

# Soaking and Cooling Unit MBWeich 200

# Operating manual

## 1. Introduction

Dear Customer, please read this manual carefully prior to first use and act accordingly. Keep the manual in a safe place and pass it on to any future user. It is very important to read the safety instructions prior to commissioning!

Warranty: 12 months when maintained properly and used as intended! Parts subject to wear and tear are excluded.

Liability: Each user shall be responsible to maintain and use the soaking and cooling unit in a responsible manner.

The manual shall be directly accessible to the user to ensure proper operation and in particular to ensure the compliance with the safety instructions.



## 2. Use

The soaking and cooling unit must only be used for the purposes described in this manual - the control of soaking and cooling units in pigsties. The manufacturer does not accept liability for damages caused by improper use.

## 3. Safety instructions

Safety features protect the user and functions must neither be deactivated nor bypassed. The soaking and cooling unit must only be operated by persons fully acquainted with the device functions. Please observe the following safety related instructions before commissioning and during operation.

- For safety reasons the owner of the soaking and cooling unit is requested to introduce each user to the device functions in accordance with the manual.
- The soaking and cooling unit must only be used in a technically perfect condition and at the same time the user must observe all safety instructions. Make sure that device controls are clean and do not place any objects on the device. Immediately eliminate any malfunctions which possibly impede safe operation!
- In addition to the manual observe the general regulations with respect to the prevention of accidents (in particular the accident prevention regulations) as well as any statutory provisions with respect to the prevention of environmental pollution.
- Ensure that the local supply voltage complies with the operational voltage of 230 V / 50 Hz. Ensure that the voltage stated on the specification plate complies with the power supply voltage. Unsuitable extension cables might be dangerous.
- Do not store or operate the device next to heat sources.
- Use the device only with firmly fixed front cover.
- Always disconnect and remove power plug from main supply before maintenance or repair work.

- Do not repair the device yourself.
- Inspect the device before each use. Do not use the equipment in case of damages to the device, plugs or cables. Disconnect power plug and have the device replaced or repaired by a technically qualified person.
- Rinse lines before initial use of the device. Mount soaking nozzles afterwards!

#### 4. Connections

- Plug 230V
- Magnetic valve water supply (main v)
- Magnetic valve pressure release (release v)
- Temperature sensor - place in compartment or supply air for reference

#### 5. Operation

Press „ON/OFF/OK“ at top right-hand side to switch device from stand by mode to active mode (display MB 200). Press „+“ or „-“ buttons to switch between soaking and cooling mode. Press „ON/OFF/OK“ to confirm selected mode.

##### 5.1. Option „Soaking“

- Press „ON/OFF/OK“ to switch between manual (H) and automatic mode (E). Press „+“ button in position „H“ to open the magnetic valve, press „-“ to close the valve.
- Press „+/-“ in „E“ mode to switch between the parameters break period, pressure release period and spraying period. After selection of parameter press „ON/OFF/OK“ button to confirm. Press „+ / -“ button to select the requested time in seconds. Press „ON/OFF/OK“ button to confirm.
- Spraying time approx. 60 s depending on local conditions.
- Pressure release period 0 s.
- Break period approx. 600 s.
- During operation the display indicates „MB Weich“ and „E“.
- Press „ON/OFF/OK“ for approximately 2 seconds to turn off the device.

##### 5.2. Option „Cooling“

- The current temperature is indicated.
- Press „ON/OFF/OK“ button to switch between manual (H) and automatic mode (K). To open the magnetic valve in position „H“ press the „+“ button, press „-“ to close the valve.
- Press „+/-“ in „K“ mode to switch between the parameters set temperature, break period, pressure release period and spraying period. After selection of parameter press „ON/OFF/OK“ button to confirm. To select the requested time in seconds press „+ / -“ button.
- Set temperature in °C specifies start of cooling, e.g. 28 °C.
- Spraying period approx. 2-4 s.
- Pressure release period approx. 1-3 s; cooling nozzle should stop immediately after closing valve 1.
- Break period approx. 20 s.
- The device works when indicating „MBWeich“ and „K“ as well as the current temperature.
- Flashing temperature display indicates that the selected set temperature has not been reached yet. The device is activated and starts operation as soon as the set temperature is exceeded. The device stops operating when reaching approx. 2 °C below set temperature.
- Press „ON/OFF/OK“ for approximately 2 seconds to turn off the device.

Recommendation for urgent jobs: Switch the soaking device to „manual mode“ and wet stable completely for 2 to 5 minutes before regular soaking intervals. In case of very thick excrement layers we recommend to wash the already soaked upper layer away after a few hours to improve the watering effect and soaking.

