



Mechanical preparation

# **Improved** quality through surface treatment



For the production of high-quality cooked ham, massaging the muscles is an important part of the process. Protein is activated which ensures optimum bonding.

This process supports the Schröder macerator. The blade rollers cut the surface, enlarging it, and increasing the release of protein and improving the absorption of brine.

Large tendons, for poultry products as well, are also cut by the MacMAX, reducing muscle contraction during cooking and increasing binding.

#### The result:

- Improved bond between the parts
- Increased yields
- Reduced massaging time
- Increased slice cohesion
- Increased brine intake
- Reduction of brine pockets



#### MACHINE LENGTH (with infeed and outlet conveyor) MACHINE WIDTH approx. 1340 mm MACHINE HEIGHT

TECHNICAL DATA

approx. 1340 mm (without crane), approx. 2260 mm (with crane)

HEIGHT ADJUSTMENT 1045 mm - 1215 mm INFEED CONVEYOR **CONVEYOR WIDTH** approx. 500 mm

NUMBER OF BLADES PER optionally 79 (1,5 mm) or 84 pieces (1 mm) BLADE ROLLER

**COMPRESSED AIR** min. 6 bar

**BLADE ROLLER ADJUSTMENT** Depending on the product 0 bis 50 mm

> WEIGHT approx. 950 kg

ELECTRICAL CONNECTION 3Ph/PE; 400/440V; 50/60 Hz







# More flexibility through pressing

## PSM 650 - Curing press

Processing muscles with a hard structure needs special attention in the production of high-quality ham. The lack of flexibility makes the forming and filling process more difficult. When different muscles (silverside/topside) are mixed together, different cooking losses, diffusion and massage times occur.

In order to balance out the different muscle textures, the PSM 650 is used. The roller pairs break down the internal structures without destroying the surface.

By individually adjusting the pressure and rolling distance, the different products can be taken into account.

#### The key quality improvements are:

- Optimised forming
- Uniform massaging processes
- Faster massaging results
- Improved slicing
- Diffusion process in batches of mixed muscles is more quickly and evenly
- Same muscle size in the cut/slice
- Better absorption of the brine during massaging/tumbling



#### TECHNICAL DATA MACHINE LENGTH approx. 2100 mm MACHINE WIDTH approx. 1250 mm approx. 1500 mm MACHINE HEIGHT approx. 600 mm CONVEYOR WIDTH COMPRESSED AIR min. 6 bar **GAP WIDTH** 10 to 50 mm **ROLLER TYPE (TOOTH** Depending on the product ROLLER) WEIGHT approx. 860 kg

ELECTRICAL CONNECTION 3Ph/PE; 400/440V; 50/60 Hz

The machine safety is ensured by the preceding machine (preferably Schröder IMAX) including safety guard and magnetic switches.

When used as a "stand alone" machine a chute with magnetic switch is necessary.





### T-MAX 620 – Needle tenderizer

The different fibre structures within a muscle absorb the injected brine in different ways. Brine pockets and inhomogeneous brine distribution must be prevented for high quality requirements.

The Schröder TMAX needle tenderizer penetrates the entire muscle. Its blade-like sharpened tips cut through the fibres of the muscle and shorten them in the process. Replacing the injected brine during the fibre process is then possible, the distribution is optimized and the muscle is also perfectly prepared for absorbing the protein during massaging.

Depending on the product, the tenderizer can be equipped with single- or double-head and single- or double-blades.

#### The quality improvement is clearly demonstrated by:

- Faster diffusion of additives
- Reducing pickle pockets
- Homogeneous reddening
- Increased tenderness
- Shorter massaging and tumbling times



#### TECHNICAL DATA

MACHINE LENGTH approx. 2160 mm

MACHINE WIDTH approx. 1400 mm

MACHINE HEIGHT approx. 2240 mm

CHANAL WIDTH 620 mm

WALKING BEAM HIGHT approx. 1200 mm

PRODUCT INFEED HIGHT up to 210 mm

Depends on the configuration – from 300 to 600 NUMBER OF NEEDLES

ADVANCE 50/100 mm

15-60 CYCLES PER MINUTE

TRANSPORTED AREA 223 m<sup>2</sup>/h

COMPRESSED AIR min. 6 bar

> approx. 1450 kg WEIGHT

ELECTRICAL CONNECTION 3Ph/PE; 400/440V; 50/60 Hz



#### JBT PROTEIN PROCESSING

#### SECONDARY

BRINE PREPARATION | HOMOGENIZATION | INJECTION INJECTION & RETURN MILLING | MACERATION | MASSAGING | TENDERIZATION TVI MEAT SLICING | -RAY TECHNOLOGY | AUTOMATED TRAY LOADING

















#### **Northfield**









SOLUTIONS | X-RAY TECHNOLOGY | HIGH-PRESSURE PROCESSING (HPP)

WEIGHING | PORTIONING/TRIMMING | COATING | FRYING & FILTRATION | PROOFING

COOKING | COOLING | CHILLING | FREEZING | REFRIGERATION | CLIPPING & PACKAGING



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