Usage of the ServoBlend System in a Brewery

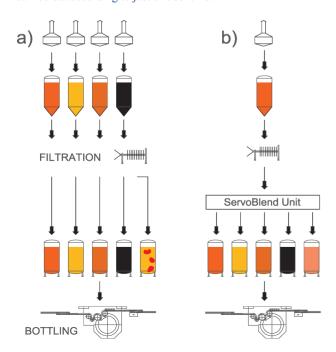
Our ServoBlend system is an optimal solution for soft drink producers. But the best additional benefit will be obtained by a brewery.

The Old Heart of the Brewery

Down to the present day the brewhouse has always been considered as the heart of the brewery. Here the foundation for a good beer was laid and the competence of the brewmaster found its greatest analogy. Basically in the brewhouse the products of a brewery were predefined. The final product was created with different malt and hop varieties. In order to continuously obtain reproducable results for each product, high effort was always required. Separate fermenting and storage tanks had to be held available for each product.

The New Heart of the Brewery

Today only those breweries will survive which are in the position to realise an attractive product range. A very efficient and lean production at a concurrently high variety of products was as yet only feasible with a very high device-related, technical input. However, the difference in contrast to former days is that nowadays this has become realisable with less effort. Our solution for this purpose is the "ServoBlend" System. You can limit your brewing process to one or two standard beer types (e.g. a top-fermented and a bottom-fermented type). For most of the breweries one slightly stronger brewed beer type is sufficient. Also the fermentation, the storage and the filtration are carried out according to just one scheme.



Our ServoBlend System is the high-precision, self-controlling and absolutely reliable New Heart of your Brewery. All products are developed here where your recipes are stored and the production takes place at the push of a button. Within short time you can react on changes in the product demand, also small quantities are quickly supplied and you can either launch a new product rapidly on the market or even stop it, without incurring big investments.

Makes of Components

A ServoBlend System is always customized. Customer preferences with reference to certain makes are understood. However, as we have specialized in the following makes, these are preferred by us.

- Alfa Laval (valves, pumps)
- Siemens, E+H, Negele (brix, flow, pressure, temperature)
- Haffmanns / Mettler Toledo (CO₂, O₂)
- Anton Paar (original extract)

Control System

By default the plant is furnished with a Siemens PLC and coloured operator panel. On request the plant can also be equipped with a communication processor. Then the plant can be controlled from a central switch room.

The ServoBlend System can be equipped with a multitude of special requests. We would especially highlight the availability of a weigh station for each container. Through this each dosing point obtains a secondary measuring system which automatically controls the primary measuring system (mass flow rate, brix, colour or turbidity). Furthermore the container content will be displayed on the basis of its real content and not on the basis of a calculation. Compared to the additional charges you will achieve an easier handling of the plant.



Pasteurisers - CIP Plants - Blending Units- Degassers - Evaporators

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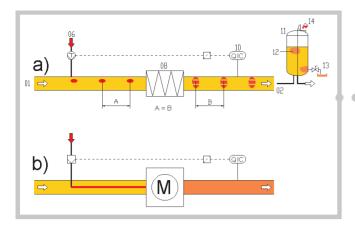
Blending Unit for Production of Soft Drinks and Beer Mix Beverages

SERVO-BLEND

Our ServoBlend System is a plant for the high-precision inline blending of beverages.

All necessary additives are dosed inline to the main component (water or beer). Each additive has its own dosing station. The dosing stations are arranged beneath the positioning place for the concentrate container. The dosing can be carried out according to colour, turbidity, original extract, brix or mass flow. Each component has its own measuring system. Highly viscous or lumpy additives can be dosed trouble-free and with high accuracy. The change to a new concentrate tank takes place automatically. Each container position can optionally be equipped with a weigh measurement.

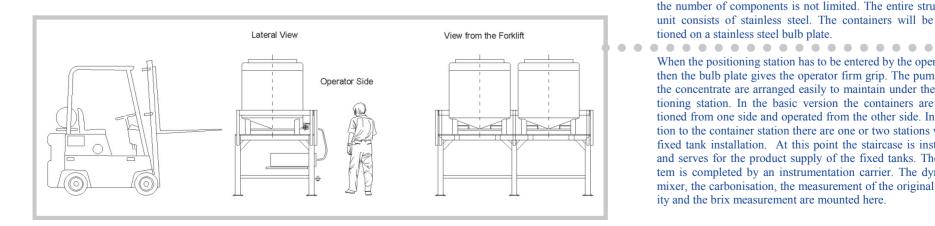




The chart on the left side contrasts a customary mixing system (a) to the ServoBlend System (b). Static or dynamic mixers can only minimize the discontinuities with a) but not end. Due to possibly necessary "corrections" in the tank with a), the final result may deteriorate further.

The flow diagram on the right side shows a complete ServoBlend system. All components are dosed with an unexcelled accuracy due to the values being stored in the recipe editor. Each component is supplied at start of production until dosing point. On this occasion, just like during the exchange of a container, no air enters the product. It is excluded that the production begins without all components being properly available at the dosing point. The pump systems are extremely robust and gentle on the product. The entire system is subject to an inline CIP cleaning together with the main pipeline. There are no dead spots or areas where cleaning is carried out with a reduced intensity. All connecting hoses (stainless steel flexible hoses) are included in the cleaning process.

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The illustration shows a station for two components. However, the number of components is not limited. The entire structural unit consists of stainless steel. The containers will be positioned on a stainless steel bulb plate.

When the positioning station has to be entered by the operators, then the bulb plate gives the operator firm grip. The pumps for the concentrate are arranged easily to maintain under the positioning station. In the basic version the containers are positioned from one side and operated from the other side. In addition to the container station there are one or two stations with a fixed tank installation. At this point the staircase is installed, and serves for the product supply of the fixed tanks. The system is completed by an instrumentation carrier. The dynamic mixer, the carbonisation, the measurement of the original gravity and the brix measurement are mounted here.