

Description

The DI-BATCH™ unit enables:

- recipe-controlled filling of dissolving tanks with water
- preselecting the required dissolving times
- highly precise dosing of sugar solution and water for the preparation of a syrup batch.

Sequences, quantities, temperatures, stirring times, etc. are variables and stored as recipe parameters. Up to 300 recipes can be stored by default and optionally even more.

Moreover, the unit includes a sugar Brix compensation which allows an equal quality of the finished syrup, even if the Brix value in the sugar solution is varying. Diet products can also be handled.

The prerequisite is, of course, that the liquid concentrates and dry solids are already made available in weighed units. Those quantities are not measured by the DI-BATCH™ unit, but optionally detected via barcode. The water quantities required for dissolving the dry solids and for flushing the concentrate barrels are automatically subtracted from the recipe quantity.

External pumps supply the unit with water and sugar solution. The DI-BATCH™ unit is cleaned through the water line. The sugar line can be separately cleaned.

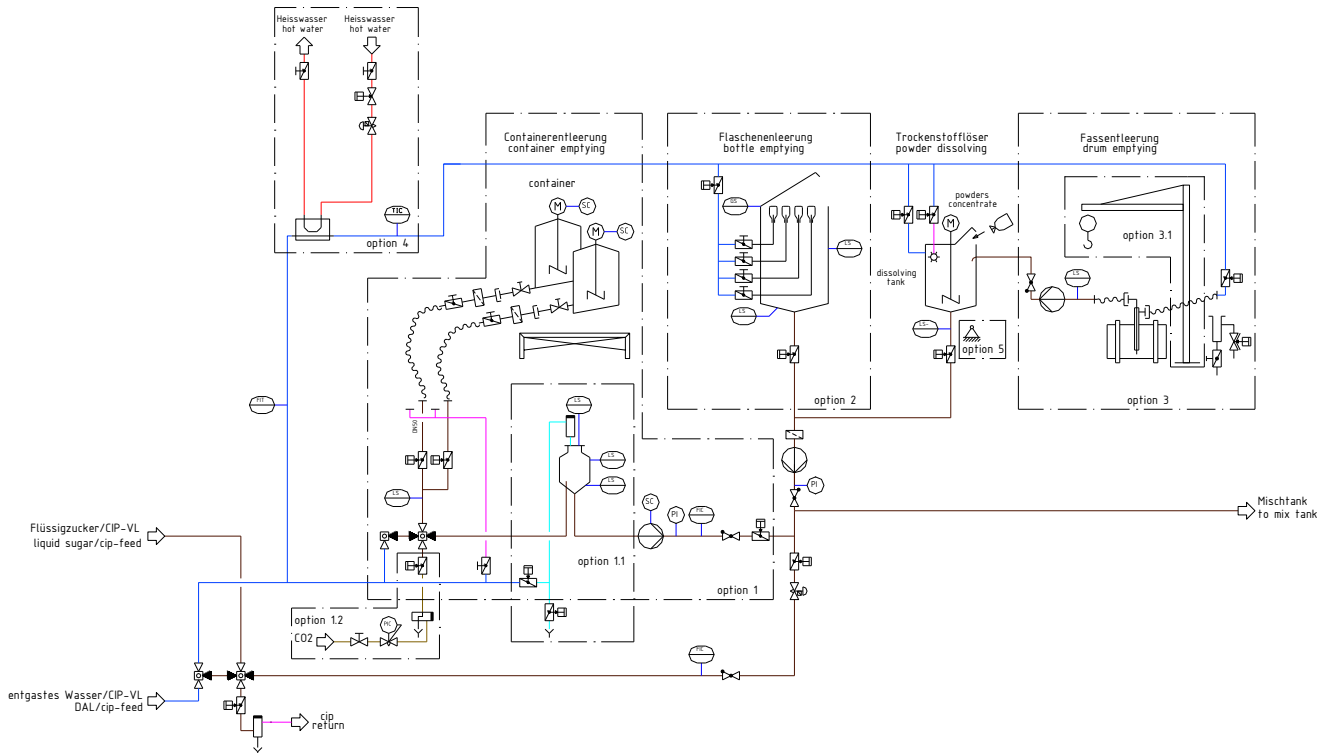
Features

- Constantly high product quality
- Optimum use of raw materials without overfeeding
- Easy product change
- Lessening the workload of the personnel in the batch-preparation area
- Low wear and tear, i.e. only little maintenance required
- Valve position monitoring to avoid malfunction and unintended mixing
- Mix proof valve technology
- Automatic switch-off compensation
- Stop in case of lack of product

Technical data (other upon demand)

| | | | |
|--|---|---|---------------------------------|
| Total flow rate | Approx. 12,000 l/h (without mixing times) | Nominal pressure of the unit | 8 bar |
| Pressure at the outlet of the unit | Approx. 1.0 bar | Piping | DN 50, dissolving area DN 40 |
| Individual flow rates: Water Sugar solution/HFCS | 15,000 l/h max. 15,000 l/h max. viscosity <300 cP | Product-contact parts | 1.4301 (AISI 304) |
| | | Product-contact parts for the dissolving tank | 1.4404 (AISI 316L) |
| | | Seals | EPDM / FKM |
| Inlet pressures: Water Sugar solution/HFCS | 2.0 bar ± 0.25 bar 2.5 bar ± 0.25 bar | Control air | 7 – 10 bar, dry and clean |
| | | Power consumption | depend on execution |

Scheme (Example)



Options

1 Container emptying:

Container emptying equipment is required, if the batch mixing unit shall be used for the processing of concentrates, too. The concentrates feed unit by gravity. A centrifugal pump carries them to the mixing tank.

1.1 Test lantern:

The test and deaerating lantern enables an air-free admission to the pump, thus enabling a container change without air can enter the unit. Apart from that, the lantern is used to check the concentrate flow meter during the production.

1.2 Pressing back the concentrates:

This option is used to press back the concentrates from the pipelines or hoses into the containers. CO₂ or sterile air is used for that purpose.

2 Bottle emptying:

This option is required if many concentrates included in bottles have to be processed. It enables up to 4 bottles to be emptied and totally flushed at the same time.

3 Barrel / KEG emptying:

If concentrates are supplied in barrels, this option offers the possibility to empty them.

3.1 Boom with balancer for suction lance:

For a better handling the suction lance can be suspended from a boom provided with a balancer.

4 Slightly heated up dissolving water:

The dissolving water has to be slightly heated up if some components cannot be dissolved at the available water temperature.

5 Dissolving tank of weight cells

If desired the partly emptying of barrels can be realized by installing load cells at the dissolving tanks.