

Case Study: Shampoo

Application

Veegum stabilizer/thickener and oat flour into water.

Specifications

Powder induction rates:
Veegum at 50 lbs/min,
Oat flour at 150 lbs/min.

Challenge

Disperse powders evenly with no clumping nor waste.

Issue

Powders clump when not properly dispersed, then sink and stick to the sides and bottom of the tank.

Products with Similar Challenges

- Hand Sanitizer
- Conditioner
- Lotions
- Medical Gels



Powder Mixer Capabilities

Models: 7 configurable
Max. Induction Rate: 600 lbs/min
Max. Flow Rate: up to 350 gpm



Powder Mixer Reduces Processing Time by 67% and Improves Product Quality

A shampoo maker was having trouble dispersing powdered ingredients using a top entry agitator in a batch tank. Due to clumping, ingredients fell out of the mix to the bottom of the tank requiring more powders to be added, lengthening mixing time.

Solution

A model 20-53 Powder Mixer with optional vibrator, lid, and variable frequency drive (VFD) on the FS Shear Blender.

Why It Worked

The Fristam mixer recirculated product from the bottom of the batch tank up to the top while the powders were slowly added to the water stream via the funnel, allowing control of the liquid to solids ratio entering the shear blender. Once inside, the shear blender's turbulence fully dispersed the powders on the first pass. Next, when stream entered the batch tank, the powders were already hydrating and thickening the end product.

To read the complete story, visit: www.fristam.com/pm-apps

Call Fristam to discuss your application today: 800-841-5001.



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