

Inside, learn how Gorbel's EASY ARM™ helped one company:

- Improve their workflow
- Reduce back injuries
- Increase productivity by 25%



For more information on Gorbel's Easy Arm™
Intelligent Lifting Device, please go to:
www.gorbel.com

GORBEL[®]
A CLASS ABOVE

WHITE PAPER

Overhead Material Handling Solutions: Reducing Back Injuries

"If they didn't install this machine, I would've had to retire by now."

- Female Operator

Background

A turbine motor overhaul center receives engines that are used in oil and gas industries, power generation and military use. When the turbines are received, they have been in use for long periods of time and are in need of repair and refurbishing. The turbines are unpacked, disassembled and each individual part is inspected for wear and damage.

Injury-Plagued Inspections

After the engines are received, they are broken down and the parts are sent through an inspection area by conveyor where several inspectors wait for the parts to be unloaded and moved to their work bench. The weights of these components vary, some as high as 100 pounds. The manual lifting and twisting was leading to significant lost-time back injuries. The labor was particularly straining for several of the operators who were older and female.

The Gorbel Solution: Free Standing Easy Arm™

The company installed a free standing Easy Arm™ unit at each of the 4 inspection stations. The articulating arm with a 10 foot span allowed enough coverage area for the operator to reach the part as it came down the conveyor, lift it into the work cell, and eventually move the part to a pallet on the floor opposite the conveyor.



The Results

The primary goal of reducing injuries was achieved, with no instances of back injuries since the Easy Arms™ were installed. An added benefit was that all parts are now able to be handled and inspected by any of the operators without restrictions, which makes staffing the work cells much more efficient.

One of the female operators, who had required three back surgeries in her ten years of employment, was able to return to work with no limitations to her job.

"I love this Easy Arm®, " she said.
"If they didn't install this machine, I would've had to retire by now."

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WHITE PAPER

Overhead Material Handling Solutions: Perfect Complement to Six Sigma

"The introduction of the Easy Arm™ into the work flow tied in perfectly to our Six Sigma strategy and the efficiency of the company's work flow."

- Manufacturing Manager

Background

Gorbel's Easy Arm™ has also helped transform another work area in this turbine motor overhaul center.

Injury and Work Flow Problems

During reassembly and balance of the turbine engines, parts had been called up from a vertical storage unit, loaded manually onto a cart and brought to a work bench for assembly. A large overhead crane is in the area, but because it was shared by multiple work cells, work flow was often interrupted because workers had to wait for their turn with the crane. This prompted many workers to lift parts manually, with some of the larger parts requiring two people to lift. Back injuries were the leading workers compensation problem for the company, and the sequencing of the work flow was not ideal.

The Gorbel Solution: Free Standing Easy Arm™

In implementing a Six Sigma manufacturing strategy, the company installed two free standing 150 lb capacity Easy Arms to serve the individual work bays. The Easy Arm™ fit beneath the existing overhead crane, and no special foundation was needed for their 6 inch concrete floor.



The Results

The primary goal of reducing injuries was achieved, and since the Easy Arms have been installed, there have been no lost time injuries.

The goal of increasing productivity by improving work flow was also achieved, as the company has seen a 25% rise in productivity.

"We are a very ergonomic-minded company," said the Manufacturing Manager. "While some products may be good for the workers, they can be a tough sell when we try to convince them to use the products. The Easy Arm™ products were very easy to convince our workers to use."

"The introduction of the Easy Arms into the work flow tied in perfectly to the Six Sigma strategy and the efficiency of the company's work flow."