

SALT BRINE SYSTEM **daxSol**

FOR THE PRODUCTION OF COLD DOUGH

- Hygienic dough production without the use of flake ice
- Improvement of dough structure



Reduces the dough
core temperature,
hygiene assured!



Special advantages of daxSol:

- No flake ice needed
- Improvement of dough structure
- Sterile
- Simple, accurate dosing
- Reduced kneading times in comparison to the processing of flake ice
- No temperature fluctuations
- Useable all the year

Option:

- Storage tank (isolated) – material polypropylene
- Conveying and dosing pump to feed storage tank
- Ring line
- Integration into existing control system
- Conductivity measurement for monitoring the salt content

Functional principle:

The salt brine system is used for the production of cold dough.

Into a preparation vessel, filled with water (defined quantity), the salt will be dosed according to the desired concentration. The resulting solution is passed through a heat exchanger to cool down the preset temperature. The cooled brine is stored in a storage tank and will be fed to the consumers as required. Intermediate circulations support the stability of the solution or its temperature.

Salt brine:

In addition to the crystalline dosage form, salt can be dissolved in water, whereby the quantity of salt in water will be determined by the (normally temperature-dependent) maximum saturation level. Under ideal conditions approx. 310 g salt can be dissolved in 1000 g water. Such a solution has different physical properties than pure water. Thus, among other things, the freezing point will be lowered, which depending on the concentration of the brine, can be much lower than 0° C. This means that a 15% salt brine solution (under laboratory conditions) will only freeze at approx. -9°C.

Of course, this "cold" solution is an ideal medium for controlling the dough temperature, since the brine can be dosed clean, comfortable and exact into the mixer bowl. The dough temperature can be kept within narrow limits, so that possibly addition of flake ice is not necessary. Due to the aggregate state of the solution, the structure of the dough will not be impaired, since there are no sharp-edged ice crystals. Due to the automatic addition of the salt brine, without manual manipulation, the hygienic aspects in the dough preparation will be enhanced.

Design:

- Storage tank for brine – material polypropylene
- Weighing system
- Propeller mixer
- Conveying and dosing pump
- Flushing nozzles
- Stainless steel frame for floor installation
- Plate heat exchanger