

Solutions for Your TOUGHEST
MIXING Applications in

FOOD

Introduction

Deagglomerating

The Process

Batter Mixes

The Problem

The Solution

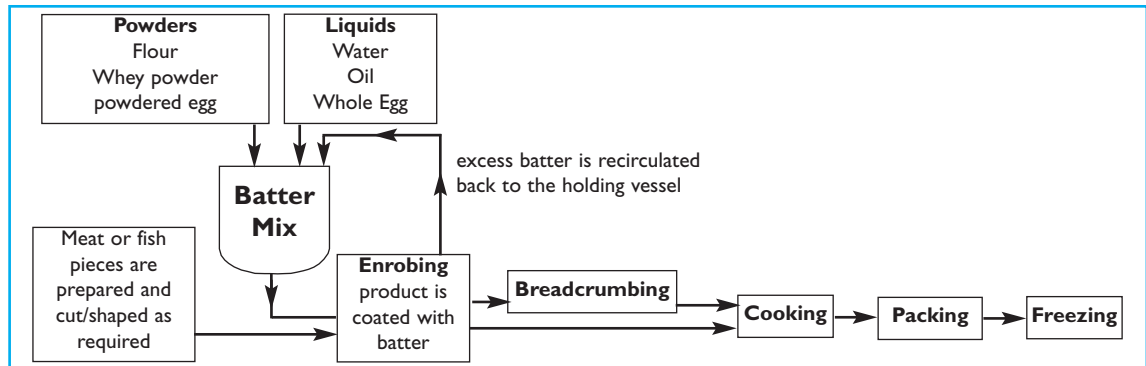
The Advantages



Deagglomerating Batter Mixes

The installation of a Silverson In-Line mixer has solved production problems for a major food processor. They manufacture products such as fish fingers and chicken nuggets in a continuous process which could be summarized as follows:

The Process



The Problem

Problems were experienced during preparation of the batter mix, where flour and other powdered ingredients were forming lumps which the existing mixing equipment could not break down. These stuck to the product in the enrobing stage, resulting in an unsatisfactory appearance to the finished product. In some cases, misshapen or oversize products would not fit into packaging properly, bringing production to a standstill. Further problems arose because the batter mix is also recirculated from the enrobing system back to the holding vessel; lumps had a tendency to build up, reducing the flow of material and raising potential hygiene issues.

The Solution

A Silverson In-Line mixer was installed between the mixing vessel and the enrobing unit and the problems were solved instantly. A single pass through the self-pumping unit imparted high shear to the batter which deagglomerated the mix, resulting in a homogeneous, smooth batter. This gave an improved appearance to the finished product and increased the efficiency and hygiene of the recirculation system. Another advantage was improved yield of raw materials and a better overall consistency of mixture resulting in improved quality.

Other Products

An In-Line mixer was the simplest and most efficient solution to this problem. Silverson also manufactures a range of other mixers which could be used in place of the existing mixing apparatus, the selection of which depends on factors such as type of ingredients, batch size, and the viscosity of the batter mix. These include:

- **High Shear Batch Mixers** For small batches. "V" Range mixers (with an inverted workhead) are ideal for bulk powder dispersion.
- **Bottom Entry Mixers** With no immersed shaft for reduced cleaning requirements, these units are also ideal for higher viscosity mixes.
- **Flashblend** Powder/liquid mixing systems capable of rapidly incorporating large volumes of powders. Flashblends can produce a guaranteed agglomerate-free dispersion in a single pass. Suitable for large batches.



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