

# Tetra Albatch™

The gentle Food Processor



## **Highlights**

- Processing system for mixing, heating, cooling and vacuum treatment
- Rapid processing cycles of high and low viscous food with or without particles
- Ideal for mechanically sensitive products
- Minimal air incorporation
- Low product losses
- Low maintenance costs

## **Application**

Processing of fruit preparations, tomato products, soups, sauces, desserts and puddings incl. rice products.

# **Working Principle**

Tetra Albatch can both be used in a batch production scenario or as pre-treatment in a continuous production scenario. The food processor has its own PLC control system but can also be interlinked to an overall system.

Tetra Albatch is available in two sizes; 1200 and 2500 litres, and can fully equipped carry out the following operations:

#### **Filling**

The food processor can be filled in three different ways dependant on type of raw material. Liquid ingredients can be pumped through the inlet valve, powder- and solid ingredients filled using a lift and tilt device, or manually through the manhole door.

## Mixing and blending

The ingredients are gently mixed and air incorporation is minimal due to the slow revolving screw formed horizontal mixer. The gentle treatment, regardless of particle size, also supports the particle integrity.

## Heat treatment and cooling

The food processor is equipped with dimple jackets that enable gradual heating and cooling to the required temperature. The design of the Tetra Albatch also offers the choice to decide on batch size from half capacity and upwards.

#### **Vacuum treatment**

The vacuum treatment can be used for evaporation, deaeration and flash cooling.

## **Emptying**

Emptying is done either by a pump or by using the over-pressure in the tank. A continuous process can be achieved by using two or more tanks arranged for alternative emptying.

#### CIP

Tetra Albatch is cleaned in place by an external CIP system. The tank is equipped with CIP nozzles. Optional is a separate CIP outlet to clean the tank separately from the emptying pipe.

## **Standard Design**

Standard food processor 1200 resp. 2 500 litres

- Horizontal tank, atmospheric pressure
- Screw formed horizontal mixer, with flushed seals, stepless variable 5 16 resp. 21 rpm
- Split dimple jacket, -1/+4 bar(G)
- Manhole door with safety switch
- High and low level probes
- Temperature probe
- CIP nozzles
- Valves, pipes and fittings for:
  - CIP/filling
  - Steam/condensate
  - Outlet
- Stainless steel cabinet, incl.
  - Control system Siemens S7
  - MCC
  - $-\,\mathsf{Solenoid}\,\mathsf{valves}$
- Operator panel in stainless steel, incl. HMI
- Cables in open stainless steel trays
- Frame in stainless steel
- $\bullet$  Pre-assembly and water test before delivery
- Technical documentation

#### **Material**

Scraper blades in Peek, all parts in contact with product in stainless steel AISI316.

# **Technical data**

Standard food processor 1200 resp. 2 500 litres

- Tank volume 1550 resp. 3000 l
- Working capacity 1200 resp. 2500 l
- Connections
  - Liquid inlet/CIP 63,5 mm
  - CIP flow, minimum 20 000 l/h, 2 bar(G)
  - Product outlet/CIP return

- Soft water for shaft seal  $\frac{1}{4}$ ", 120 l/h, temp. 5-60 °C
- Instrument air 50 NL/min
- Electricity 380/400 V, 50 Hz, 4,5 kW
- Steam 850 kg/h
- Condensate

# **Shipping data (Standard food processor)**

Tank working volume, litres	1200	2500
Gross weight, kg	3900	4300
Volume m <sup>3</sup>	25	27

## **Options**

Standard food processor 1200 resp. 2 500 litres

- Pressure vessel, -1/+3 bar(G)
- Internal finish, Ra<0,8 (3A)
- Separate product and CIP outlet
- 4 load cells
- Evaporation, deaeration and aroma recovery
- Recipe handling
- ASME approved
- Non standard control system
- Prepared for lift and tilt device
- DCPA (Data Collection Process Analysis)
- Batch reporting
- Reports on production efficiency
- Direct Steam Injection
- Culinary steam injection into the vessel for fast heating
- High hygienic design
- Steam blanket
- Sterile air valve cluster
- Steam barriers
- Aseptic valves & equipments

#### **Dimensions**

Measurements in mm. 1200 l and (2 500 l) in brackets.





