

# LinearOven

High grade steaming, cooking and grilling

**TOWNSEND**  
FURTHER PROCESSING

**marel**



- Creation of the correct microclimate
- Uniform browning and cooking
- Suitable for many ranges of product

# High grade steaming, cooking and grilling



In earlier times further processing was a solution for making meat left over saleable. Nowadays end products are made from specially selected meat. What is more, aspects such as quality and convenience play an ever greater role in the consumer's wish list. The industry has tuned in to this and is taking over more and more of the operations traditionally done in the kitchen. Heating up products is a good example of this. Townsend Further Processing' LinearOven has been designed to steam, cook and grill a wide range of different products.

## Upgrading the end product

Steaming, cooking and grilling are good examples of upgrading a product. Heat treatment with a natural or coated product as the raw material clearly adds value. Starting with your product requirements such as desired core temperature, flavour, bite and colour, the Townsend Further Processing LinearOven is able to give you exactly the product you want. Production takes place in a continuous process resulting in steady flow of uniformly high quality products.



# Process management



## Separate compartments

LinearOven fits in extremely well with the demands and wishes of the further processing industry. To be able to steam, cook or grill product in the best possible way, LinearOven has two separate compartments where temperature and air speed can be set independently. The correct climate for a given process is achieved by injecting the correct quantity of steam. Air is sucked in by fans and directed through the separate sections such that both the top and underside of the product is exposed to it.

Each section has a heating element, which transfers heat to the air. The air then conducts this heat right into the product. Air is sucked in once more by the fans creating not just a closed circulation but also an underpressure at both entry and exit to stop the egress of too much steam when steaming.



Result of the LinearOven: a steady flow of uniformly high quality products.

LinearOven makes for excellent process management, particularly when it comes to setting temperatures, air speed and air humidity. Depending on the respective settings of these parameters, products are exposed to a steaming, cooking or grilling process. Operation of the oven is by means of a menu on a touch screen. This touch screen is on a control panel sited remotely from the LinearOven. You can therefore control the whole LinearOven process from a single location.

## Unlimited possibilities for processing products

The hot air tunnel's headroom allows the processing of a wide variety of products of varying dimensions. A belt conveyor transports these effortlessly through the LinearOven. LinearOven's capacity varies depending on the execution of tunnel chosen, the products to be handled and those product characteristics required such as colour, core temperature, cooking time and air humidity.

Because of its many settings options LinearOven is suitable for the steaming, cooking, grilling and/or browning of all kinds of raw marinated products as well as cooked, baked or fried products. LinearOven's can quite often be seen in the line after Townsend's GoldFryer, its job here being to completely cook flash fried products.

It is not only chicken, chicken fillets and bone-in products that can be steamed, cooked or grilled particularly efficiently in LinearOven. The oven is also extremely suitable for the cooking of formed products such as burgers, nuggets and composite products like Cordon Bleu. It will handle red meat products such as spare ribs, roast beef and sausages too.



Operation of the oven is by means of a menu on a touch screen.



# Intensive cleaning for optimum hygiene

At Townsend Further Processing hygiene is a basic principle of paramount importance when new products are being developed. In this context a lot of attention was paid during development of the CIP system to cleaning the machine in the closed position. This can now be done fully automatically using a PLC. A separate belt washing installation has also been included in the unit.



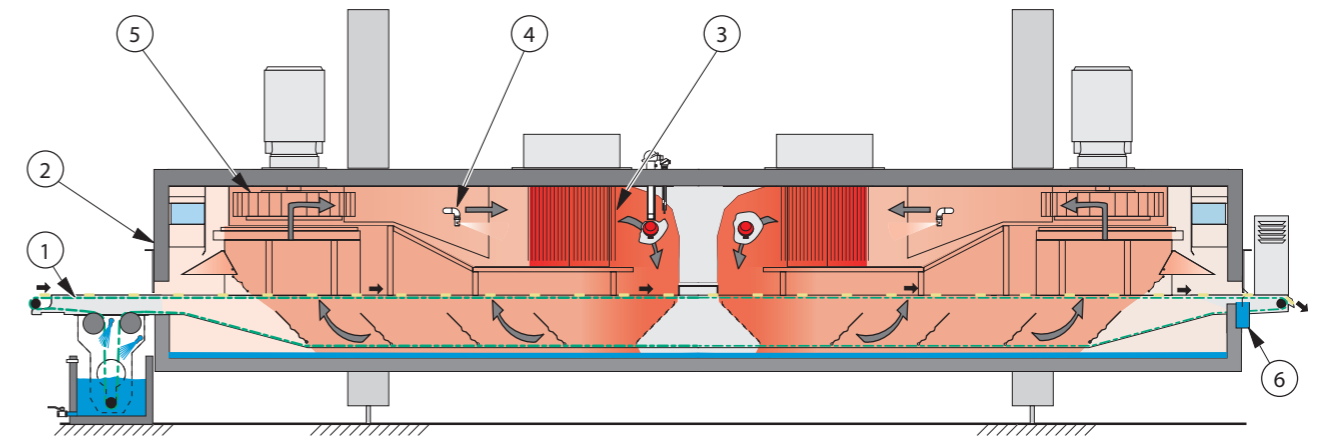
## Cleaning of the LinearOven is easy, efficient and quick