The soaking unit can continue operation in larger compartments during cleaning with the high pressure cleaner in order to avoid drying of dirt.

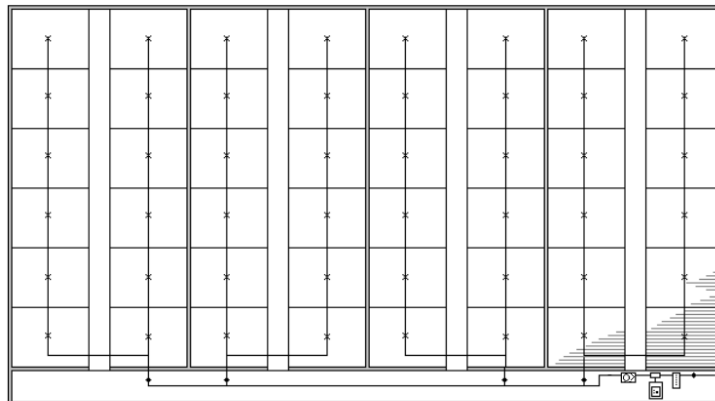
# Installation and start-up instructions

## Combined cooling and soaking device

### 1. Setup:

Example: comb-shaped stable

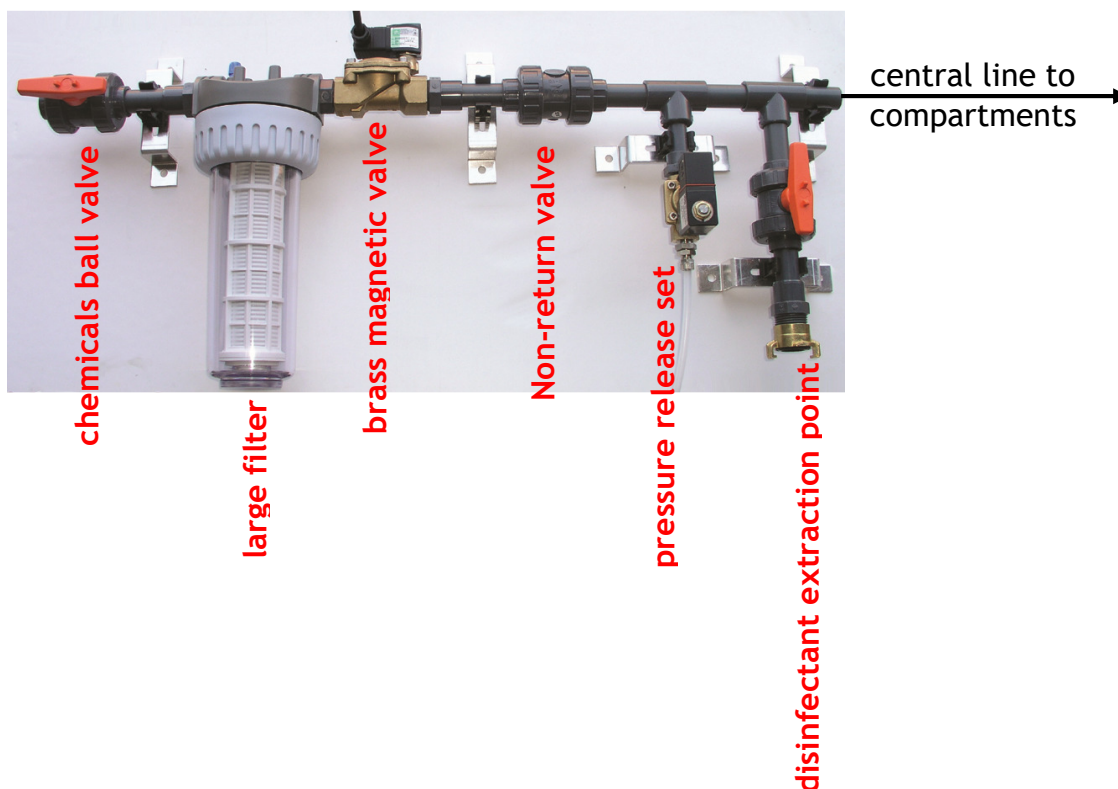
- One line of jets per inlet
- Splitting line in central corridor with one ball valve in front of each partition.



Comb-shaped stable with 144 feeding places control centre

### 2. Splitting:

- Install soaking device, pressure release, magnetic valve and filter on central corridor (note: corridor must be frost-protected). Water pressure **min. 3.5 bar!** Install magnetic valve behind the filter (caution: observe flow direction/ arrow); install pressure release behind central line on central corridor. Installations with disinfection connection require non-return valves behind magnetic valve. Installation of connection with ball valve behind pressure release.
- Mounting with fasteners.



