

Furniture Assembly Line Lifts



The Challenge

A major furniture manufacturer was challenged to improve employee ergonomics and total factory throughput of cabinets and other furniture assembled on their production conveyor line. Furniture of varying heights was being conveyed past assembly employees of varying heights on “slave” pallets over fixed height conveyor sections. Worker efficiency was suffering due to poor ergonomics on this conveyor line – assemblers had to bend excessively to access the work. The customer requested that Autoquip propose a material handling solution that would improve workstation ergonomics, and subsequently improve overall efficiency and throughput.

The Autoquip Solution

Manual assembly stations are benefited from a solution that provides the operator incremental adjustments in elevation of the work, depending on the height of the work and/or the height of the worker. A hydraulic lift was recommended as the most cost-efficient method of providing adjustments in elevation in order to always keep the assembly task at an optimum, ergonomic work height. The lift was also equipped with a gravity roller conveyor bed to fit and function within the existing conveyor line. The customer is completely satisfied with this work station improvement, and worker productivity and quality have improved as a result of keeping the work more nearly within the ergonomic “power zone” of the assemblers.

Lift Specifications for this Conveyor Line Application:



Lift/Turn Capacity: 2,500 lbs.

Vertical Travel: 48"

Platform: 30" x 48" with gravity roller conveyor

Actuation: Hydraulic

The Solution Benefits

Through the addition of a hydraulic lift with a conveyor bed, this assembly line has been cost-efficiently updated to include worker productivity improvement, thereby increasing factory throughput while decreasing employee's exposure to back injury.