automation highly apparent. The main objective was to tackle one of the bottlenecks in their fresh produce packing line, box erecting. Currently, workers build an average of 2,400-3,000 boxes a day. The pace of the line was so fast, they needed to erect additional boxes outside of their shift in order to have inventory for the next day.

SOLUTIONS

- Automated cobot box erector/taper with dispenser where operator can load 50 case blanks at a time.
- Simple push-button to start and stop allows anyone to use, volunteer or staff.

BENEFITS

Increased productivity

It took 2 workers to produce 2400+ boxes by hand. The cobot box erector produces 1600 boxes per day (67% of the production output), further reducing labor hours and eliminating their bottleneck.

Reduced labor hours and inventory space

Case erector reduces labor hours needed to build boxes as well as overtime, and allows for reallocating the labor pool so the extras can work elsewhere. This also means there is no longer a need to store hundreds of boxes in anticipation of the next day.

Increased quality and consistency

Perfectly squared boxes means sturdier stacking and less collapsed loads, which ultimately reduces shipping damage.

Reduced repetitive strain and injury

Using a case erector reduces the risk of workers injuring themselves from repeatedly opening boxes and taping them.