### 3. Glueing of lines:

- Cut pipes with angle grinder, hand-hacksaw, PVC shear or mitre saw with PVC blade (remove chipping). Clean adhesion surface area with the cleaner (end of lines outside, fittings inside).
- Apply glue to both sides (see text on box glue and cleaner).



### 4. Mounting:

- Separations towards compartments with T-fittings. Mount ball valves behind T-fittings in front of each compartment (mind flow direction/ arrow).
- If required, mount spacer behind pipe clamps in central corridor.

- Mount pipes centric on top of inlets, right and left parallel to taps. Mount directly to ceiling or at air ducts with pipe clamps (or Spax screws) or with suspension hooks (mounting height 2 - 2.30 m to allow reaching jets without ladder). Distance from pipe clamps or suspension hooks approx. 1.20 m.

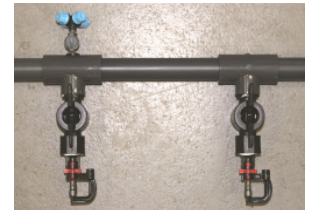


- For mounting to ceiling: fixate suspension hooks with Spax screws to ceiling.



### 5. Glueing of jets:

- Glue combined jets in place, depending on instructions, usually centric on top of inlets.
- Soaking jets point downwards, cooling jets upwards.
- Depending on instruction, place combined cooling jet holder (left) and soaking jet holder (right).



### 6. Combined cooling in farrowing crate:

- Soaking jets: one jet per inlet, centric.
- Separate cooling jet line above corridor of compartments.



#### Mounting:

- Mount jets **before** glueing pipes!
- Press mounting ring (black rubber band) with screwdriver in bore of jet socket.
- Screw soaking or cooling jet, incl. non-return valve, with small pipe tong into mounting ring. Turn jet until mounting ring is exposed to slight compression.
- Following, glue completely mounted jets to lines.

# Disinfection

## 1. Connection to soaking device:

The disinfection pump/ disinfection cart injects between pressure release and central line. Disinfecting agents should not pass magnetic valve. To protect incoming water line, disconnect completely to prevent return flow of disinfecting solution to line network. Connection of disinfection pipe and water supply is prohibited.

## 2. Blending of solution: (see package insert)

Example: compartment  $12\text{ m} \times 10\text{ m} = 120\text{ m}^2$ , instructed output quantity  $0.4\text{ l/ m}^2 \gg 48\text{ l}$  output quantity. At intended concentration of  $1\% \gg 0.48\text{ l}$  disinfecting agent. Place mixing vessel next to disinfection pump and mark height. Then fill in required quantity of agent and subsequently fill up with water until mark is reached.



Do not enter the compartment during or 2 hours after disinfection process. Rinse pump thoroughly with water after disinfection.

Do not deploy Alzogur or other disinfecting agents through the soaking device. Alzogur is extremely corrosive. Inadvertant access to compartments is very dangerous. Also, due to the all-over output with the soaking device feeders would be moistured, leading to symptoms of poisoning in animals. Extra equipment with sprinkler head available for applying Alzogur.

**Use only DVG listed disinfecting agents and strictly adhere to package insert! Furthermore, use of Neopredisan or similar products through the soaking device is prohibited since it affects synthetic materials.**

## Operating instructions disinfection pump

### 3.1 Disinfection process:

Place suction pipe of pump in blending vessel and couple pressure line to soaking device. Fill pump with water by using the pressure pipe (no dry suction). Close water line with ball valve, (cut-off incoming water line, it has to be assured that revert to water supply line is impossible).

Open the corresponding compartment tap. Switch on pump until container is empty. Fill in water corresponding to the line (usually 10 l are sufficient) and rinse line till empty.



## Operating instructions disinfection cart

### 3.2 Disinfection process:

Connect pressure output of disinfection cart to coupling of soaking device with a short  $\frac{3}{4}$ " tube. At initial operation of disinfection cart it is necessary to feed in water through the pressure exit (fill pump). When using further, fill in water through pressure exit or top cover. Close water line with ball valve (cut-off incoming water line, it has to be assured that revert to water supply line is impossible).

Open corresponding compartment tap. Switch on pump till container is empty. Fill in water corresponding to line (usually 10 l are sufficient) and rinse line till empty.



☞ Do you have any questions?

It would be a pleasure for us to help. Please call us! Tel.: +49-5262 / 99399-0

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