



Massager

# Highest yield and maximum protein activation



# MAX massaging technology

The procedural principle of the MAX massaging technology is based on knowledge from the MYAC decomposition theory, and has been implemented by means of horizontal mounting of a rotating paddle shaft in a fixed container. The massaging effect is achieved using the spirally-arranged paddles. These produce extremely effective movement of the meat mass, and transfer the massaging energy directly into the muscle (a horizontal and vertical material flow occurs inside the container due to the specific paddle position). This paddle technology, in combination with an extremely high degree of system filling and active jacket cooling, leads to very efficient and effect protein activation. Your benefits: demonstrably shorter process times and better yields.

### MAX technology means

- Intensive protein activation, particularly in the individual muscle
- Improved intra-muscular and extra-muscular slice cohesion
- Low protein abrasion on the surface of the product (due to the active jacket cooling)
- Increased water retention, tenderness and more stable structure in the end product
- Highly efficient due to filling volumes of up to 85%

#### Control

The intuitive user interface of the controller guides the user through the program, guarantees safe and practically-oriented operation, and stores all audit-related data.

- 100 freely selectable recipes for automation control
- Alarm and event history in a ring buffer with 1000 entries
- Recording and storage of the temperature for the product and the cooling system
- Recording and storage of the process parameters (speed, vacuum, operating hours)
- Recording and storage of the weights if load cells are present

## Examples of massaging times

CHICKEN FILLETS 10 – 15 min.

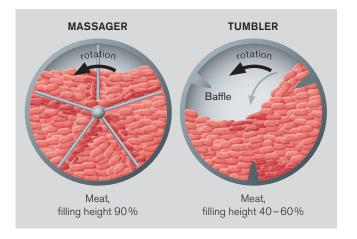
CHICKEN BREAST FILLETS 45 – 90 min.

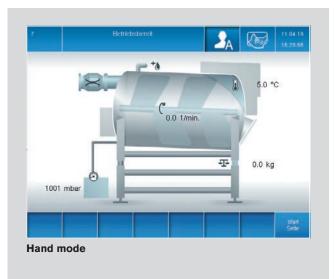
PORK SHOULDER 120 – 180 min.

PORK TOPSIDE 120 – 180 min.

PORK SILVERSIDE 210 – 300 min.

BEFF ROULADE 360 – 480 min.





## MAX 3000/6000

The first class of massage units for large capacities – highly productive, powerful and reliable, can handle quantities of up to 3000 kg or 6000 kg.

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Designed in accordance with the in-line principle: Production lines with multiple units make ideal product flow possible without the risk of path crossing or cross-contamination.

A wide range of options makes incorporation in any industrial manufacturing process possible. From automatic feeding by means of vacuum loading to program-controlled, intelligent Schröder FLOWMAX belt emptying.

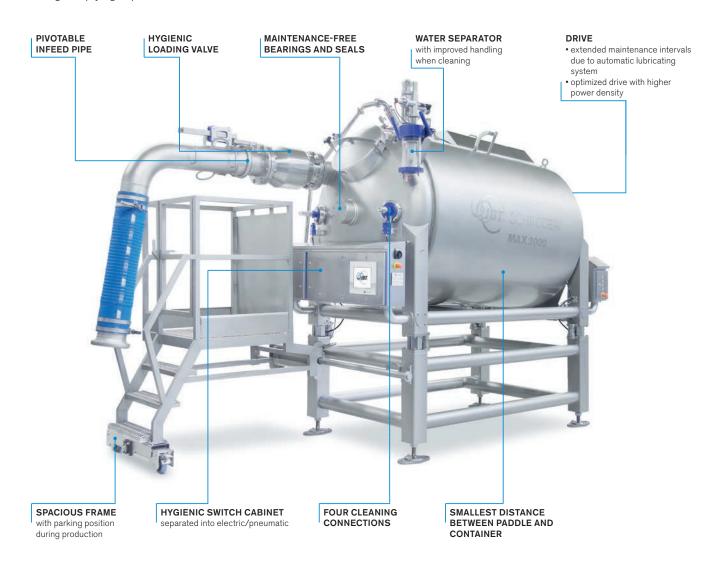
#### Standard version

- Thermo-plate and external insulation
- SCHRÖDER 10.4" touch panel
- 100/160 m<sup>3</sup>/h rotary vane vacuum pump
- Connections for cleaning nozzles
- Connection to customer cooling system (coolant: propylene glycol brine)
- Pneumatic feeding valve
- Large emptying flap

