

# Metering systems and process plant

for the the food and beverage industry





# New solutions for the beverage industry

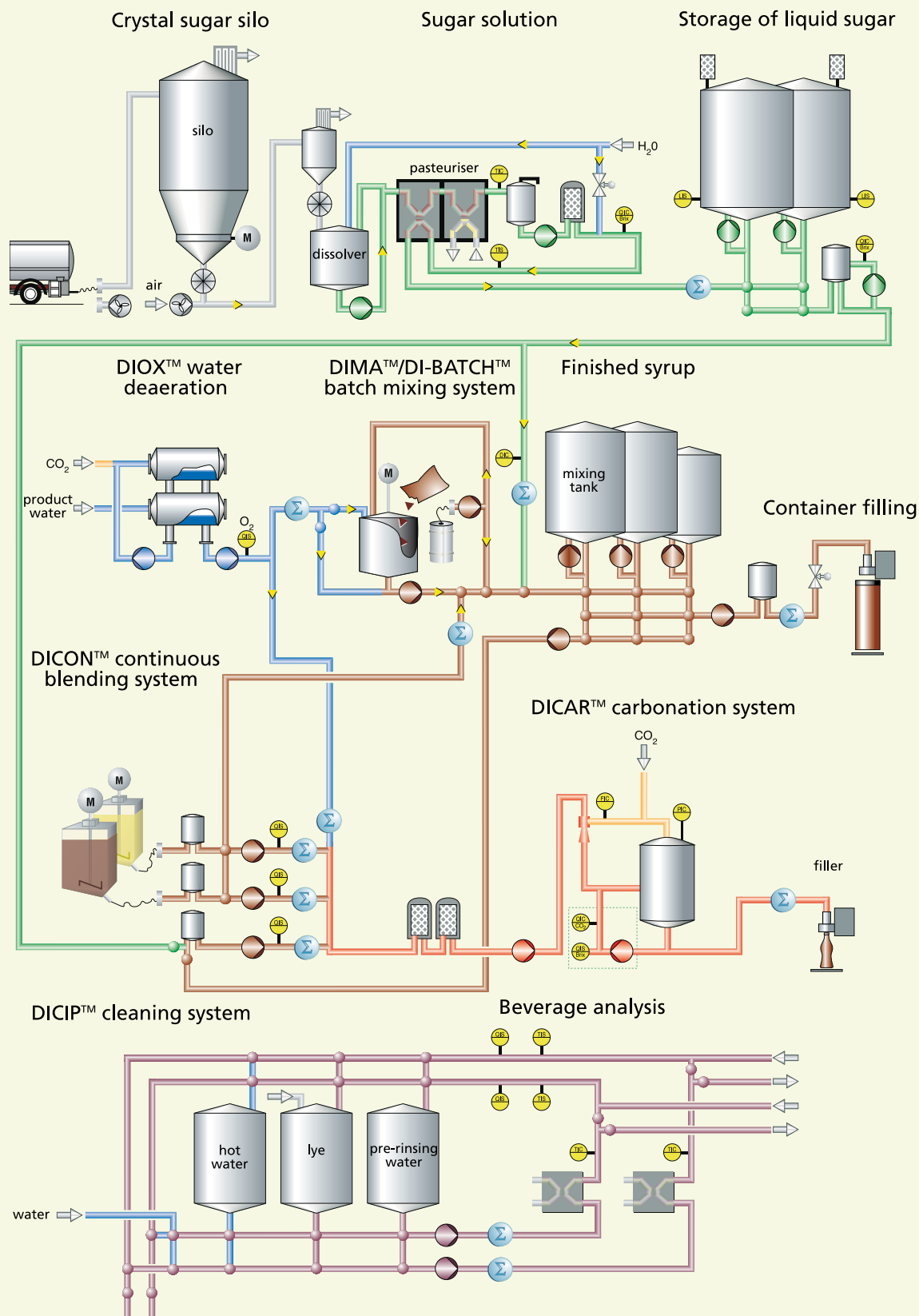
Thanks to decades of experience, the most modern process and automation technology and its internationally tried and tested project and service teams, GEA Diessel is a competent partner for you in all matters relating to the production of soft drinks.

