

# Case Study: Sugar

## Application

Combining sugar and water into a fluid stream

## Specifications

The sugar was inducted at a rate of 600 gallons/min

## Challenge

Efficiently and safely mixing the sugar

## Issue

Large batch tanks can pose a safety concern for workers

## Products with Similar Challenges

- Dextrose
- Non Fat Dry Milk (NFDM)



## 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)

Part #:  
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## Powder Mixer Resolves Safety Concern

A US sucrose processor wanted to find a safer, ground-level solution for mixing sugar and water. Previously, the processor was combining the sugar and water with a top entry agitator in a large batch tank. This meant that employees had to carry 100 pound bags of sugar up a ladder, in order to pour them in the tank. The potential for accidents and injury was too great. Overexertion and slips/falls are the #1 and #3 most common workplace injuries. The sucrose processor decided that it needed to search for a more efficient and safe method to incorporate the sugar.

## Solution

Fristam's 40-00 model Powder Mixer with a high-volume FZX Liquid Ring pump for consistent induction

## Why It Worked

The Powder Mixer was able to quickly induct the sugar into the water at a rate of 600 pounds/minute, saving the processor an estimated 30 minutes per batch. The Powder Mixer's low height also allows operators to work from floor level below the batch tank, eliminating safety concerns. Now, still using the Powder Mixer 15 years later, the processor continues to be impressed and its employees continue to be safe and healthy.

To read the complete story, visit:

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