## Continuous Dosing System BDK 2000 A

# HANSELLA



### HANSELLA BDK 2000 A **'Cooking Without Water'**

#### 'Cooking without water'

The innovative continuous dosing and mixing unit BDK 2000 A makes it possible to produce a sugarglucose syrup solution without having to add water to the recipe. This makes the unit especially suitable for the energy-saving production of, for example, hard candy and toffees as well as binding masses for bars. The unit's centerpiece is a special mixer – the TurboMixx – which produces a uniform and homogenous mix of sugar crystals and glucose syrup. The subsequent dissolving process in the Rapidsolver guarantees a crystal-free solution.

#### **Method of operation**

The gravimetric or volumetric control in the BDK 2000 A ensures precise dosing of the ingredients sugar and glucose syrup as well as optional water. If the ratio of sugar and glucose is 100:100 or the glucose content is higher, then the integrated mixing system TurboMixx performs the dissolving process by using only the water inherent in the glucose. This produces a slurry with a dry substance of up to 90%. Thanks to this innovative process the energy needed for the evaporation of approx. 250 litres of water per hour during the production of two tonnes of hard candy can be saved. This new process allows for high energy savings while simultaneously reducing costs.





BDK 2000 A, saves energy and increase the performance of existing cooking systems

#### **High energy savings**

The present procedure to produce sugar masses uses a lot of energy as the water added to dissolve the sugar as well as much of the water inherent in the glucose has to evaporate. Through the new technology, the unnecessary adding of water can be omitted and the resulting shortened cooking process achieves high energy savings. At the same time the BDK 2000 A can significantly increase the performance of existing cooking systems. The BDK 2000 A allows for a highly efficient production and the saving of resources at the same time.



Produces solutions with a **dry substance** of up to **90%** 

### Dissolving in the **Rapidsolver**

#### Rapidsolver

The integrated heat exchanger Rapidsolver uses pressure to dissolve the slurry of sugar and glucose syrup. The Rapidsolver is a natural development from the established pressure dissolver by HANSELLA, which has been in worldwide and successful use by nearly all major customers for many years. The Rapidsolver is a dissolving system on the basis of a pipe bundle heat exchanger with integrated mixing elements and an optimal infeed and outfeed of the mass. The system meets important requirements, such as 'first in – first out', minimum pressure loss and short dwell time, and ensures the constant high quality of the products.

#### **Design and function**

The Rapidsolver is an innovative heat exchanger which consists of a slim casing pipe into which a steam pipe bundle is inserted and crossed by specially developed mixing elements. The mass moves from the bottom to the top through the casing pipe, flows around the steam heated pipes of the steam pipe bundle and is mixed by the radial mixing elements. Thus the slurry is heated and completely dissolved.

## **Energy saving** and cost reduction

Heat exchanger Rapidsolver





Steam pipe bundle with mixing elements

### 2 in 1 - dosing and dissolving system



BDK 2000 A with Rapidsolver and sugar hopper

#### **Novel concept**

With its novel concept the BDK 2000 A can replace the established volumetric Solvomat as well as the gravimetric Gravomat, depending on the model and application. Irrespective of the use of the system, the energy and cost savings remain the main argument for the BDK 2000 A. Depending on its application, the system will pay for itself within the first two years.

#### Areas of application

The solutions produced by the BDK 2000 A are suitable for a variety of confectionery. Thanks to making high dry substances of solutions possible, it is especially suitable for the production of soft and hard sugar masses. Furthermore, the BDK's interfaces for other liquid and solid mixes allow for flexibility in the production of other products.





Steam pressure gauge BDK 2000 A

#### Your advantages:

- Energy savings and cost reduction
- Produces solutions with a dry substance of up to 90%
- Most uniform mixing of sugar and glucose syrup
- Continuous production process without large buffer volumes
- Direct feeding of the cooking system possible (without additional product pump)
- Production can be switched off and back on via button, no product loss
- Interfaces for the additional dosing of liquid and solid ingredients
- Continuous production or batch production in one machine
- Clearly laid out hygienic design
- Intuitive control concept with recipe management

#### **Technical data:**

- Output up to 2000 kg/h
- ▶ Sugar-glucose ratio adjustable from 100/80 to 100/120
- Control parameters: performance, sugar glucose ratio, dry substance
- Gravimetric system with load cells and flow meter for utmost dosing precision









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