

TERLOTHERM®

Scraped surface heat exchanger

Meat processing



Products

- Sausage
- Meat filling

Semi-manufactured products, such as:

- Meat
- Stuffings
- Pet food base

Applications

- Continuous pasteurization and cooling
- Structure improvement



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 **terlet**

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TERLOTHERM® Applications in the meat-processing industry

Continuous pasteurization of meat masses

The TERLOTHERM, developed by Terlet, is an alternative to heating and cooling meat products such as meat fillings and compound sausage products in batches, the filling, or stuffing, can be continuously pasteurized and cooled.

Process

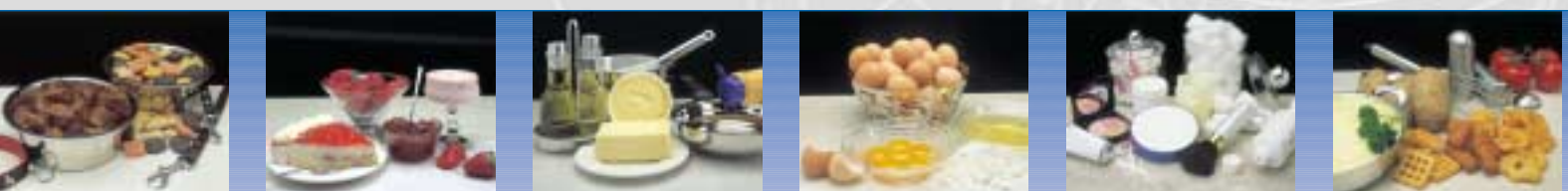
The filling is prepared in the cutter. Liver-containing products are preferably pre-cooked in order to prevent “grittiness” due to coagulation of liver protein during the pasteurization process. After the filling is made, it is first pumped with a positive pump through a heating TERLOTHERM holding tube and then directly through a cooling TERLOTHERM. This process results in pasteurization and cooling effect, comparable to immersing the product in cooking- and cooling containers for many hours.

Since the product in the TERLOTHERM is constantly in motion, long “penetration times” to the core are avoided. It is a rapid process and can even be aseptic. After packaging under inert gas, the result is a fresh product with a relatively long shelf life.

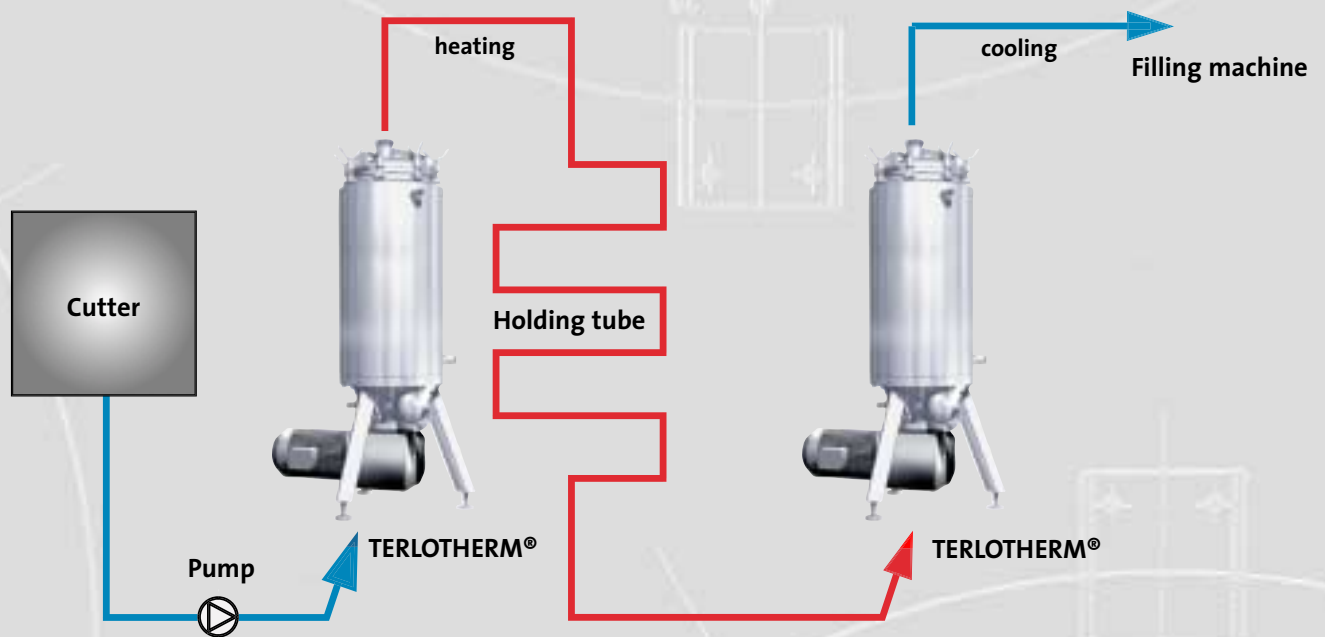
Semi-manufactured products, such as meat, can also be pasteurized with the TERLOTHERM and then kept refrigerated. Compared to refrigeration in cold stores, in-line cooling is microbiologically safer with the extremely short cooling times.

Advantages of TERLOTHERM® for the pasteurization of meat masses:

- In-line process
- Totally closed system
- Limited heat load for the product
- Saves energy and space
- Can be CIP cleaned



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 ²	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 ³ /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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