



Brine preparation system

BRINE PREPARATION jbtc.com



# Standardized brine, highest hygiene



# BRIMAX – Brine preparation system

BRIMAX technology allows the production of all types of brine used in injection, massing and/or tumbling procedures, whilst maintaining a standardised product quality under the most stringent hygiene requirements. A unique feature is the software, which has been developed and refined using years of experience, that performs, controls and documents the entire system, as the operator.

# The BRIMAX mixer

Ensures precise merging of solid and liquid components, system-guided procedures, controlled mixing processes through to the automatically monitored result of the finished, properly chilled brine

# The BRIMAX control unit

Is the central management panel of the system. Equipped with a large 10" touch panel, it allows to work both in automatic or manual mode. Automatic control, which guides the operator through each step, organises the mixing and cooling of the brine according to the specified recipes (ingredients with weight, mixing times, temperature settings). The manual mode functions include mixing, cooling and pumping out by using manual input.

# The BRIMAX storage tank

Ensures that the consumers (injector, massager, loading container, tumbler) are supplied with brine. Optional equipment with agitator/shear pump and thermo plate ensures a constant temperature and homogeneous brine. An important option for the brine mixer, it represents the perfect complement to the Schröder brine processing system. It is perfectly integrated into the system, representing the link between brine preparation and injection.

#### TECHNICAL DATA BRIMAX 1000, Mixer

TECHNICAL DATA BRIMAX 1000, Mixer	
TANK VOLUME	10001
MACHINE WIDTH	approx. 2850 mm (Mixer with control)
MACHINE DEPTH	approx. 2010 mm
MACHINE HEIGHT	approx. 2070 mm (with optional agitator approx. 2530 mm)
COMPRESSED AIR	min. 6 bar
WATER SUPPLY	Hose barb DN 40
CLEANING CONNECTION (OPTION)	G 3/4
WEIGHT	450 kg, 680 kg with PWT and control
ELECTRICAL CONNECTION	3Ph/N/PE; 400/440V; 50/60 Hz

# TECHNICAL DATA BRIMAX 1000, Storage tank

TANK VOLUME	10001
MACHINE WIDTH	approx. 1360 mm
MACHINE DEPTH	approx. 1350 mm
MACHINE HEIGHT	approx. 2070 mm (with optional agitator 2530 mm)
CLEANING CONNECTION (OPTION)	G 3/4
WEIGHT	approx. 400 kg (without load)
ELECTRICAL CONNECTION	from mixer

Up to 3 storage tanks possible without control extension, on one mixer.



thanks to modular design

For higher brine quantity requirements, the BRIMAX also comes with a 2000 liter tank – the BRIMAX 2000 brine preparation system makes it possible to produce very large quantities of brine with just a few rudimentary steps. The functionality and the program of options are identical to those of the BRIMAX 1000.

The BRIMAX systems can be extended practically without limit. Tanks for pre-cooling the fresh water are possible, which reduce the cooling time in the mixing tank while also ensuring that a standardized water temperature is used for mixing brine.

Expansion of the system with multiple storage tanks has the advantage that different types of brine can be mixed successively in the mixer. Storage of these brines with recipe-specific temperatures and interval mixing times, as well as the supply of the injector, is performed autonomously by the storage tank.

The intelligently designed control ensures safe operation.

# Options BRIMAX 1000/2000

- Various basic tanks are available
- Agitators for continuous brine mixing
- Cleaning nozzles for an automated cleaning procedure
- Shear pump, which uses its special design for an effective mixing process that achieves a homogenous mixing result for difficult brines. The shear pump optimizes the introduction of difficult soluble additives, such as potato starch, vegetable proteins etc. and reduces the mixing times of all brines
- Depending on the brine specification, a plate or pipe-heatexchanger can be used as a cooling device

#### TECHNICAL DATA BRIMAX 2000, Mixer

**BRIMAX 2000** 

TECHNICAL DAIA BRIMAX 2000, Mixer		
TANK VOLUME	20001	
MACHINE WIDTH	approx. 2860 mm (mixer with control, without mobile platform), approx. 3020 mm (mixer with control, with mobile platform)	
MACHINE DEPTH	approx. 2010 mm	
MACHINE HEIGHT	approx. 3070 mm (with optional agitator approx. 3530 mm)	
COMPRESSED AIR	min. 6 bar	
WATER SUPPLY	Hose barb DN 40	
CLEANING CONNECTION (OPTION)	G 3/4	
WEIGHT	630kg, 860kg with PWT and control	
ELECTRICAL CONNECTION	3Ph/N/PE; 400/440V; 50/60 Hz	

# TECHNICAL DATA BRIMAX 2000, Storage tank

TANK VOLUME	20001
MACHINE WIDTH	approx. 1360 mm (without mobile platform), approx. 2640 mm (with mobile platform)
MACHINE DEPTH	approx. 1350 mm
MACHINE HEIGHT	approx. 3070 mm (with optional agitator approx. 3530 mm)
CLEANING CONNECTION (OPTION)	G 3/4
WEIGHT	approx. 600 kg (without load)
ELECTRICAL CONNECTION	from miyor

Up to 3 storage tanks possible without control extension with one mixer. Mobile platform required for work on the manhole.

# BRIMAX 1000/2000

# Control unit

The Schröder touch panel STP 104 is used to operate the system in both automatic and manual mode. In addition, a programmable washing program of the cooling and mixing circuit is included as standard.

The manual mode functions include water dosing, mixing, cooling and pumping out. Automatic mode ensures a user-guided brine production according to defined specifications: ingredients with quantity input, mixing time for each ingredient, final mixing time, and final temperature.

The operator is led through the recipe step by step. All the ingredients contained in the recipes are queried and checked with the exact weights in a specific order. Once the recipe is complete, a pre-programmed final mixing procedure is carried out, the brine is cooled down to the target temperature and prepared for the injection process.

# Monitoring units

- Integrated weighing cells
- temperature measurement
- conductivity measurement
- dry-run protection (even with foamy brine)
- documentation of the operation history in the controller

# Process security

- Standardize brine production by defining and controlling the order of ingredients, mixing times, temperatures, ...
  - Brine mixed exactly according to the recipe, always with the same quality, an indispensable basis for all further processes (injection/tumbling/roasting/freezing/slicing ...)
- No deviations from the recipe, complete dissolution of the ingredients, always the same temperature and viscosity
- Data exchange between the tanks: For identical brines (recipe name). Automatic and monitored pumping from the mixer to the storage preparation and automatically controlled brine transport to the injectors.
- BRIMAX brine preparation reduces the amount of errors in the brine production process
- Inspection and documentation of all process-relevant parameters







Batching End batching Manual mode

### JBT PROTEIN PROCESSING

#### SECONDARY

BRINE PREPARATION | HOMOGENIZATION | INJECTION INJECTION & RETURN MILLING | MACERATION | MASSAGING | TENDERIZATION TVI MEAT SLICING | -RAY TECHNOLOGY | AUTOMATED TRAY LOADING

#### FURTHER

WEIGHING | PORTIONING/TRIMMING | COATING | FRYING & FILTRATION | PROOFING COOKING | COOLING | CHILLING | FREEZING | REFRIGERATION | CLIPPING & PACKAGING SOLUTIONS | X-RAY TECHNOLOGY | HIGH-PRESSURE PROCESSING (HPP)

















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