GEA introduces DI-BATCH-F™, the latest edition of the DI-BATCH modular system for beverage making. Designed initially for the production of complex recipes in the energy drinks category, this flexible manufacturing system provides the customer with an operator friendly, high performance, intelligent and flexible manufacturing system for a wide range of recipes. Accurate additions, traceability of materials and parallel operations means flexibility, quality and efficiency for the customer’s production team.

In combination with standard GEA big bag, sack, drum and IBC handling systems, DI-BATCH-F™ offers a minimum of manual handling while the control system provides the facility for cross checking of addition accuracies with reports and trends recorded and suitable for integration with the overall process plant control system if necessary.
DI-BATCH-F™
Modular system for beverage making

The mixing vessel size can be adapted to the customer’s needs. Batches can be produced directly or pre-concentrating of ingredient mixes can be carried out before transferring to a batch tank. The DI-BATCH-F™ can be tailored to be used as a pilot process and small batch process, for example for new product launches or R&D trials.

GEA’s IBC unloading systems offer the customer the opportunity to add ingredient directly and accurately to the batch in a fully automatic way for multiple batches. The recently patented system can also be used for different ingredients without loss of high value ingredient from the outlet hose when changing IBC. For multiple ingredients delivered in IBCs, using more than one unloading systems greatly reduces further the manual intervention required.

The DI-BATCH-F™ consists of unloading equipment for big bag, sacks, bags, bottles, containers and drums. Rinsing of bottles, containers and drums ensures no loss of liquid ingredient. The option to use a high shear pump enables dispersion and dissolution of challenging powder ingredients. An inline heat exchanger can control the product at the required temperature to match the recipe.

A feature of the system is the facility to pre-weigh the ingredients into bags or containers. A ‘kitchen’ controller checks the weighs and prints unique barcodes which are applied to the package.

Automation
A separate GEA OTAS® based recipe management program guides the operator through the recipe and checks all weights, additions and operations to ensure correct manufacturing. This helps the operator to avoid inadvertent error in manufacturing.

The level of automation means that operators are not required at the system continuously, and parallel operations such as big bag unloading and drum unloading enable shortened batch making times where allowed by the recipe. It also means that the batch information is readily available from the DI-BATCH-F™ control system.