



Powder Mixer Saves \$32K Yearly



Powder Mixer

Better Mixing in Less Time

In order to create the base for their milkshakes, processors typically add a stabilizer made of several gums to absorb moisture and thicken the product. Because gums comprise the stabilizer, they can create a clumpy product if not properly dispersed. One major US food processor was losing \$32,000 per year to lumps and clumps of wasted ingredients.

A prevailing method to incorporate gums is to slowly add them into a 2,000 gallon batch tank of liquid by hand, mix it using an in-tank impeller, and recirculate. While this system was able to produce the shake base, there was too much waste. A large amount of product clumping needed to be filtered out. In addition to clumps of stabilizer being thrown out, there was also product sticking to the sides of the batch tank. Both instances of waste led to additional stabilizer needing to be added to each batch to achieve the desired viscosity, driving up ingredient costs. The processor decided that this was unacceptable and needed a more efficient mixing solution.

In researching several mixing technologies, they identified two key needs: getting a steady feed of the stabilizer into the liquid and mixing it thoroughly. During their search, they discovered Fristam's Powder Mixer. The Powder Mixer features a funnel, full-port valve, and suction pump combination for smooth, controllable solids induction. Once inducted, the premix is forced through an in-line blender, meaning all of it must pass between spinning shearing teeth, not allowing any of the mix to remain in clumps.

The processor was very pleased with the Powder Mixer's ability to mix their stabilizer into the shake base, quickly and efficiently on the first pass. They saw no more wasted ingredients in their batches and the end product was the perfect consistency. By installing the Powder Mixer, the amount of stabilizer needed per batch was reduced by over five percent, saving the processor an estimated \$32,000 per year.

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