

# Complex lines. Fish portioning and packaging line

## **OFFERED SERVICES**

Fish portioning and packaging line, delivery, installation, testing, adjustment, commissioning according to approved solutions and volume.

## **NEROLI MET GUARANTEES:**

CE marking for all equipment. Production equipment warranty period 12 (twelve) months from the date of mutual signing of the final acceptance certificate.

## **TECHNICAL DATA**

One new set of equipment, intended for weighing and packaging frozen fish.

Frozen fish weighing-portioning device, integrated in the fish supply, sorting, 10 kg weighing and packaging line. For installing at customer's premises, taking into consideration dimensions and ceiling height. Multi-head portioning device MBP 14C2 EW 60.

## **GENERAL DATA:**

Number of heads: 14 pcs.

Type of weighing: weight sensors.

Weighing accuracy: 0.1 – 1.5 g

Volume of pockets: 5 litres.

Portioning per cycle: max. 4,000 g

Type of pocket opening: from two sides.

Nominal speed: up to 180 cycles/min.

Pocket drive: step motors.

Air dryer: above 0 degrees.

Electricity AC 240 V, 50 Hz, Consumption 1.0 kW;

Equipment weight: 800 kg.

Equipment dimensions: 2,600 x 2,600 x 1,450 mm (to be specified)

Control: 12.1" touch-sensitive display.

Number of programs: up to 99.

Range of room temperature: from 0 °C to +40 °C;

External vibration compensation: 4 built-in load sensors for external vibration compensation.

Protection class: IP 66, condensate resistant, fully washable

Interface: Ethernet port, USB 2 GB from the panel.

Automatic zeroing: Yes.

Self-diagnostics: Yes.

Remote diagnostics: Yes.

RCU cable.

Weighing accuracy is determined during launching- adjustment works, depending on fish portions.

Flow Pack type packaging equipment PFM Zenith EW Servo.

#### **GENERAL EQUIPMENT DATA:**

The equipment is intended for forming packaging from a film roll.

#### **PACKAGING DATA:**

width 100–320 mm. • max. packaging volume – 6 litres.

length 80–400 mm. • max. roll width – 700 mm. Film roll diameter – max. 350 mm.

Mechanical speed: Up to 90 cycles per minute.

The actual speed will be specified after tests with the actual product and packaging material.

#### **EQUIPMENT BASIC ASSEMBLY INCLUDES:**

Equipment frame, electricity cabinet, melting jaws, vertical melter support.

Made of stainless steel.

Roll holder with centring cones.

One stainless steel shaping tube for making pillow- shaped packaging (adjustable diameter).

Photo sensor for film with printing and encoder for determining packaging length.

Vacuum belts for film feeding.

Equipment version with tilt for product and packaging safety.

Product holding mechanism in front of jaws.

Packaging support.

Vertical seam melting bar with pneumatic drive.

Equipment functions are controlled through PLK Siemens. Photo sensor for working with printed film.

Possibility to save up to 99 various programs. Equipment control using a 12.2" touch-sensitive panel.

Equipment self-diagnostics. Safety devices correspond to the highest safety standards.

Set of essential spare parts. Notes: The equipment is intended for working with hot jaws and materials such as OPP/OPA, suitable for frozen food products. Estimated maximum working speed with 1 kg packaging up to 50 pack./min. The working speed can be determined only after receiving the actual product and packaging material, and carrying out tests at the manufacturer's factory, and it also depends on the packaging length.

#### **EQUIPMENT DIMENSIONS (basic model):**

Height: 1,600 mm. Air consumption: 350 NL/minute.

Width: 1,280 mm. Electricity consumption: 4 kWh.

Depth: 2,200 mm. Connection: 400 V. 3 Ph. - 50 Hz.

Weight: 550 kg.

Number of cycles per minute is specified during the launching-adjustment works, depending on fish portions.

From 7–15 mm – capacity

2 t/h. From 15–22 mm – capacity 1.2 t/h.

## **2. MULTI-FUNCTIONAL LINE,**

corresponding to the customer's requirements and premises. Intended for fish delivery from IFQ, sorting, accumulation in containers, when required, weighing into 10 kg portions, for forming cardboard boxes and feeding the weighted boxes for sealing and placement on pallets.

#### **THE LINE CONSISTS OF:**

Frozen fish delivery, reversible conveyor from IQF with glazing and automatic switching to reverse and feeding into a container or towards sorting. In the case of reverse the glazing turns off.

Frozen fish sorting line, 4 work places. Delivering defective fish to containers. Possible fish delivery for weighing into portions of 10 kg, towards a container, or switching to MFG.

Feeding conveyor for weighing into portions of 10 kg. Conveyor for delivering packed boxes to sealing. Reversible conveyor with control from scales with two weighing stations.

Roller conveyor for feeding empty boxes to 10 kg and 1 kg packaging stations.

Workbench for packaging 1 kg packs in boxes. Rotating table for accumulating 1 kg packs.

Production feeding conveyor to MFG.

Conveyor for production feeding from MFG to the packaging machine.

Conveyor for feeding 1 kg packs to the rotating table. Cardboard box forming machine, automatic

Box sealing machine.

Platforms for employees at the sorting line, 4 pcs.

Unloader, adjusted to the feeding-sorting line.

Semi-automatic work place for packaging and strapping frozen blocks: strapping machine; hydraulic pallet lift, table with plastic surface, roller shelf for boxes and fastening; conveyor for feeding to the strapping machine. Strapping in two locations; conveyor for feeding to pallet forming;

roller table for accumulation.

Automatics, designing, microcontroller programming.

Shared control mode for the entire line.

Manual mode. Emergency STOP for the entire line.

3. Mobile weighing work place at the fish sorter, with weighing into portions of 15, 20, 25, 30 kg.