

MRC PROCESS IMPROVEMENT ROADMAP DELIVERS CAPACITY AND SALES INCREASES WHILE REDUCING DOWNTIME

ABOUT BREY--KRAUSE MANUFACTURING COMPANY. Since 1909, family-owned Brey-Krause Manufacturing Company has produced commercial and industrial washroom accessories. All of the company's products are made at their 68,000-square-foot facility in Bethlehem, Pennsylvania.

THE CHALLENGE. Washroom accessory manufacturer Brey-Krause experienced an equipment failure that led to several weeks of downtime on their mirror production line and a significant amount of lost sales. Brey-Krause turned to MRC, part of the Pennsylvania MEP and the MEP National Network™.

MEP CENTER'S ROLE. "Some of our fabrication equipment was old, and in addition to requiring a lot of maintenance, its downtime was causing measurable productivity and revenue losses," says Brey-Krause Owner and CFO Vykie Whipple. "We asked Shawn [Furman, MRC's Advanced Manufacturing Technology Strategy Manager] if there were any automation opportunities on that particular manufacturing line." After visiting Brey-Krause to assess the issue, Furman set to work creating a set of recommendations that would address the immediate failure and offer some incremental improvements as production demands and revenue permitted.

"We started by recommending replacement of the straightener and notcher," says Furman. "The new system enables Brey-Krause to build a considerable amount of Work in Process (WIP) without requiring an operator to continuously monitor the operation. It's more precise control."

The roadmap also made recommendations for subsequent equipment improvements. In the future, as the company sees increased revenue from these incremental upgrades, the roadmap suggests replacing an existing spot welder with a collaborative robot, also known as a cobot. "That will enable shorter weld times and eliminate the risk of catastrophic failure associated with the current spot welder," Furman says. "The cobot won't need to stop to let the spot welder cool down."

There is also the option of adding a five-gallon metered dispensing system; buying ASI adhesive in five-gallon buckets, as opposed to 10 oz. tubes, will mean less time spent by replacing tubes every 2-3 mirrors. "That means more time for making mirrors," Furman adds. "They can also consider including a meter to dial in a specific amount of adhesive per mirror. Those material savings will only add to the economies of scale associated with buying bulk adhesives."

"In the end, we're up and running again with an improved process that is reliable, repeatable, and can run without an operator having to babysit the system," Whipple says. "That frees personnel to complete other tasks, increasing productivity for both the individual and the shop in general."

"MRC not only got us back up and running, they gave us a process improvement roadmap to guide us now and in the future."

-Vykie Whipple, Chief Financial Officer

RESULTS



1 new job



20% sales increase



15% less downtime



15% growth in capacity



Positioned for automation technology

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