



Improved mixing efficiency contributes to faster, more efficient processing and higher productivity

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Want to capitalize on the growing global demand for food? By improving the mixing processes at your plant you can save energy, delivering faster and more efficient processing and protect product integrity, such as colour, flavor, texture and aroma.

Mixing and blending is vital for food processing. Protecting product integrity in the mixing process is paramount to product quality. Most food producers rely on high-quality powdered ingredients to add colour, flavour, texture and aroma to their products such as soups, sauces, dressings, ketchups etc. Blending powdered ingredients and thickening agents helps create the base for most processed food and drinks, solid pieces of food or fruit pulp can then be added to further enhance flavor and appearance. Proper mixer selection is therefore a key consideration.

Image 1. Alfa Laval Hybrid Powder Mixer



An innovative combination of pump and powder dissolving technologies, the Alfa Laval Hybrid Powder Mixer is capable of drawing powder into the unit while using a single pump to simultaneously transfer the resulting process liquid at pressures of up to 4 bar.

Selecting the right hygienic equipment for your application is key. Food logic from Alfa Laval helps you succeed.



50% energy savings with innovative mixing technologies

A revolutionary hygienic mixing technology, the Alfa Laval Hybrid Powder Mixer (Image 1) makes it possible to achieve a consistent ingredient base, faster, more efficiently and using less energy than conventional technologies. It combines pump and powder dissolving technologies into a single versatile unit and is the only hygienic inline powder mixer capable of drawing powder into the unit while using a single pump to simultaneously transfer the resulting process liquid at pressures of up to 4 bar. This eliminates the need for separate supply and discharge pumps, cutting energy costs by up to 35% and doing away with associated costs.

However, cost savings is not the only area in which the Alfa Laval Hybrid Powder Mixer excels; it reduces processing time and mixes more thoroughly than conventional mixers. Other inline powder mixers might create mechanical shear within a small area, which can raise process temperatures and negatively impact product quality. In contrast, the Alfa Laval Hybrid Powder Mixer effectively pre-blends the powder and liquid before the mixture enters the high-shear stage. It then creates high dynamic shear in different stages using less energy to ensure quick and complete powder dissolution with no negative impact to product quality.

Another effective mixing technology is the Alfa Laval Rotary Jet Mixer, which handles liquid mixing, gas dispersion, tank cleaning, and powder mixing when used in combination with a powder mixer. The Alfa Laval Rotary Jet Mixer together with the Alfa Laval Hybrid Powder Mixer provides one of the fastest and most efficient methods available to blend powdered ingredients while saving up to 50% in energy costs. Conventional powder mixing technologies require several motors for the supply pump, booster pump, agitator, discharge pump and tank cleaning device. This Alfa Laval mixer combination only requires a single motor to handle the same tasks!

Up to 80% energy savings with gentle agitation

Upon completion of powder mixing, agitation may be required to add solid pieces into the liquid base, such as sliced mushrooms into soups or visible herbs in clear salad dressings (Image 2).

Image 2. Sliced mushrooms in soups



Energy-efficient Alfa Laval agitators provide efficient mixing and gentle handling that is essential to preserve sensitive ingredients, such as sliced mushrooms in soups.

Energy-efficient Alfa Laval agitators are suited to a wide range of mixing and blending applications, including those that involve keeping sensitive solids suspended in liquids. Alfa Laval agitators feature EnSaFoil impellers that combine effective and gentle mixing, low-shear performance, uncompromising hygiene and a reduction in energy consumption of up to 80%.

When the world is looking to increase food and beverage production, innovative mixing solutions like these can contribute to producing more food and drink that looks and tastes better.

To learn more, visit www.alfalaval.com/foodlogic

About Alfa Laval

Alfa Laval is a leading global provider of specialized products and engineered solutions that help customers heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Alfa Laval's worldwide organization of 18,000 employees works closely with customers in 100 countries. Listed on the NASDAQ OMX Nordic Exchange, Alfa Laval posted annual sales of approximately 3.85 BEUR in 2014.

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How to contact Alfa Laval

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