Whether you prefer to use batch or in-line processing, whether you need individual components or a complete plant, we have a solution to match every requirement. From an individual flow meter to in-line analysis equipment, from blending systems to water deaeration or CIP equipment and all the way to the modernisation or replacement of your entire syrup and finished beverage manufacturing lines, we can offer you the complete range of equipment for your syrup room. What is more, we will take charge of every stage of the procedure for you – from planning and building to installation and commissioning in your facility. You can rely on our process expertise!

## Our services at a glance:

- one-stop shopping for all syrup room components
- constant further development of all our products and services in collaboration with our customers
- internationally experienced project and service teams
- modern processing and automation technologies
- quality assurance through comprehensive process monitoring
- greatest possible efficiency in the use of ingredients
- flexibility in production
- simple controls for easy operation
- graphic process control systems to make processes transparent to the operating staff
- logging of all important production data

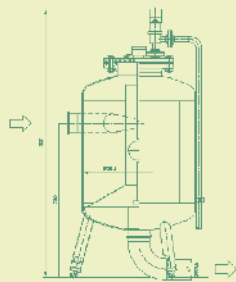




# One partner – all components

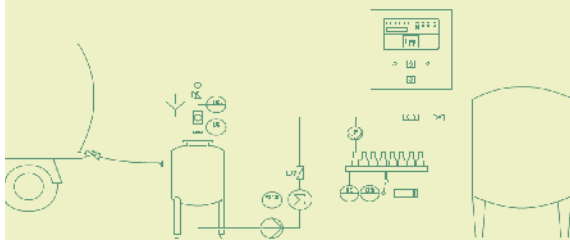
People who work in the food industry are faced day after day with the tasks of accelerating processes, ensuring that everything runs smoothly and keeping production flowing. Downtimes and outages mean losses – and not only from an organisational or financial point of view, since delivery dates are often fixed months in advance.

So much the better, then, if a manufacturer is able to rely on a partner who is distinguished by decades of experience and competence in metering and process technology for liquid or fluid foodstuffs: GEA Diessel. Whatever processes your food production involves, GEA Diessel has a comprehensive range of components and accessories ready and waiting for you that will meet all your production requirements. Why not talk to us?



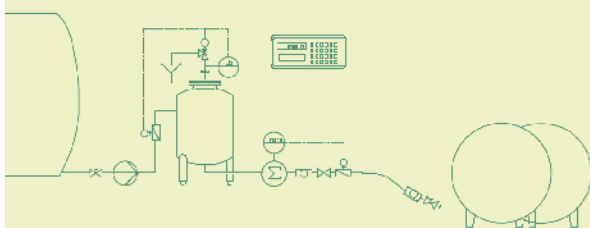
## Metering without air

The air eliminator, which is an obligatory part of any volumetric metering system that requires weights and measures approval, ensures the complete removal of all air that is entrained with the product. Thus the quantity of liquid received or discharged can be determined to the litre.



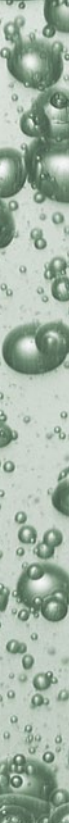
## Volume or mass – the choice is yours

With GEA Diessel reception equipment for liquid products – e.g. milk, concentrates, juices or alcohol – either the volume or the mass can be measured, whichever is required for accounting purposes. In the same way, sampling can be performed in proportion to either the volume or the mass. Wherever required, supplier data can also be captured and saved with the documentation of the metered values.



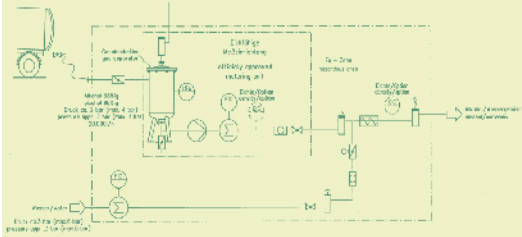
## Maximum accuracy at every discharge

GEA Diessel's discharge equipment for liquid products is perfectly suited to container or tanker transportation systems. It can be used to ensure that liquid products, such as alcohol, liquid manure or urea (AdBlue) as well as liquid foodstuffs like milk, are measured accurately for accounting purposes at discharge. Depending on customer requirements either volumetric or mass flow metering is possible. By means of a quantity pre-selection function the discharge process runs automatically.