LinearOven has an automatic hoist as standard, allowing the air treatment canopy including heating elements to be lifted, if required, with the belt conveyor too.

Another aid is a lecithin roller. This prevents product from sticking to the belt and reduces the risk of damage to your products. Another benefit is less contamination of the belt conveyor with baked-on residues.

## What does LinearOven offer you?

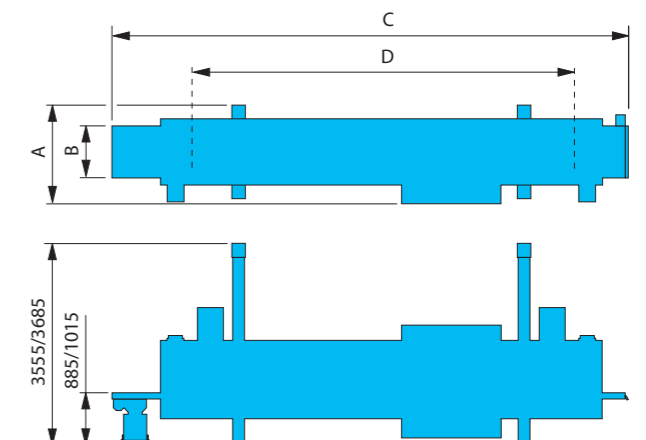
- Creation of the correct microclimate
- Higher weight yield through optimum airflow management in the hot air tunnel
- Uniform browning and cooking
- Suitable for many ranges of product
- Eminently suitable for lower capacities
- Consistently high product quality
- High level of reliability
- Automatic hoist for belt conveyor
- Easy to clean
- Efficient use of energy.



## LinearOven in operation

Products are transported through the hot air tunnel (2) on a belt conveyor (1). The hot air tunnel consists of two compartments, each of which allows a different microclimate to be created round the product. Preparation of the products is controlled amongst other things by the amount of heat given off to the air by the heating elements (3). Air humidity can be controlled by the injection of steam (4). Fans (5) ensure optimum and uniform airflow. A water barrier (6) seals off the hot air tunnel.

| Type         | A (mm) | B (mm) | C (mm) | D (mm) | Effective cooking length |
|--------------|--------|--------|--------|--------|--------------------------|
| 630 / 6000   | 1900   | 760    | 8110   | 6000   |                          |
| 630 / 8000   | 1900   | 760    | 10110  | 8000   |                          |
| 630 / 10000  | 1900   | 760    | 12110  | 10000  |                          |
| 630 / 12000  | 1900   | 760    | 14110  | 12000  |                          |
| 1000 / 6000  | 2270   | 1130   | 8110   | 6000   |                          |
| 1000 / 8000  | 2270   | 1130   | 10110  | 8000   |                          |
| 1000 / 10000 | 2270   | 1130   | 12110  | 10000  |                          |
| 1000 / 12000 | 2270   | 1130   | 14110  | 12000  |                          |
| 1200 / 8000  | 2470   | 1330   | 10110  | 8000   |                          |
| 1200 / 10000 | 2470   | 1330   | 12110  | 10000  |                          |
| 1200 / 12000 | 2470   | 1330   | 14110  | 12000  |                          |



## Contact details

### Townsend Further Processing

Design, manufacture, worldwide sales and service of further processing systems for portioning, marinating, coating, heat treatment and sausage-making for poultry, red meat, and fish.

### Townsend Further Processing

Handelstraat 3, 5831 AV Boxmeer  
 P.O. Box 233, 5830 AE Boxmeer  
 The Netherlands  
 T: +31 (0)485 586 122  
 F: +31 (0)485 586 655  
 E: [info.townsend@marel.com](mailto:info.townsend@marel.com)  
[www.marel.com/townsend](http://www.marel.com/townsend)

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