



DANISH  
TECHNOLOGICAL  
INSTITUTE



# Pilot plant Equipment catalogue

## Contact

Business Manager

Gry Carl Terrell

Mail [gte@dti.dk](mailto:gte@dti.dk)

Phone +45 7220 1513

# Pilot plant – unique opportunities

**Microbiological laboratory\***

**Chemical laboratory**

**Sensory laboratory**

\*Authorized to conduct challenge tests with pathogens

\*\*Authorized for export – produce samples for your costumers

## Unit Operations\*\*

Grinding  
Ghopping  
Blending  
Tumbling  
Multi stitch injection  
Stuffing  
Fermenting  
Curing  
Cooking  
Sous vide cooking  
Smoking  
Cooling  
Vacuum packaging  
Canning  
Freezing  
Ohmic heating



# High-speed chopper 30 liters – Kilia



**Capacity approx. 10-20 kg depending on product.**

**Can chop with and without vacuum with 3 or 6 blades.**

**Adjustability:**

- 2 knife speeds**
- 2 bowl speeds**
- Kneading function 2 speeds**

# Meat grinder – K+G Wetter



**Scrapping of raw materials to approx. 25 mm.**

**Notch to 1.5 mm, 3 mm, 5 mm, 10 mm using various perforated discs.**



# Multi-Syringe – Fomaco

**Injecting salting of whole pieces of meat with brine**

**Can be set with different needle patterns and different needle types**



# Fomaco three-room tumbler



**Volume pr. room: 100 liters.**

**Maximum degree of filling approx. 80%  
depending on product type.**

**Tumbling during vacuum.**

**Adjustability options:**

- 1. Total time, tumbling time, breaks**
- 2. Revolutions per minute**
- 3. Hard and soft carriers**



# Vacuum Filling Machine – Handtmann VF50

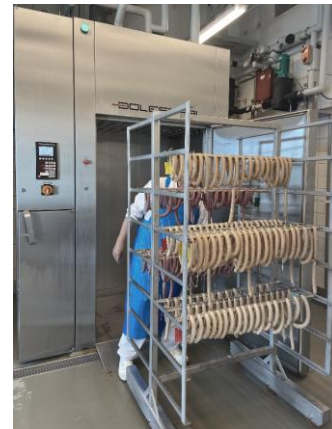


Can portion from 5 g – 9999 g.

Can twist sausages with both natural and artificial casings.



# Smoking cabinets (x2) – Doleschal



**Capacity: Product dependent - 1 rack per cabinet.**

**Products can either hang or lie on wire shelves.**

**Temperature: 5 – 95°C.**

**Humidity can be controlled from 50 – 99% relative humidity.**

**Air speed: low and high.**

**Smoke generator produces natural smoke from wood chips.**

**All data is logged and collected in a data file.**



# Cooking cabinet – Doleschal



**Capacity: depending on the product – 1 rack**

**Temperature: 0 – 95°C, boiling with steam**

**Programming different cooking programs**

**Delta T boiling**

**Cooling with sprinkling**

**Cooling down to 0°C**

**Can be used for controlled defrosting**

**All data is logged and collected in a data file**

# Climate cabinet – Maurer KLS 1710 EL/WA



**Can be used for fermentation, maturation and drying of meat products.**

**Capacity: Product dependent - 1 rack per cabinet.**

**Temperature 5 – 35°C.**

**Humidity can be controlled from 50 – 99% relative humidity.**

**Air speed: infinitely adjustable from 5 – 100%.**

**Data logging of temperature, humidity and air speed.**

# Sous vide – classic gastro



**Capacity: approx. 40 kg depending on the type of product.**

**Setting options: Core temperature and holding time.**

**All data is logged and collected in a data file.**

**The food is vacuum packed, and heat treated in water to a given core temperature and holding time.**

**A very precise heat treatment temperature is achieved. Allows to produce products with great tenderness and juiciness.**

