

# Case Study: Baking Preservative

## Application

Mixing calcium hydroxide and Satsol to create lime slurry

## Specifications

The calcium hydroxide was inducted at a rate of 136 lb/min

## Challenge

Evenly dispersing the calcium hydroxide into the liquid

## Issue

Calcium hydroxide can agglomerate on mixing equipment

## Products with Similar Challenges

- Cocoa powder
- Carbopol



## Powder Mixer Capabilities

**Models:** 7 configurable

**Max. Induction Rate:** 600 lbs/min (272 kg/min)

**Max. Flow Rate:** up to 350 gpm (80 m<sup>3</sup>/hr)



## Powder Mixer Reduces Mixing Times by 50%

A US baking ingredient processor wanted to increase the efficiency and safety of their lime slurry production process. Lime slurry is a mixture containing calcium hydroxide and Satsol, used to preserve bakery items such as bread and pastries. Originally, the processor was creating the mixture in a 700 gallon mixing tank with an agitator. This method was time consuming and caused the calcium particles to agglomerate on the sides and blades of the mixing equipment, leading to slow mixing times and inconsistent product output. The method also required workers to carry heavy bags of product up ladders, which was a safety concern.

## Solution

Fristam's 15-52 model Powder Mixer with funnel vibrator to prevent the calcium hydroxide from sticking to the funnel

## Why It Worked

The Powder Mixer was able to quickly induct the calcium hydroxide into the fluid stream without product clinging to the funnel, which allowed for mixing times to be reduced by 50 percent. Along with improved mixing times, the Powder Mixer also reduced the safety hazard of workers climbing ladders, because the Powder Mixer is able to be used in a bulk bag unloading system.

To read the complete story, visit:

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

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