TECHNICAL DATA	MAX 3000	MAX 6000
NOMINAL VOLUME	3600 Liter	7000 Liter
FILL LEVEL	approx. 84 %	approx. 86 %
CAPACITY	3000 kg	6000 kg
OUTER CYLINDER DIAMETER	approx. 1500 mm	approx. 2000 mm
MACHINE LENGTH, INCLUDING DRIVE (WITHOUT VACUUM SUCTION UNIT)	approx. 3300 mm	approx. 3375 mm
MACHINE WIDTH	approx. 1720 mm	approx. 2090 mm
HEIGHT WITH BASE FRAME	approx. 2970 mm	approx. 3450 mm
DISCHARGE HEIGHT	approx. 960 mm	approx. 960 mm
COMPRESSED AIR	min. 6 bar	min. 6 bar
ELECTRICAL CONNECTION	3Ph/PE; 400/440V; 50/60 Hz	3Ph/PE; 400/440V; 50/60 Hz

#### **Options**

- Paddle with bulge for delicate products
- Load cells
- Product-specific feeding (lifting tipper, belt, priming tanks)
- Feeding container with batching software for producing a batch
- FLOWMAX automatic conveyor emptying system
- Dosing and spraying unit



CONTAINER SIZE

adapted to MAX massagers

charge container

**BB 3700 and** 

to ensure optimal capacity

CONTAINER DESIGN

quarantees uninterrupted

product flow

SCHRÖDER

# MAX System features

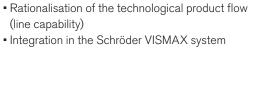
A wide range of enhancements enable the MAX massaging technology to be optimally adapted to the individual manufacturing processes. The MAX loading container optimises the process cycle through the program-controlled pre-batching of products with marinades (brine) and additives. The vacuum loading enables efficient and hygienic product supply. Manual or automatic discharge is possible.

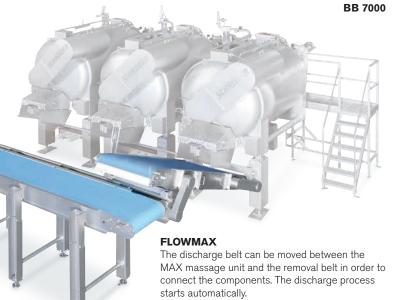
In comparison with tumbler technology, less production space and fewer personnel are needed due to the automated processes.

#### MAX technology: Increase in productivity

- Up to 50% reduction in processing times compared to the tumbler
- Increase in product yields
- Increase in slicer yields
- Significantly higher levels of system utilisation compared to tumbler technology

Energy savings thanks to increased efficiency





#### JBT PROTEIN PROCESSING

#### PRIMARY

CHILLING | WEIGHING | PUMPING CUTTING-UP | SKINNING | WATER RE-USING | ENHANCING FOOD SAFETY

#### SECONDARY

PORTIONING AND SLICING | BRINE PREPARATION | HOMOGENIZATION INJECTION & RETURN MILLING | MACERATION | MASSAGING | TENDERIZATION | X-RAY TECHNOLOGY | AUTOMATED TRAY LOADING

#### **FURTHER**

COATING | FRYING & FILTRATION | PROOFING | COOKING | COOLING CHILLING | FREEZING | REFRIGERATION | CLIPPING & PACKAGING SOLUTIONS | X-RAY TECHNOLOGY | HIGH-PRESSURE PROCESSING (HPP)













ADAPTER STATION

for up to six

WEIGHING

cells, optional

**BATCHING PROGRAMM** in combination with weighing

CELLS optional

MAX massagers

























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