

# TERLOTHERM®

Scraped surface heat exchanger

Egg processing



## Products

- Whole egg
- Egg white
- Egg yolk, with sugar or salt

## Applications

- Heating and cooling
- In-line pasteurization



[www.terlotherm.com](http://www.terlotherm.com)

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# TERLOTHERM® Applications in the food industry

## Pasteurization of egg products

The TERLOTHERM developed by Terlet is very suitable for the pasteurization and cooling of various egg products. Due to its unique design, the TERLOTHERM is ideal for processing products of widely varying viscosity. The in-line pasteurization and cooling of raw egg and egg yolk are among the processes the Terlotherm carries out successfully.

The pasteurization of egg yolk is described as a “practical example” below.

### Process

The TERLOTHERM can be used as a pasteurizer for various egg products. Both for whole egg and egg yolk, the TERLOTHERM is the right choice, as the TERLOTHERM has been specially designed for processing products with a high level of viscosity and products that burn easily.

In the first step of pasteurization, egg yolk is heated from 3°C (37°F) to approximately 68°C (152°F). Water at a temperature of 75°C (167°F) is usually used as a heating medium.

In order to guarantee the correct time/temperature combination, the egg yolk is kept at the right temperature in the heater. The next step is cooling; the TERLOTHERM reduces the temperature to 3°C (37°F).

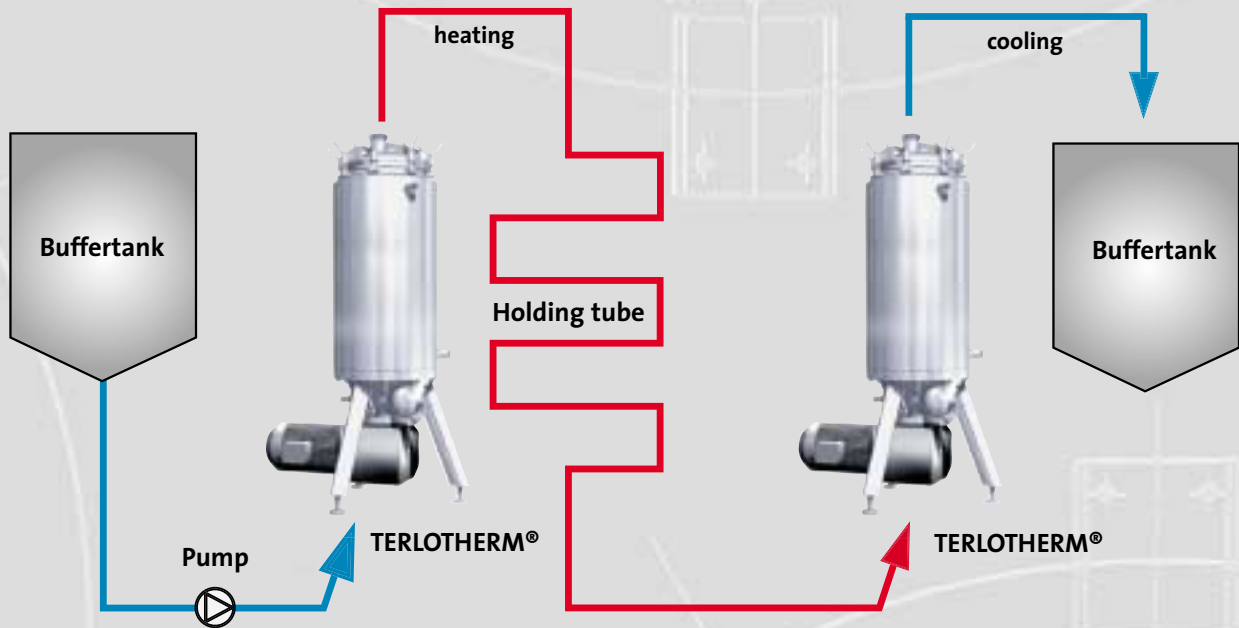
After this, the product is pumped to the buffer tank or the filling machine.

### Advantages of TERLOTHERM® for egg processing:

- Low pressure on product side
- High capacity
- Optimum hygiene
- No coagulation on the wall
- No corrosion problems occur in products with high salt level



# TERLOTHERM® and your process



## TERLOTHERM® advantages and applications



### Advantages

- Scrapers can easily be replaced
- Can be CIP cleaned
- Inspection without removing seal
- Lid can be opened with clamps
- Large heating area on limited floor area
- Tangential inlet
- Acceleration and deceleration area
- No damage to product
- Maintenance-friendly; only one seal and one drive

### Applications

- Heating
- Aseptic cooling
- Deep-cooling
- Crystallisation
- Tempering
- Sterilization
- Pasteurization
- Polymerization
- Gelling



# TERLOTHERM® Technical information

Type	Number of scrapers	Heated surface in m <sup>2</sup>	Number of scraper rows	Total height in mm ca.	Cylindrical height in mm ca.	Ground Clearance in mm ca.	External diameter in mm ca.	Product inlet in NW	Product outlet in NW	Medium inlet interior cylinder inch	Medium inlet external cylinder inch	Medium outlet interior cylinder inch	Medium outlet external cylinder inch	Rinse / leak detection pipes in mm	Product space in mm	Scraper peripheral velocity in metre/second	Maximum drive capacity in Kw	Product temperature range from to in °C	Maximum product area pressure in bar g	Cooling & heating medium in m <sup>3</sup> /hour	Product volume in litres
T1/2	8	0,6	4	1108	552	556	423	50	50	3/4	1	3/4	1	8	50	0,5-3,0	4,0	0-150	5 of 10	5-8	20
To-4	16	1	4	1427	871	556	423	50	50	3/4	1	3/4	1	8	50	0,5-3,0	4,0	0-150	5 of 10	5-8	30
T1-4	24	2,4	4	2015	1340	675	573	80	80	1	1 1/2	1	1 1/2	8	50	0,5-3,0	17,0	0-150	5 of 10	10-15	70
T1-6	36	2,4	6	2015	1340	675	573	80	80	1	1 1/2	1	1 1/2	8	50	0,5-3,0	17,0	0-150	5 of 10	10-15	70
T2-4	32	4,4	4	2460	1690	770	723	80	80	1 1/2	2	1 1/2	2	8	50	0,5-3,0	22,0	0-150	5 of 10	20-25	130
T2-6	48	4,4	6	2460	1690	770	723	80	80	1 1/2	2	1 1/2	2	8	50	0,5-3,0	22,0	0-150	5 of 10	20-25	130

Applied heating media:  
Steam and water

Applied cooling media:  
Water, ice water, brine, glycol and ammonia

## TERLOTHERM® types



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