

Mechanical Freight Lift Streamlines Resin Mixing Process



The Challenge

A maker of PC boards wanted to streamline their resin mixing process with an automated lift and conveyor system.

The Autoquip Solution

Autoquip supplied the manufacturer with (2) Two-Level Mechanical Freightlifts.

- The freightlifts are controlled by an Allen-Bradley PLC with soft start and soft stop controls.
- A powered conveyor is mounted on the lift carriage.
- The clear load height on the carriage is 103" due to the mixer height.

Powered mixing totes are delivered by a single fork truck to the conveyor system. The smart conveyor system contains load cells so that ingredients are added to the mixing totes at each station for quality assurance. The tote when full is then indexed onto the first Freightlift and then automatically elevated to a second floor blending operation where the contents are then dumped into a hopper below the mezzanine level. The contents are then pneumatically blown into an adjacent injection molding room. The empty totes are then returned to the main floor by a second lift and the process is repeated.

Model- FLM-4 with 4000 lb. capacity rating.



The Solution Benefits

The FLM Freightlifts and smart conveyors now require a single fork truck for loading the totes on the conveyor. Automation streamlined the entire process to a two-man operation that once required as many as 6 with an expected 12-14 month ROI.