

Case Study: Hand Sanitizer

Application

Mix Carbopol® into water.

Specifications

40 kg of Carbopol® 940 into 3,000 kg of water.

Challenge

Disperse Carbopol® evenly with no clumping and no product waste.

Issue

Carbopol® will clump when not properly dispersed. These clumps will sink and stick to the sides and bottom of the tank. It can also expand too fast and clog the system.

Products with Similar Challenges

- Shampoo
- 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 Nets \$100K+ Savings Yearly

A personal care copacker, using top entry high shear agitators in their batch tanks, was having difficulty fully dispersing and hydrating Carbopol® 940 in their batches of sanitizer gel. This was causing them to extend the mixing time up to 3 hours for some batches to get an acceptable result.

Solution

A Fristam Powder Mixer 10-52.

Why It Worked

The FZX pump within the Powder Mixer pulled the Carbopol® in at a controlled rate and pumped it through the FS Shear Blender which, thanks to its intermeshing teeth and high turbulence action, blended the powder into the water and eliminated any lumps. Because of this, they were able to fully disperse the Carbopol® 940 on the first pass and ensure a thorough dispersion before the product ever gets into the tank.

Since the Powder Mixer dispersed the product so well, they were able to reduce their blend times from 3 hours to 15 minutes. Considering that they were running 3-5 batches per day, 5 days a week, the time savings is substantial—between 2,000 to 3,500 hours per year.

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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