

Customized solutions lead to increased efficiency, productivity



INNOVATIVE TOOLING PRODUCES BETTER CLEAN USING LESS WATER IN LESS TIME

A leading producer of polymers had struggled for years to find a safe and efficient way to clean two of its aprons (12-foot wide by 150-foot long stainless steel conveyor belts) during down times. The cleaning challenge was exacerbated by limited water supply and its narrow window of opportunity. The entire cleaning process had to be completed within six hours of the customer's 36-hour scheduled down time. Previous methods had failed to completely clean all required surfaces.

MPW met with key stakeholders to present solutions highlighting MPW's dedication to safety, engineering and automation. MPW had never worked for this company at this point.

SOLUTION

MPW accepted a blanket contract for four workers to each be on-site for 40 hours per week. With a permanent presence, MPW was able to develop relationships and become integrated into the company's industrial cleaning process. Meanwhile, MPW's engineering department developed custom automated solutions that reduced water usage and sped up the cleaning process to fit within the down-time window.

MPW built two six-foot cleaning sections with two moving carriages and thus four nozzles, which limited water consumption to 30 gallons per minute at 5,000 pounds per square inch (psi). The previous system used 600 gallons of water per minute at up to 9,000 psi.

During the planning phase of this project, engineers and fabricators built and developed a scale model of the customer's conveyor belts to test and fine tune MPW's custom tooling system. The model also allowed MPW to display its innovative solution for the customer's own engineers.

RESULTS

In its initial live trial at the facility, MPW was able to clean all surfaces and remove old residual material while decreasing the amount of clean-up time required.

Final inspections were approved and all feedback received was positive. The first official cleaning took place with excellent

results: MPW easily beat the customer's expected service timeline.

Additionally, MPW's new cleaning tools have been so successful that the customer asked for similar machines to be built to manage a separate top-side cleanse for the same conveyor belts.

COMMITMENT TO SAFETY

MPW recorded zero safety incidents during this project

