CASE STUDY

# Employee Owned Steel Manufacturer

▲ 46% Productivity
▲ 0% Energy

## SITUATION

**Low Productivity**

Workers at one of the nation's largest propane tank manufacturers has a very demanding job. Workers rotate from multiple stations to lift, test, and package the tanks. Each tank weights 15lbs to 50lbs. High turnover and worker fitness led to low productivity.

Dozens of workers were outfitted with the Boost watch and trunk pod. The baseline results were:

- 825 propane tanks lifted/shift (productivity)
- 4,017 total steps/shift (productivity)
- Average VO2 was 10 ml/min/kg (fatigue)

**Laevo**
Back support Skeleton

## INTERDICTION

**Improve Productivity with Exoskeleton**

Key challenge was to reduce the energy required to perform each lift. Passive spring-based exoskeleton, Laevo, was selected. The springs in the device store energy when the worker bends at the waist and returns the energy when they straighten. This is similar, in concept, to the pogo stick.

GoX Labs Boost:

- Samsung Galaxy watch measuring over 20 form, force, fatigue, fitness, performance and environmental factors
- Haptic feedback and display warnings on the watch to drink water, use good form, etc.
- GoX Labs motion pod measuring 3D movement of selected body part such as trunk or arm
- Dashboard providing real-time status risks by groups and workers

CASE STUDY

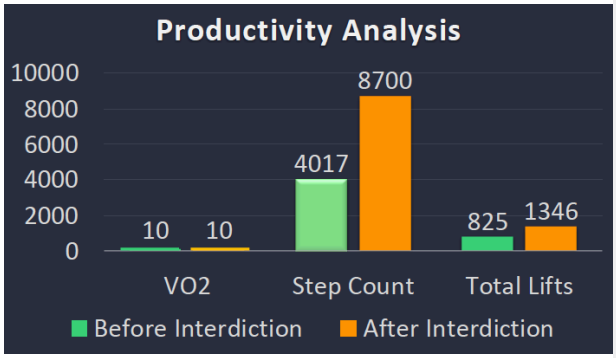
## RESULTS

**46% Productivity Increase & 0% Energy Increase**

The results were significant. Productivity nearly doubled with no increase in energy expenditure. Stress on the lower back and perceived exertion decreased. New workers to the plant were very happy with the support.

Our client realized:

- 1,346 propane tanks lifted/shift (productivity)
- 8,700 total steps/shift (productivity)
- Average VO2 was 10 ml/min/kg




## How it Works


**1** User puts on watch at the beginning of the day.

**2** Critical physiological & biomechanical data collected measures risk shown in green, amber, & red. If risk is too high haptic feedback alerts the worker.

**3** Data is continuously collected on the watch and uploaded to the cloud when connectivity is established via wifi or cellular.

**4** At this time, managers, executives, and workers can view the data from the dashboard on their computer or phone.

**Learn how your company can benefit from Boost wearable today.**
**Visit us at goxlabs.com or contact us at info@goxlabs.com**

Boost powered by