

High Cube Brush Trimmer Packaging Tilter



The Challenge

A worldwide manufacturer of powered brush trimmers wanted to increase the cube height of palletized product for shipping and handling efficiencies. Increasing the cube height to seven-feet high presented unique challenges to the palletizing process:

1. Employees could not reach past 48-inches high with the boxed product
2. Could not modify factory floor to go below grade with the pallet build-up process
3. Finished, palletized cube needs to be manually conveyed to a fixed height shrink-wrap station
4. Equipment must consume a minimum of valuable factory floor space

The Autoquip Solution

It was determined that a custom-designed, floor-mounted hydraulic tilter would satisfy all the performance requirements of this customer:

1. A unique “non-intrusive” tilting action caused the tilter to tilt within its own footprint, thereby reducing the overall factory floor square footage requirement
2. A powered “shuttle” belt conveyor on the high-cube tilter platform/wing to move the top layer of



the palletized cube away from the operators during build-up to minimize reaching and walking as the cube was being built

3. An adjustable-height gravity conveyor section was added to the smaller platform/wing to mate with an existing, adjoining shrink wrap conveyor section this specialized solution allowed the customer to increase palletized cube height with a minimum impact to the building plan/structure.

The customer has been utilizing this unique tilting solution for two shifts per day with minimum downtime and maximum throughput.

Specifications for this Tilter Application:

Tilter Style: Non-Intrusive

Tilting Capacity: 1,500 lbs.

Platform Wing 1: 48" x 86" with powered belt conveyor

Platform Wing 2: 48" x 48" with gravity roller conveyor

Degrees of Tilt: 80 degrees

Actuation: Hydraulic

The Solution Benefits

Through the addition of this custom tilter with powered shuttle, the customer has dramatically increased throughput on the assembly line dedicated to this product. In addition, critical ergonomic features have been incorporated to minimize employee exposure to work-related injuries.