

FCM Colloid Mixer Saves Mayo Maker \$100K Yearly



FCM Colloid Mixer

Next-Gen Colloid Mill

A U.S. food manufacturer was using a competitor's colloid mill on multiple production lines to make their classic mayonnaise, made of oil, eggs, and water. However, because the competitor's colloid mill was not CIP cleanable, they were experiencing a time-consuming and costly clean out of place process. The need to COP increased labor requirements and frequent damage to the mill, leading to high spare parts usage of approximately \$100,000 a year. They needed a solution that could efficiently handle their colloidal suspension process while ensuring product consistency and reducing substantial maintenance overhead.

The end user required a solution capable of:

1. CIP cleaning to streamline maintenance processes.
2. Real-time adjustments for product consistency without halting production.
3. Delivering a perfect colloidal suspension for high-quality mayo production.
4. Minimizing downtime and spare parts consumption.

Solution: The Fristam FCM Colloid Mixer

After consulting with their local Fristam distributor, they learned about the latest technology available in the Fristam FCM Colloid Mixer. Once Fristam reviewed their application, they specified their FCM 160 model and coordinated a trial with a Fristam representative on-site. The FCM Mixer not only provides CIP cleaning capabilities but also allows for on-the-fly adjustments during operation for more or less shear, to ensure perfect product consistency, thanks to its real-time gap adjustment lever.

Upon installation, the end user immediately saw significant improvements in their production process. The mixer delivered a flawless colloidal suspension, meeting the high-quality standards expected for their mayo products. The shift to CIP cleaning eliminated the need for manual cleaning (COP), saving time, reducing labor and spare parts costs, and mitigating safety risks associated with equipment handling. The ability to adjust product gap settings while running further optimized production efficiency and product consistency.

Results

1. Operational Efficiency: CIP cleaning reduced maintenance time and spare parts consumption, leading to enhanced operational efficiency and cost savings.

2. Safety Enhancement: Elimination of COP cleaning minimized operator exposure to potential hazards associated with manual cleaning and equipment handling.
3. Improved Product Quality: The Fristam FCM Mixer consistently produced a perfect colloidal suspension, enhancing the overall quality of the mayo products.
4. Scalability: The success of the initial trial resulted in the end user keeping the trial unit in place and purchasing an additional unit that week. With the potential for future replacements of 4-6 more units, the end user anticipates further scalability and efficiency gains across their production lines.

Conclusion: Streamlined Operation, Lower Cost

By implementing the Fristam FCM Colloid Mixer, the U.S. mayo manufacturer has not only achieved superior product quality and operational efficiency but has also realized substantial cost savings. With an estimated \$100,000 annual savings in spare parts usage alone, coupled with streamlined maintenance processes and minimized downtime, the FCM Mixer has proven to be a wise investment for the company's bottom line.

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