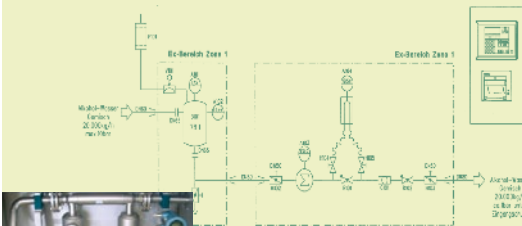
### Dealing with the hard stuff

GEA Diessel's DIVA™ alcohol reception and blending plant is equipped with two essential basic functions. In the first place, it can be used to receive alcohol from road tankers, recording the quantity by mass in a manner that is suitable for weights and measures approval if desired. Secondly, it is designed to be able to mix the alcohol with water, in order to reduce the alcohol content to a preset alcohol concentration. In this way, no additional explosion protection requirements arise in other areas.



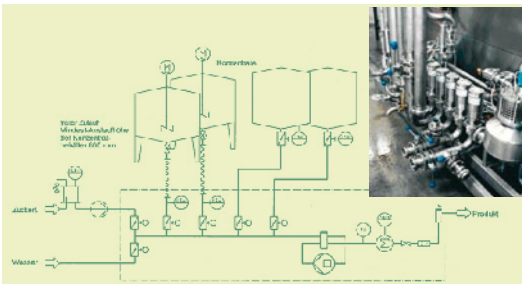
### Determining volumes – precisely and reliably

Whether you need to determine the mass of an alcohol/water mixture, the volume of pure alcohol in an alcohol/water mixture or the alcohol concentration of an alcohol/water mixture, GEA Diessel's metering equipment for alcohol/water mixtures, which is approved by both the weights and measures authorities and by the customs and excise, will do it for you reliably and with high precision.



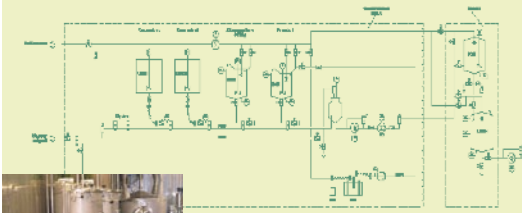
### Innovation in the starter area

Are you looking for an economical solution for the modernisation of your starter area? Then GEA Diessel's batch mixing system type DIMA™ for the blending of liquid products is just what you need. Whether for the manufacture of yoghurt, fruit mixtures, sugar solution, juices, shampoos or pickling media for gherkins – this batch mixing system is perfectly matched to the task.



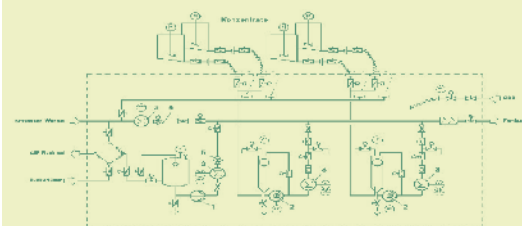
### Perfect blending of syrup

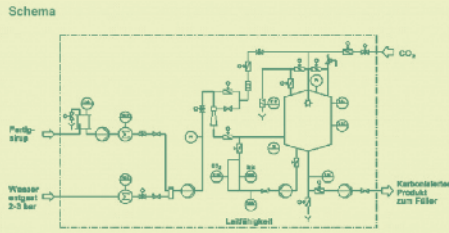
Whatever the task, from premix starting to the starting of components in very small quantities precisely in accordance with the recipe, GEA Diessel's combi mixing system type DI-BATCH™ ensures that sugar solution is constantly available. Extremely suitable for the processing of solid and liquid components, it provides for rapid and loss-minimising product changes and a minimum space requirement for high starting volumes.



### Syrup solutions

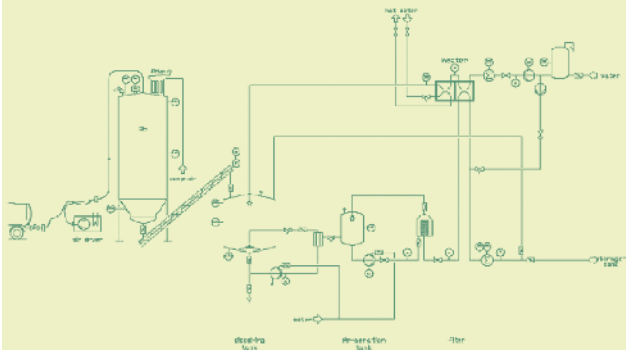
GEA Diessel's continuous in-line blending systems of the DICON™ type are designed to blend almost any multi-component mixtures with high precision, continuously and in-line. The flows of liquid are recorded by accurate flow metering devices. A digital regulation and control system directs the flows of liquid, while ensuring that the desired blending proportions are complied with. Typical applications are the manufacture of syrups, soft drinks, pickling media, washing and body care products etc.





