Written by Del Williams
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Getting out of a pickle...

In an industry that's widely consolidated, proudly independent Mt. Olive Pickle Co. has found that it is able to maximize uptime and minimize labor by using a new self-cleaning filter system that eliminates production stoppage.

As the largest privately held U.S. pickle maker, Mt. Olive Pickle Company understands it must operate more efficiently than the competition— *all while turning out product of the highest quality.*

The problem

Mt. Olive packs more than 90 million jars of pickles, relishes and peppers annually for distribution in more than 45 states. In one of its required processes, fresh pack product is run through a brine wash solution sprayed by nozzles at a salt bath. To keep the spray nozzles from clogging with bits of product debris washed off in the process, the brine wash solution must be filtered before each reuse.

According to Mt. Olive's production manager, Steve Whitman, the filter bags the company previously used had distinct drawbacks. Depending on the product that was being run, filter bags on each production line had to be changed about once an hour, each time causing production to stop for about five minutes.

Furthermore, filtering efficiency could vary depending on how full the bags were, leading to potential spray nozzle blockage and line shutdown. To determine when to change filter bags, workers had to spend time and attention monitoring pressure gauges. "As the outlet pressure gauge dropped and the inlet pressure gauge increased, workers knew they needed to get in there and change their bag out," Whitman says. Cleaning the strainers and changing out the filter bags by hand was a wet, messy job—*and purchasing, storing, handling and disposing of the bags added to production costs.*

The solution

Based on the recommendation of its salt bath supplier and its own research, Mt. Olive turned to the state-of-the-art Eco Filter system from Russell Finex, of Pineville, NC. The Eco Filter is a self-cleaning system that integrates directly into the pipeline and completely eliminates the need to change filter bags or clean filtration baskets. By means of a unique spiral wiper design, the filter element is kept continuously clean, ensuring optimum filtration efficiency. Because of its self-cleaning design, cleaning the filter between batch runs is quick and easy with minimal disruption during production changeovers.

"We no longer have to shut down production or babysit filter bags," Whitman notes. "Because we're getting all the particulate pieces of product out of the brine solution, we're not stopping up our nozzles and we're getting good brine flow into the system."

Mt. Olive now uses a number of Russell Eco Filters in production. These have a unique Q-Tap valve that allows the sampling of freshly filtered material so quality can easily be monitored on the fly—*without interrupting* production. The filters also feature the Russell Filter Management System™, a technology that automatically opens the oversize discharge valve at a specified differential differential pressure or time interval. That means the system can be operated efficiently without operator involvement. Production is streamlined because the system automatically flushes and cleans itself when needed, and there's no need to monitor, change or dispose of bags.

The benefits

Compared to the previous filter bags, these new filters are saving the company a substantial amount of downtime and labor. Whitman puts it this way: "We've had zero downtime with the Eco Filters. Because they're virtually maintenance-free, they've helped us meet our production targets while saving labor."

Companies like Mt. Olive are discovering that the Eco Filter fits neatly into their existing production lines, in many instances adding significant capacity without requiring excessive space. Because they are totally enclosed, these products also prevent outside pollutants from contaminating product and protect operators from any fumes or spillage. According to Russell Finex, users see considerable improvement in product purity, as well as throughput and waste elimination.

"With more production uptime and lower labor costs, the Eco Filters are helping us stay

productive, competitive and grow into new markets," concludes Whitman. "They're part of our winning team." **MT**

Del Williams is a technical writer based in Torrance, CA.