

Admix Solutions for Ice Cream Processing

Customer Case Studies



Customer Case – Fastfeed[®] Powder Induction & Dispersion System

A manufacturer of ice cream mix, cultured dairy drinks, and shelf stable flavored milk was having difficulties incorporating powder ingredients using a Tri-Blender and was considering installing a Likwifier. The application was perfect for a Fastfeed and would provide major benefits over the the bottom entry mixer they were considering, including:

- ✓ Lower project price
- ✓ Lower horsepower
- ✓ Smaller footprint
- ✓ Better ergonomics for bag dumping
- ✓ Better quality of product
- ✓ Lower maintenance



Admix Solution: The Fastfeed was set up in a recirculation loop about ten feet from the batch tank. Their first batch of ice cream mix was smooth as could be. Powdered ingredients were inducted at 200 pounds per minute and liquid cream was drawn from totes at 600 pounds per minute.

The customer even inducted chocolate chips through the Fastfeed and cut batch time of a chocolate ice cream mix from 4 hours to 20 minutes!

Customer Case – Rotosolver[®] High Shear Batch Mixer

To incorporate all powder ingredients, an ice cream manufacturer was using a conventional sweep agitation in large blend tanks. They were having some issues. To complete dispersion and hydration of the hydrocolloid stabilizer, they were using hot water which often resulted in sizeable lumps of non-hydrated stabilizer throughout the mix. Dust and ergonomic issues associated from dumping in powder ingredients were also a concern.

Admix Solution: First, we conducted scaled product testing in our pilot test center. Using our Rotosolver high shear batch mixer, the stabilizer was completely dispersed and hydrated in less than 10 minutes at ambient temperature – no lumps!

The Rotosolver eliminated the hot water requirement which translated into cost savings on boiler horsepower, a welcome and unexpected ROI!

They purchased a Rotosolver for each 3,000 gallon blend tank, and our rep supplied them with a dustless bulk bag unloading and delivery system to fix the powder dusting and ergonomics problem. The entire design enabled them to produce large batches of smooth, homogenous ice cream mix in just over 20 minutes in a single tank with no recirculation loop!

The ice cream mix needed to be made fast enough to supply a 6,000 gph HTST system. They came to an Admix representative for a better solution.

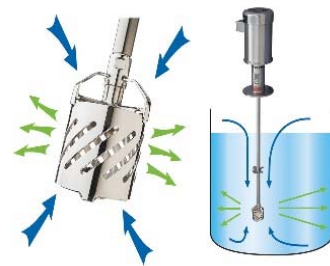


Illustration of the Rotosolver's tank flow pattern. Actual customer Rotosolver model not pictured.