CASE STUDY - ERGONOMICS

Pallet Level Loader Increases Productivity and Reduces Worker Fatigue



The Problem

A leading manufacturer of porcelain electric insulators produces a variety of types and sizes. The electric insulators range from small 5 pound units to much larger one that weigh several hundred pounds. The heavier insulators are handled with power lifting equipment, other sizes are handled manually. Loading and unloading insulators stacked on skids four or five feet high involves considerable stretching and bending on the part of workers.

At inspection stations, work pieces were removed from stacked skids and workers would find themselves lifting insulators from floor level, a physically demanding job. After seeing a demonstration utilizing a PalletPal® Level Loader it was quickly realized that this equipment was needed. Twelve units were purchased and immediately put into service at various assembly, inspection and packing stations throughout the plant.

The Solution

The PalletPal® Level Loader consists of a rugged, tubular steel frame incorporating heavy duty springs. The springs are calibrated to keep specific pallet loads at heights most convenient for loading and unloading. As loads are added or removed, the unit automatically lowers or rises to maintain the desired height. It is also designed with a manual turntable platform that rotates to provide near-side loading or unloading—a feature that minimizes stretching, reaching and the worker having to walk around the pallet. The units are freestanding and don't require floor lagging—built-in fork pockets allow them to be easily moved.

Other features include completely mechanical operation (no power required) and complete freedom from maintenance. There are no motors or hydraulics to require attention. Operation is totally automatic, free of operator involvement. Studies have shown that the palletizer can cut the work required for loading and unloading pallets by as much as 40% and there are fewer back complaints. "The equipment has made a big difference. The workers appreciate how much easier it is to load and unload pallets. Also, although we have no hard and fast data, I'd say we've been able to get work done faster."







