

Case Study: Lotion

Application

Smoothing Carbopol in lotion after batch mixer

Specifications

Each batch of lotion was 3000 gallons

Challenge

Carbopol® needs to be fully dispersed to utilize its viscosity modifying capabilities

Issue

Undispersed Carbopol

Products with Similar Challenges

- Shampoo
- Medical Gels



FS Capabilities

Models: 12

Max. Tip Speed: 44m/s

Max. Flow Rate: 375 gpm (85 m3/hr)



FS Saves \$400K in Ingredients

A major US lotion manufacturer was struggling to find a solution to their challenges with adding Carbopol to their lotion to achieve their desired viscosity. Carbopol, a water-soluble thickening agent, is a common ingredient in many personal care products such as lotions, creams, and gels. For processors, there is an array of challenges involved with using Carbopol in their products. Carbopol needs to be fully dispersed into products in order to utilize its viscosity modifying capabilities, which can prove difficult because of how quickly the ingredient expands and forms clumps.

Solution

Fristam's FS model 3522

Why It Worked

After using the FS to fully disperse the Carbopol, they discovered that the final viscosity of the lotion was higher than they desired because there were no longer ingredients wasted in each batch. Since all the Carbopol was being absorbed into the lotion, they were then able to reduce the amount in each batch by 50 pounds, saving \$800 per batch. With the processor producing an estimated 500 batches yearly, this reduction in ingredients saves them \$400,000 annually.

Along with the large savings in ingredient costs, the processor also noticed their batches were blending much quicker. They estimate that each batch has shortened its blending time by an hour. They are very pleased with the performance of the FS and continue to benefit from the ingredient and time savings it provides.

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

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

Fristam
PUMPS®
Engineered For Lasting Performance®