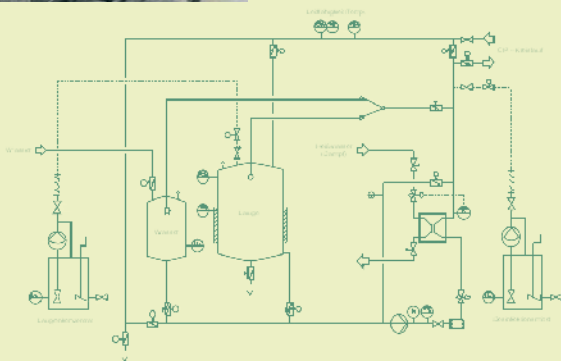
### Refreshing soft drinks

GEA Diessel's mixing plant for beverage of the DIMIX-C™ type is a professional tool for the highly accurate continuous blending and carbonation of soft drinks. Also available in aseptic design.



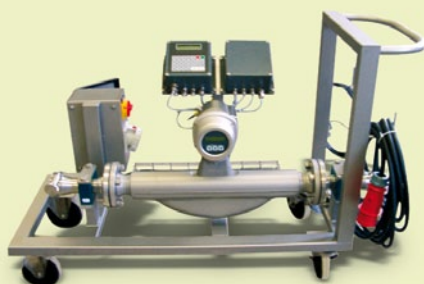
### Getting a taste for it

GEA Diessel's sugar dissolving equipment is well proven in the manufacture of liquid sugar, either in a continuous dissolving process or by dissolving sugar in a large dissolving vessel. A reliable piece of equipment in the soft drinks industry, for the manufacture of liqueurs in the spirituous liquor industry, for confectionery making, the processing of fruit and other tasks. Available with bulk material handling, sterilisation, sugar inversion.



### Cleaning, done proper!

The solution for many different cleaning requirements: from cleaning with once-only use of the medium to batch cleaning with the recovery and reactivation of the medium, cleaning in multiple circuits etc. The DICIP™ cleaning plant can be adapted to different cleaning technologies.



### Mobility in all fields of metering

Whether in wine cellars, breweries, fruit-juice processing plants or the soft drinks industry – mobile metering units with automatic cut-off are in demand everywhere. GEA Diessel has the right kind of equipment for both volumetric metering (by litres) or mass flow metering (by kilograms). Sturdily built to do a different job every day.

# Performance unites us

All over the world, the name GEA Diessel stands for high-performance, tailor-made process equipment. As one of the leading companies in the field of metering and process technology, we specialise in everything that flows. Our core competences are in the fields of metering, recording, analysis, mixing, checking, monitoring, distribution and cleaning. This expert knowledge is reflected in our equipment, which can be tailor-made to meet our customers' special requirements, offering individual solutions to problems in the food and beverage industry.

From the individual component to the complete metering system, we are at your service with our many years of expertise and our engineering capabilities.



One of our strengths is the construction of “units”, pre-assembled systems which shorten assembly and commissioning times for our customers, as the complete systems have already been tested and pre-qualified at GEA Diessel.

Furthermore, with the flexibility of our modular system concept we can offer you almost unlimited retrofitting of any existing plant.

## GEA Diessel – your partner for process equipment and systems for the manufacture of liquid products such as

- **soft drinks**
- **spirituous liquors**
- **beer and beer based mixed drinks**
- **dairy products**
- **cosmetics & personal care products**
- **homecare products**



GEA Process Engineering

**GEA Diessel GmbH**

Steven 1 · 31135 Hildesheim · Germany

Phone +49 5121 742-0 · Fax +49 5121 742-153

[info.geadiessel.de@geagroup.com](mailto:info.geadiessel.de@geagroup.com) · [www.geadiessel.com](http://www.geadiessel.com)