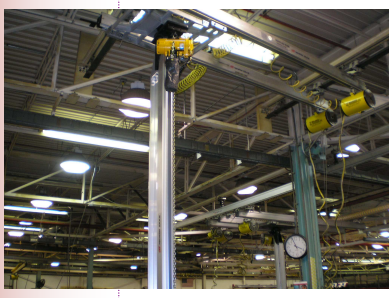
Ingersoll Rand
Case Study Overview

Vertical Rail Solution for Insulation Manufacturer



A manufacturer of fiberglass building insulation needed to increase productivity on its production line.

In this application, two production workers manually lifted rolls of insulation from the line, and placed them onto a series of stackable trays on a pallet. It was time consuming, difficult work and the operators were often exposed directly to the fiberglass insulation.

While the trays were designed with forklift slots, floor space limitations restricted the use of a forklift in the application. Additionally, in the fast-paced environment, the manufacturer was concerned about the safety of other operators in the area.

"The operator never comes into contact with the insulation, and is able to perform the job alone, more safely & productively than ever before."

The Solution? Ingersoll Rand designed a vertical lift system out of aluminum monorail, and lifted a set of forks using an air-operated Ingersoll Rand hoist. The entire system is mounted to a carriage, and suspended from a dual-bridge workstation, allowing movement throughout the entire work cell.

Now, a single operator lifts a tray from the floor and transfers it into a machine which produces the rolls of insulation. The machine places 3 rolls of insulation onto the tray. The tray is then removed from the machine and placed onto a pallet.

The operator never comes into contact with the insulation, and is able to perform the job alone, more safely & productively than before. The system is limit-switched to prevent over-travel of the forks, and hoist controls are mounted on a handlebar style interface. A green light alerts the operator when the proper lift height is reached for placing the tray into the insulation machine.

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Ingersoll Rand

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