

Mixing with a Minimum of Energy Consumption



By Erik Dath Harbo, Sales Director, Daniatech

Daniatech from Denmark and Packo Pumps from Belgium gathered their expertise in mixing and pump manufacturing and have set a new standard in high-shear pumps and high shear mixers.

The patented rotor-stator design was optimized with CFD and gives the pump an unrivalled energetic efficiency. "The energy consumption is 40 % to 50 % lower compared to other high-shear pumps and mixers", a manufacturer informs. "This high efficiency does not only result in a lower energy bill for every hour the pump is in operation, but also reduces the initial investment. The high-shear pump can be fitted with a smaller motor

and the possible frequency converter is also smaller and cheaper. The optimized flow through the rotor-stator also results in a very quiet operation."

Based on Packo FP Pumps

The Daniatech MixMaster pumps and mixers are based on the well-established Packo FP pumps and they share consequently all their valued unique advantages. All the options of the FP pumps are also available on the Dania-

tech MixMaster & mixers and they have almost all spare parts in common (motors and seals are normalized).

The Daniatech MixMaster are plug-and-play mixing units that combine the mixing and pumping function in one machine, hence saving maintenance, floor space and the need of a booster pump. They have pumping capacities up to 200 m³/hour and up to 80 m differential pressure. These features, together with the hygienic design, make the Dania-



Company Background

The mixer unit has been developed together with Belgium Pump Manufacture Packo Pumps. The core of the company is two of the founders behind Daniatech. With more than 40 years of experience in the mixer industry, they are the backbone of Daniatech.



tech MixMaster the favorite in dairy, ice cream, prepared food, beverage, bakery, marmalade and similar industries.

Reduce mixing time

Where static mixers, dynamic mixers and agitators can give satisfactory results for simple duties such as blending liquids of similar viscosity and density, the high-shear pumps can reduce mixing times up to 95% in processes where stable emulsions are needed, particle size has to be reduced or texture agents (e.g. xanthan, alginate, pectin, carboxymethyl cellulose, carob, gelatin,...) have to be mixed without any lumps forming.

Replace the homogenizer

Thanks to the recently elevated shear rates of up to 95,000 s⁻¹, the Daniatech MixMaster and mixers are even suitable for processes where traditionally a homogenizer was needed. Thanks to these

ultra-high shear values, the Daniatech MixMaster gives enough mechanical power to the pumped liquid to transform yoghurt into drinking yoghurt or e.g. produce lump free stabilizer solutions. The Daniatech MixMaster with a low shear action can be used as a creaming device for yoghurt. The viscosity of yoghurt can be controlled with the use of Daniatech MixMaster and an inline viscosity-meter to control the final viscosity of the yoghurt.

Low complexity

The high shear device used as a high shear mixer in combination with a tank offers multiple advantages. Service wise, the mixer unit is direct driven flanged into the bottom of the tank. The number of spare parts is reduced to a shaft seal arrangement and two elastomers (O-Rings). The unit has the same complexity as a standard



Anuga FoodTech
Please meet Daniatech at the Anuga FoodTech in Cologne 20. - 23.03.2018 in Hall 10.2 at D-109.

centrifugal pump e.g. no bearing arrangements except for the bearing in the standard norm-motor used, and no pulley system. Daniatech and Packo pumps have reduced the complexity of the unit and the cost & time of service to a minimum. ■



Join the **evolution...**

Daniatech sets new standards for efficient mixing solutions








Visit daniatech.com