**After heat treatment, the products are cooled in the sous vide vessel.**

# Light exposure of products



**Can be used for shelf-life tests.**

**Can copy detail lighting etc.**

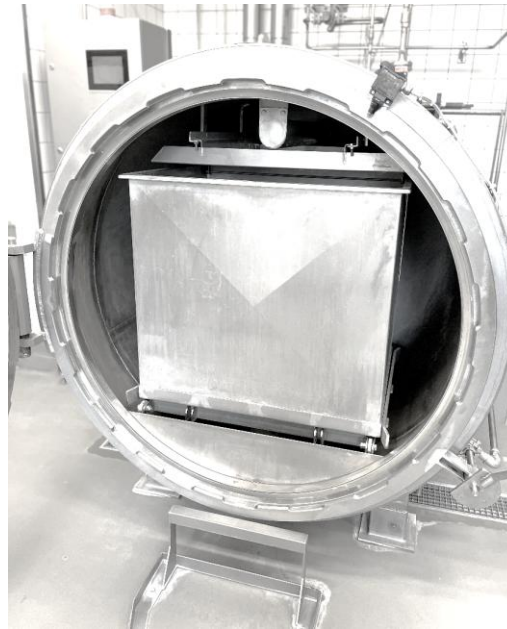
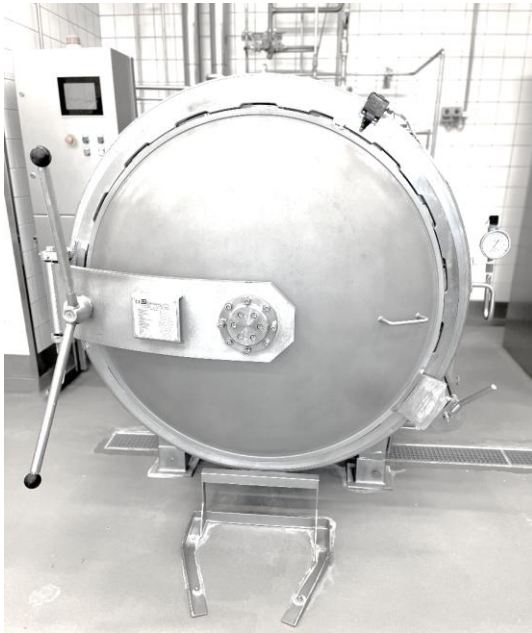
**Variable light intensity (lux).**

**Timer function with light on and off.**

**Temperature control from 0 – 30°C.**



# Autoclave KEA Phønix



**Volume of container: 63×81×95 cm**

**Irrigation autoclave**

**Cooling with cooling water**

**Temperature range: 5 – 140°C**

**Pressure: up to 6 bar**

**Data logging of time, temperature and pressure**

# Vacuum can sealer - Hastrup



**Closes cans under vacuum.**

**Dimension of cans:**

**- 90×95×50 mm H×L×W**

**- 45×95×50 mm H×L×W**

# Vacuum packing machine RöscherMatic



**Pack under vacuum - double chamber.**

**Vacuuming degree can be regulated.**

**Bag size up to 75 cm × 65 cm.**

**Can handle bag types with different barrier properties, plastic thickness, etc.**

# Vacuum Packing / MAP Packing with Controlled Atmosphere



**Vacuum packaging - vacuuming degree can be regulated.**

**Bag size up to approx. 40 cm × 35 cm.**

**Controlled atmosphere packaging (MAP).**

**1. Vacuum: approx. down to 5 millibars, gas injection up to 950 millibars.**

**2. Welding: setting the time and temperature depending on the bag type.**

**Standard gas mixtures based on  $N_2 + CO_2 + O_2$ .**

**Other gases can be ordered.**



# Tray Sealer T250 – Multivac



**Modified/controlled atmosphere packing (MAP).**

**Tray size: e.g. 190×143×52 mm L×H×W Volume 900 ml.**

**Standard gas mixtures based on N<sub>2</sub>+ CO<sub>2</sub>+O<sub>2</sub>. Other gases can be ordered.**

**1. Vacuum: approx. 20 millibars.**

**2. Gas supply: 950 millibars.**

**3. Welding: setting the time and temperature depending on the film and tray type.**

# Slicer – Weber 305UB




## Product Size:

1. Maximum length mm: 1000
2. Maximum width mm: 250
3. Maximum height mm: 125 / 135 / 150

Slicing speed: max. 400 slices/min

Slice thickness mm: 0.5 – 50

 Stacked	 Staggered Stack	 stacked-with-interleave	 Shingled-stack
 Shingled	 Shingled-with-interleave	 Endless-shingled	 Pieces
 Shaved	 Folded	 Overlapped - single/mixed	 Multiple-overlaps - single/mixed

# Spice up your feed with food innovation

Follow us on LinkedIn



Gregersens vej 9, DK-2630 Taastrup