The DI-BATCH expands GEA’s modular portfolio of beverage mixers. Originally designed to process complex energy drink formulations, this flexible manufacturing system provides a user-friendly, high performance, intelligent and flexible production solution for a wide range of recipes.

Accurate dosing addition, material traceability and parallel operation all combine to deliver flexible, high quality and efficient production.

Together with standard GEA big bag, sack, drum and IBC handling systems, DI-BATCH minimizes manual handling; the control system provides a cross-checking facility to ensure accurate ingredient dosing, and also generates reports and trend information that can be integrated into an overall process plant control system.
The mixing vessel size can be adapted to meet specific customer requirements. Plus, batches can be produced directly or ingredient mixes can be pre-concentrated before being transferred to a batch tank. The DI-BATCH can be tailored for pilot- or small-scale batch processes, for new product launches or R&D trials, for example.

Ingredients can be added directly and accurately to a single or multiple batches in a fully automatic way using GEA’s IBC unloading systems. The recently patented system can also accommodate different, high value ingredients with no loss from the outlet hose when changing the IBC. Using more than one unloading systems further reduces the amount of manual intervention required.

The DI-BATCH features unloading equipment for big bags, sacks, bags, bottles, containers and drums. There’s no loss of liquid ingredients when rinsing bottles, containers or drums, and the optional high shear pump facilitates the dispersion and dissolution of challenging powder ingredients.

An inline heat exchanger maintains the appropriate process temperature, according to the recipe, and the system is also able to pre-weigh ingredients into bags or containers. An integrated controller checks the weights and prints unique barcodes, which are subsequently applied to the package.

**Automation**

GEA Codex® comprises an engineering portal, a high-performance HMI, standardized and structured software and is the easy way to compile your master recipes, incorporating ingredients, access points and operating instructions. Plus, with material identification by human readable code and RFID technology, the system can be fully automated for batch execution. The double-check validation option for recipe changes and previous versions ensures compliance with current legislation and transparent production. Delivered with the plant, the system can be extended and expanded on request.