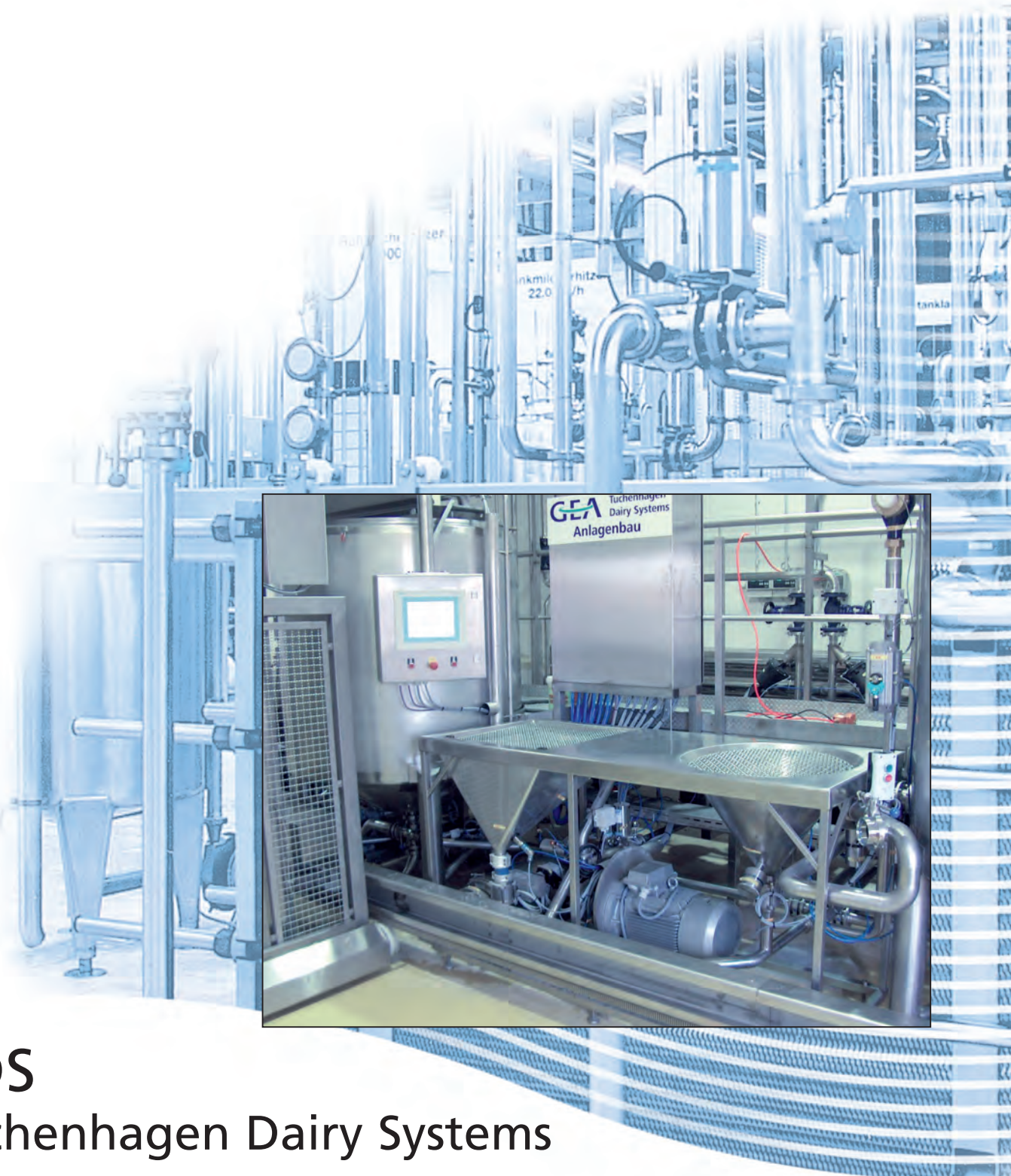


# Sauce processing plant

For the production of smooth sauces and sauces containing particles in the delicatessen industry



**TDS**

**Tuchenhagen Dairy Systems**

## Sauce processing plant

### Plant description:

Insulated stainless steel tanks are filled with a pre-selected quantity of water via a recipe management system. When the specified quantity of water has been supplied, the basic pasty and powdery ingredients are introduced into the circulating water stream by a blending table, a self-priming centrifugal pump and a homogenizing pump.

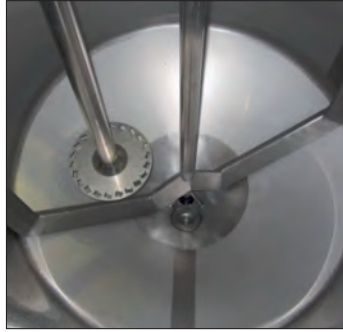
In the homogenizing pump, the components are finely blended in the shear gap between rotor and stator, thus preventing agglomeration, lump formation and cross linking.

The homogeneous blend is circulated until the

entire supply of basic ingredients on the blending table has been introduced into the sauce tank.

Homogeneity of the sauce, which at this stage is still cold, is maintained by agitators.

A positive-displacement pump transfers the tank contents to a TDS VARITUBE® M tubular heat exchanger.



The tubular heat exchanger type M consists of several inner tubes surrounded by hot water, which flows in the shell. The tube bundles are mounted in a "floating" manner so that the complete bundles can be removed for inspection purposes.

The modules of the tubular heat exchanger also contain specially designed flow devices which keep the heat exchanger free from deposits when processing products containing fibres or particles.

Once the specified heating temperature has been reached and cold vegetables have been added (optional), the prepared sauce is automatically kept warm.

A push-out program conveys the prepared sauce to the buffer tanks or the filling system.

Whenever a product change-over takes place, an intermediate rinsing step with water is performed.

After production end, the sauce tank is subjected to CIP cleaning.

Only the blending table is cleaned manually.

CIP cleaning does not require a separate cleaning system as a cleaning program is integrated into the control system and the plant already includes all components required for effective cleaning.

### Process steps:

1. Intake of water and pasty basic ingredients (tomato puree, mustard, liquid seasoning) and powdery basic ingredients (starch, spices, binding agents)
2. Blending and homogenization
3. Heating the sauces and addition of pieces of vegetables (peppers, sweet corn, mushrooms)
4. Buffering the prepared sauces
5. CIP cleaning

Capacity: 300 – 1,500 l batches

Time: 20 – 30 min per batch

Temperatures: 15 °C – 90 °C



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