

DualVee Motion Technology® Improves the Process



Challenge

An existing paint removal application that used environmentally harsh chemicals needed to be updated and replaced with a system that would cut maintenance time and improve performance.

Application Description

Automated plastic media blasting systems are used to remove paint and other coatings on projects that vary from small automotive components to components for various aircrafts. The level of complexity of plastic media blasting ranges from manual blast rooms to fully automated robotic systems, which reduce man-hour requirements, provide better working conditions, and improve consistency.

Solution

Bishop-Wisecarver created a customized LoPro® linear guide system which enabled the customer to meet higher load requirements and reduce periodic maintenance. The new configuration also decreased labor requirements by two-thirds.



Products Used

A Customized LoPro® Linear Guidance System including:

X-Axis custom carriage assemblies:

Eight (8) size 4XL DualVee® guide wheels Steel wheel plates versus aluminum Load capacities of each carriage exceed 7,500 lbs.

Z-Axis carriage assemblies:

Special chain couplers with a leaf chain drive mechanism

A solid steel idler sheave and high capacity roller bearings mounted on a steel housing structure

Lift capacities of the Z-Axis system exceed 5,000 lbs.

Available in screw, belt, and chain driven configurations, LoPro is a modular design eliminating the cumbersome effort associated with component integration.

