

## Basket Tilters Bring Castings Closer



## The Challenge

Powerbrace Corporation challenged themselves to reduce employee exposure to lower back injury due to excessive bending and reaching during the manual material handling tasks associated with assembling truck hardware components. Employees had to reach into baskets of small parts during assembly, and as the basket emptied, employees had to bend and reach further down to retrieve the parts – typically with knees locked and using only their lower back for lifting strength. Ideally, a solution was required to incrementally adjust both vertical position and degree of tilt of a work platform to ergonomically “fit” a wide variety of employee heights and reaches – dramatically reducing bending and reaching motions associated with component part retrieval during the assembly process.

## The Autoquip Solution

Since the customer wanted to be able to adjust the vertical position and angular position independently from one another, the Autoquip technical sales representative recommended a solution in which a hydraulic tilter was attached to the top of a hydraulic lift table. This design approach provides the widest range of adjust-ability and operator control over the baskets being positioned for part retrieval. Separate foot-operated controls allow the operator “hands-free” control of the material handling equipment as he/she performs assembly tasks.

Fork trucks deliver and pick up baskets of various sizes to this workstation tilter – depending on the style of truck hardware being assembled at the time. Operators then control the height and position of the load depending on the basket style and component part size/orientation. A tilter “lip” at the front of the tilter



platform was sized according to customer requirements (determined by basket style and height) – to provide load stability during the tilting process.

Specifications for this Tilter Application:

Tilter Model: STE45-40-5

Platform Size: 50" x 50"

Tilter Capacity: 4,000 lbs

Vertical Travel: 24"

Degrees of Tilt: 45 degrees

Power Supply: 115VAC

Actuation: Hydraulic

## The Solution Benefits

Through the addition of this lift and tilt combination, manual material handling tasks associated with retrieving parts from bins and baskets is now more ergonomic, reducing employee exposure to lower back injury and increasing work station efficiency.