



## ■ MIXING & BLENDING

# Powder Induction and Dispersion Success for Beverage Manufacturer

Whether your process involves in-tank batch mixing, or inline mixers that emulsify, mill, induct, hydrate and disperse, the experts at Admix assert their high efficiency systems have positively impacted their customers' operations. Admix is unable to reveal the names of its customers and the food and beverage brand names they produce, and with good cause - it stands to reason that Admix mixers give these processors a competitive advantage.

When it comes to powder induction and dispersion processing, the Admix Fastfeed® has helped processors improve their batching operations. One such success story involves a beverage manufacturer whose workers were climbing stairs while carrying 22kg (50lb) bags for slicing and dumping into an elevated tank configured with a conventional batch mixer.

Unable to keep up with increased production requirements, the beverage processor realized they needed a better equipment solution. Their wish list included a system that would enable them to make product faster, minimize energy consumption, improve worker safety with better ergonomics and achieve a return on investment in less than one year. The cherry on top would be reducing product loss incurred when producing a diverse range of products in batch sizes anywhere from about 375-113,000 liters (100-30,000 gallons.) Ingredients ran the gamut of powders including: gums, stabilizers, plant proteins, vitamins, minerals, sweeteners, energy drink components, nutraceuticals, preservatives, acids, whey and milk protein isolates/concentrates, milk powders and assorted flavorings.

The solution? The Fastfeed powder induction and dispersion system. This fully integrated skid-mounted system complete with an operator table, features a two-stage rotor/stator high speed, high shear disperser (their DynaShear® product) and a powerful suction pump. The combination of high liquid flow and controlled vacuum induction instantly and completely wets and disperses powders inline at the particulate level. This results in no unmixed ingredients ever reaching downstream blend tanks, with emulsions in the 3-5-micron range routinely produced. No unmixed ingredi-



ents equates to no product waste, improved yields and a higher quality end-product which is every processor's desire.

### How are They doing Now?

Since the Fastfeed was installed, the beverage manufacturer's operators can induct, wet, disperse and hydrate all powdered ingredients in a single pass at induction rates over 204kgs (450lbs) per minute. Highly used powders can now be inducted from bulk sacks while the balance of powders in standard size bags, is conveniently and safely added from floor level. The operators also recognized the benefit of inducting liquid flavor concentrates and purees from pails, drums, and totes without the need for an additional pump.

In addition, downstream strainers and filters are no longer required because smooth, lump-free product is delivered with every batch run. Batch-to-batch inconsistencies that happened when operators dumped powders into mix tanks at

different rates has also been eliminated. Their powder feed rates are now controlled, with rapid dispersion occurring at the proper concentrations, preventing product slugs or premature hydration.

With the highly efficient Fastfeed, the beverage manufacturer easily produces any batch size required. Batch times have been reduced by 50%, energy consumption is 70% less, and dusting from dumping powders into open top mix tanks has been eliminated. Since all mixing is now accomplished inline without the need for time consuming recirculation loops, product air entrainment has also been drastically reduced.

Admix helped this major manufacturer easily meet new product production demands and meet a 1-year ROI target to boot.

For further information go to [www.admix.com](http://www.admix.com) or contact Admix in the USA or Europe (Denmark: +45 3213 8743 or [europesales@admixon.com](mailto:europesales@admixon.com), USA: +1-603-627-2340 or [admixonsales@admixon.com](mailto:admixonsales@admixon.com)). ■