

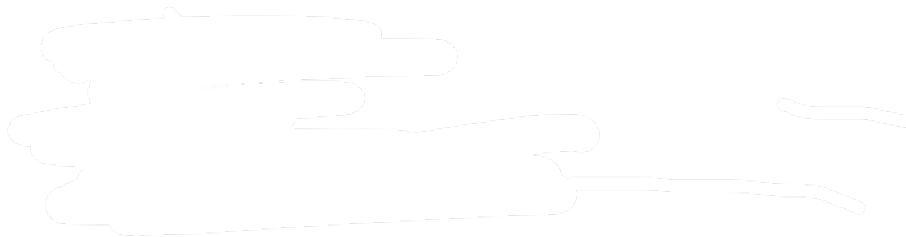


ONE TOWNSEND SPIRAL OVEN TSO 96/4EL LEFT HANDED



Layout number: N/A

Prepared by: **Marel Townsend Further Processing B.V.**



BASIC DESIGN SPECIFICATIONS

For the design of the equipment we based ourselves on the following data:

Product : half chickens, wing joints or meat balls

Process : cooking

Fixed weights, process parameters, capacities and product appearance can only be given after testing of the products.

Belt width : 660 mm gross and 594 mm effective

Working hours : 8 hours/day, 5 days/week

Electricity : 230/400V, 50 Hz and 3 Ph

Water : 200-400 kPa, unless stated otherwise

Air : 800-1000 kPa, unless stated otherwise

Steam : 700-800 kPa, unless stated otherwise

EXCLUSIONS

Our scope of supply excludes all equipment other than that mentioned and specified in this document; for instance, it does not include:

. Machines and equipment required to install the machines described in this document, such as:

- electrical installation, with the exception of the motors, distribution boxes and a number of auxiliary switch boxes and panels which form part of our equipment
- all interconnecting cabling, its cable duct ladders and supports unless specified otherwise
- supply and distribution system for water, steam and compressed air with pipelines and connections required for our equipment
- complete sewage system, drains and drain connections for our equipment
- exhaust system for the spiral oven
- roof passages
- certification of heat exchangers and accessories
- steam generator
- piping ,accessories and pipe insulation for amongst others:
 - . steam generator and user(s)
- lighting
- unloading and placing

. All constructions, such as foundations, anchor bolts, wall tiling, troughs, bases, grids, covers, beams and intermediate girders, required for pipelines and wiring, and for mounting of our machines.

. All tools, hoisting gear and manpower required for unloading and installation of the equipment.

Our scope of supply does not include the discharge or destruction of packing material, not being packing material on loan.

TH

Hot air treatment

Line no.: 01

TH0302 1 **TOWNSEND SpiralOven, type TSO 600/96/4 EL (left-handed execution)**

- suitable for high-capacity cooking, grilling and/or steaming of a wide range of products
- double drum construction with frequency controlled belt speed
- electrical heating elements (Incoloy) for good resistance to oxidation at elevated temperatures
- switchbox with:
 - separate position, at maximum 25 metres distance from the machine
 - integrated motor group switch for the chimney ventilators (max 0.18 kW each) operated from touch screen
 - modem for on-line support
 - **operating panel:**
 - **equipped with touch screen**
 - **fitted on a bracket to the machine**
- **supply including cables from switch box to the machine with a maximum cable length of 25 meters**
- dwell time can be set between 4 and 90 minutes
- automatic spindle greasing
- integrated CIP system for easy and effective cleaning with water and detergent consisting of:
 - tank with automatic level control
 - pump unit
 - integrated spraying nozzle system
- precise temperature setting for optimal production process
- optimal energy household due to fully insulated hood water seal and level control
- optimal air flow per section by means of two frequency controlled ventilators. During its travel, the product is once in counterflow and once in an air flow in the direction of transport. Thanks to a special construction vapour losses are limited to a minimum.
- easy access through automatic lifting system
- made of stainless steel and/or other corrosion-resistant material allowed for the food processing industry
- reduced radius wire mesh belt with a 11.3 mm width of mesh
- **with belt side guidings to prevent meat balls falling off the belt**
- electric heating elements with a total power of 400 kW at 180°C
- brush washer with lecithin applicator, washer pump and blower
- **advanced belt cleaning and drying using spray nozzles, brushes and blower**
- is easy to disassemble for cleaning

Installed power : 445 kW
 Maximum product height : 85 mm (125 mm in case no air guiding plates are needed)

Belt width	: 660 mm
· effective	: 594 mm
Effective belt length	: 61 m
Air (600-800 kPa)	: 0.1 Nm ³ /h
Hot water (2000 kPa)	: 4 m ³ /h
Hot water (250-350 kPa)	: 4 m ³ /h
Cold water (250-350 kPa)	: 3 m ³ /h
· during start up	: 3 m ³ /h
Steam (300-500 kPa)	: max. 1500 kg/h
Exhaustion	: 1,000 m ³ /h

TH0600 1 **TOWNSEND fat skimming system**
· for the SpiralOven, type TSO
· with connections to this oven
· with control panel

TH1511 3 **Ventilator, RGT-250 type**
· exhaust fan with AISI 304 type stainless steel made housing and ventilator
· suitable for roof installation
· excluding roof passage and piping

Installed power : 0.18 kW
Capacity : 1,175 Nm³/h at 0 Pa
: 1,030 Nm³/h at 60 Pa