

Compact GEA test mixer improves hygiene, flexibility and efficiency

GEA has redesigned its market leading BATCH FORMULA® Test Mixer to meet customer demand for the highest levels of efficiency, flexibility and hygiene. The machine's footprint has also been reduced by at least 25% compared with previous models allowing equipment to be located easily within a plant, through normal door apertures, without dismantling.

The food and dairy industry has trusted the BATCH FORMULA® Test Mixer from GEA to create exciting products such as nutritional formula, ingredients, cream cheese, drinks and sauces, for many years. Being able to test products and processes at pilot scale helps customers to prepare recipes and establish process parameters before investing in full-scale plant, thereby bringing new products to market more quickly and profitably. The equipment can also be used for long-term, small-scale production or test group evaluation.

High flexibility

The modern design has addressed four key areas: hygiene, flexibility, efficiency and footprint. The design meets the strictest hygiene requirements of the food and dairy industry. This has been achieved through a series of detail changes, for example reducing the number of dirt traps in the system, helping

to prevent cross contamination. The BATCH FORMULA® Test Mixer now features direct steam injection that allows the equipment to be used for making soft cheeses and sauces. This increased flexibility helps users to produce an even greater range of products on the same machine; also, integrated vacuum flash cooling allows fast, gentle product temperature reduction.

Efficient cleaning

Easy, efficient cleaning prevents cross contamination or product carry-over when switching batches.

GEA has used Computer Fluid Dynamics (CFD) techniques, usually reserved for full-scale equipment, on the BATCH FORMULA® Test Mixer. This allows the machine to be refined for maximum efficiency and to more closely harmonize with the results achievable on larger equipment.

A key feature of the BATCH FORMULA® Test Mixer is its integral CIP system (Cleaning in Place) which reduces the machine footprint, makes product changeover faster and reduces both water and chemical consumption.

Core functions the same

For many years the BATCH FORMULA® Test Mixer has been the benchmark technology for processors requiring the flexibility of small batch production with easy scale up and trusted GEA technology. While the redesign has improved some key features, the core functions of the mixer remain the same. These include: high-shear operation to limit exposure to air thereby improving product quality and shelf life; and lowest point drainage for maximum product recovery. The BATCH FORMULA® Test Mixer also introduces powders below the surface so they are wetted more efficiently for fast processing and better mixing. These features reduce batch cycle times, improve product homogeneity, increase shelf life and reduce time to market for new products.

GEA test facilities at Ahaus, Germany

Customers may test products on the BATCH FORMULA® Test Mixer at the GEA factory at Ahaus in Germany before putting them into full-scale production. This also provides the opportunity to test down-stream processes (such as UHT or CIP) to establish the performance of the whole production line. The results obtained can be faithfully reproduced at production level.

The BATCH FORMULA® Test Mixer from GEA (Pic. GEA)



GEA

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BATCH FORMULA® Test Mixer

– designed for hygiene, flexibility, efficiency and easy installation

The state-of-the-art BATCH FORMULA® Test Mixer from GEA – the ultimate in hygiene, efficiency and flexibility. Combining trusted technology with innovation, the BATCH FORMULA® Test Mixer now features steam injection, integrated CIP and is 25% smaller for easy installation, even in confined spaces.

- Trusted technology for the effective mixing of food, dairy and beverage products;

- Ideal for testing recipes and processes ahead of full-scale production with seamless scale-up;
- Fewer dirt traps to prevent cross contamination;
- Optional direct steam injection for making soft cheeses and sauces;
- Integral clean in place (CIP) for fast product changeover, ultimate hygiene and minimal use of water and chemicals.

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