

Case Study: Glucose Media Prep

Application

Dextrose powder into water for glucose solution.

Specifications

Dissolve 2,856 kg dextrose powder into 892 kg water to create a glucose solution at 75% solids.

Challenge

Time consuming process and unsafe workspace for inducting 42 barrels of powder.

Issue

Ergonomics and safety.

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 Solves Safety Hazard and Cuts Process Time

A pharma manufacturer making glucose media preparation wanted to improve the safety of their mixing process. Their original method required 42 barrels of dextrose per batch per day to be lifted via fork truck up to a mezzanine where an operator would pour them using a barrel dumper into tanks with top-entry mixers. This created an unsafe workspace where people or equipment could fall 20 feet to the floor. Also, lifting the 42 barrels onto the mezzanine via forklift added nearly three hours to the process, daily.

Solution

A floor level, waist-high Powder Mixer model 10-52 with full pharmaceutical certification package.

Why It Worked

The Powder Mixer's inline mixing design has a table-high funnel that allows them to pouring the glucose from floor level, below the tanks. The Powder Mixer recirculates the solution from the tank as the dextrose is poured. Solution is pulled from the bottom of a tank and recirculates to the top. Now all the dextrose is added and mixed in about 30 minutes. The time savings from forklifting equates to about 12½ hours a week, and the safety improvement is priceless.

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

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