



Gorbel App Helps With a Solution for Battery Supplier

Industry:

Government / Department of
Defense

Product:

Batteries

The Problem:

Worker Fatigue, aches, and pains

The Solution:

Gorbel Tool Solutions Jibs



“It Makes It Faster, It Is Easy to Use. I Love It.”

A Southern Atlantic area Vocational Center provides job training and working opportunities to the disabled employees, and more than that, is a highly efficient supplier of batteries to the federal government and serves as the largest single supplier of batteries to the Department of Defense. The company has received for 16 years in row “Best Value” Gold Medal Awards from Defense Supply Centers Columbus and Richmond. With awards for Large Work Center of the Year, the company has been able to support the high demand of large contracts with a dedicated work force consisting of at least 75% developmentally disabled employees, and a well-executed work flow.

The battery packing area of the plant is a 10’ by 10’ work cell where employees sitting beside a custom made conveyor with 16 workstations package and label batteries into cartons that are transferred in a lower conveyor to be put into larger, densely packed boxes at outfeed end conveyor station, which are then lifted manually and placed onto a pallet. While the individual weight of a box of batteries is not overwhelmingly heavy, the cumulative toll it takes on the worker throughout the day results in fatigue, aches and pains. While no serious injuries had occurred, the company wanted to avoid any long-term effects of the repeated lifting, as well as any productivity dips that result from slower, tired workers. When larger battery orders were being filled, it was becoming increasingly difficult for the worker at the end conveyor to maintain the fast pace necessary.

“This was a process improvement,” said the Engineering Manager. “We identified this as a material handling operation that could be more ergonomic, and we don’t like to wait for workers to complain or for there to be an injury to react to.”

They called upon their material handling distributor for potential solutions for the work cell. While several options existed for the area, what helped the company better understand the proposed solutions for their work cell was the use of the Gorbelt App the distributor used on his iPad. Using the iPad's camera, he took a photo of the cell in its original state, and the Gorbelt App enabled him to insert various crane solutions into the photo. The images were shared with the customer, who decided that the most logical solution was a Gorbelt jib crane.

The final solution was a Gorbelt TSJ-100A, a freestanding, lightweight aluminum jib crane with a 100 pound capacity and 10 foot span. Attached to the jib was a Schmalz JumboFlex 35 vacuum lifter with adjustable suction pads to handle any size battery box that the company had. The combination of the vacuum lifter and the lightweight aluminum jib created a lightweight lifting and position solution that made the employees very happy.

"It makes it faster, it is easy to use. I love it," said Sandy, the Shipping Supervisor. "I'm tickled pink with it. It's amazing how much it saves on your back."

"We had purchased a Gorbelt work station crane for the U-line Conveyor the previous year," said the Engineering Manager, "and it paid for itself in productivity within a short period of time while packing and labeling Caterpillar Batteries for Defense Contracts that reached a weight up to 119lb ea. With Jib Crane application, we wanted something more ergonomic to take the weight of the load off of the worker in this single station, and we knew the Gorbelt products had worked for us before, and taught us the best solutions for material handling on the production floor"

"The jib crane has not been there very long, but already we can tell that the worker using it is fresher throughout his shift, he's happier, and he's more productive and this is what really matters to all of us."