

Hilltop Energy, Inc.
Policy #: 883035
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Industrial Key Words: Explosives, Manufacturing, Lifting

Intervention Key Words: conveyers, lift truck, floor coating, digital scale, electric wiring

Situation:

Hilltop Energy, Inc. manufactures, distributes, and serves in explosive products. These products are manufactured by a machine, and then loaded into two types of bags, plastic and paper. Employees aid in filling the bags, first by positioning the openings for filling, then by sealing the filled bags, and loading them onto a conveyer belt. Though conveyers carry the bags to the trailers, employees must lift and carry the bags onto the conveyer, as well as off of it. The CTD risks are present during many stages of their work, from bending over to seal the bags, to pinching the closure, to loading and unloading the bags. All of this work is performed on a concrete floor, which can be slippery when it is wet. There have been recordable injuries and complaints of sore hands and wrists, back pain, shoulder pain, sore feet, and neck pain.

Solution:

Hilltop Energy, Inc. purchased conveyors and electric wiring to create a filling station and route to trailers for the bags. They also purchased a digital readout scale which is installed to the paper bag loading machine, and eliminates lifting the bags from the machine to a floor scale. Another purchase was a 175lb lift truck, used to move bags to or from the filling station. And finally, they purchased a garon floor covering, to cushion the floor, as well make it non-slip. These interventions eliminate much of the manual handling performed by the employees to reduce CTD risk. The total cost of the intervention was \$49,715.80. Safety Grants awarded Hilltop Energy, Inc. \$39,772.64 to offset the costs.



Lift Truck



Filling Station and Conveyors to Trailers

Results:

- CTD Risk Factor Scores averaged over 7 tasks in the plant, dropped 82% following the intervention.
- CTD, Lost Days, and Employee Turnover Rate dropped 100% following the intervention.
- Restricted Days were 0 one year prior to the intervention and remained at 0 following the intervention.
- Productivity increased nearly 25%, and quality increased by 100%. Where before there were 10 or more complaints, following the intervention there were 0. Quality also increased with no deadlines being missed following the intervention.