IMAX

Injection technology [Belt transportation]



Vision. Research. Development.

SCHRÖDER

THE SAFE SIDE OF FOOD.

IMAX 430 / 630 / 930

Belt injector

The processing principle of the IMAX technology is based on classic injection curing by means of hollow needles. This is where know-how regarding needle type, inlet and exit holes and needle stitch pattern plays a decisive role. The brine/emulsion to be injected is carried directly to the product by a system of pumps and pipes.
As well as boneless products, bone-in meat, poultry and fish can also be injected.



Technical Data

Chanal width	420/620/920 mm
Max. injection area per hour	227/335/497 m²
Cycles per minute	15 to 45
Advance	50/100/200 mm
Number of needles	depends on the application
Pressure range	0,5–4,5 bar
Machine length	approx. 3340/334/3580 mm
Machine width	approx. 2770/2970/3450mm, with brine basin
Machine hight	approx. 2600 mm
Loading height	approx. 1200 mm
Compressed air	min. 6 bar
Electrical connection	3 x 380–460 V, 50/60 Hz or 3 x 200–240 V, 50/60 Hz

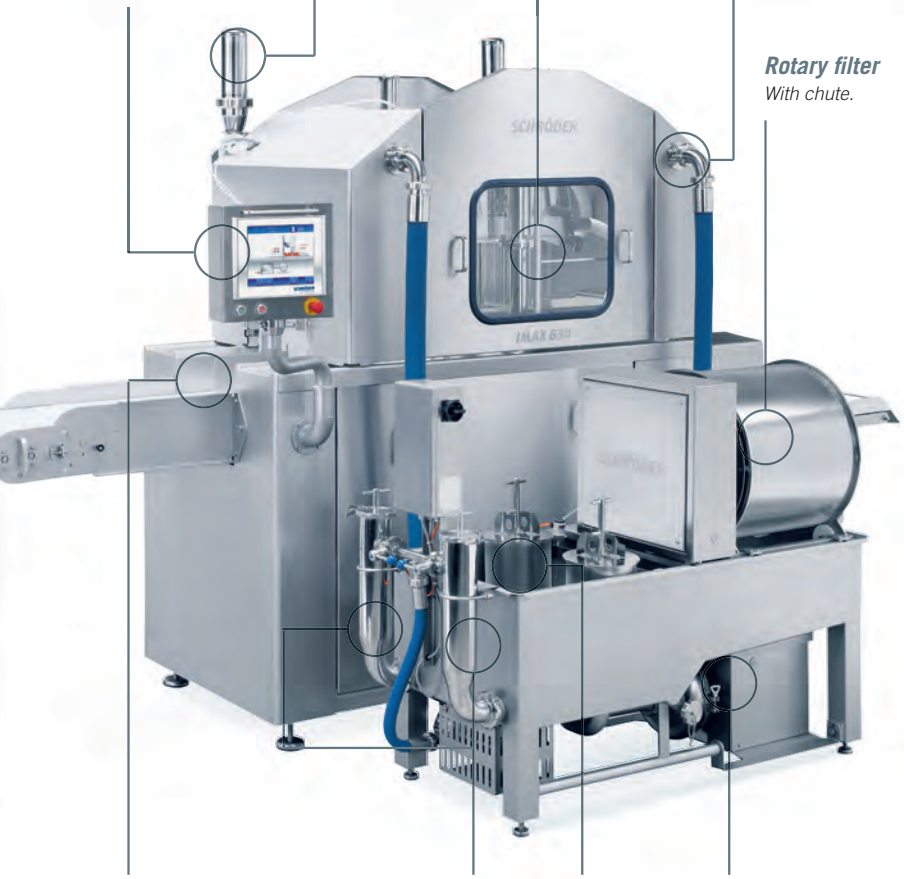
Touch panel control STP 104
Straightforward operation, ergonomically designed.

Brine pressure expansion tank

Needle manifold
Easily visible using inspection window.

Brine feed
Pipes on the outside and completely removable

Rotary filter
With chute.



Product infeed
Manual or optionally via chute or fully automatic.

Circulation filter UWF, Brine basin LB 300
As an optional feature, can also be connected to a tube-type heat exchanger.

Suction filter
With variable hole sizes.

Brine pump
High-capacity stainless steel rotary pump.



Touch panel
User management, network-compatible.

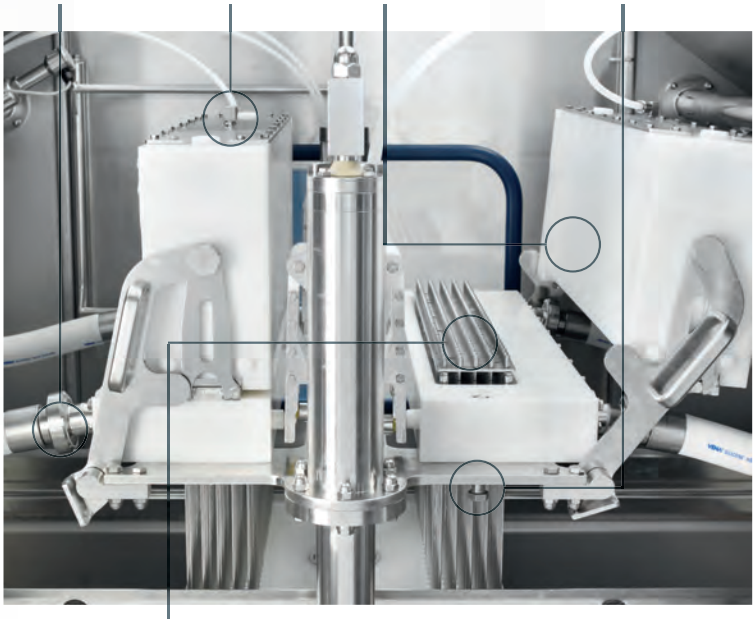
IMAX technology

Brine feed and manifold

The user-friendly touch panel control allows all process parameters relating to the product to be entered and injection recipes to be stored. There are a number of different injection modes available, such as one-way and two-way as forced injection controlled by hold-down device, BEC Brine Exit Control – vertically free definable injection area or ACI Area Control Injection – individual brine pressure for different muscles.

Whether single or double manifold: they can be adapted for the required result, according to product, brine properties and injection rate, and can therefore be optimally equipped.

The design and layout of the brine feed on Schröder injectors is the result of comprehensive research in close collaboration with a university. From the pump and filter to the needle holes, pressure ratios, volume flow and hygienic aspects have been scrutinised, resulting in optimal compatibility of the individual elements.



Needle manifold
Needle configuration can be optimally selected for the product.



Brine feed
High-quality brine feed which is easy to clean.



Needle removal tool
Easy and quick needle removal.

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IMAX controller

General information

Hotspot operation

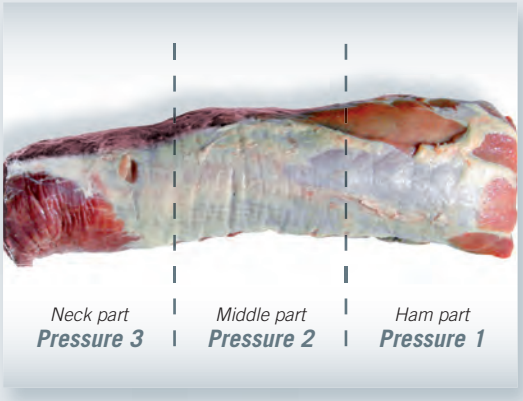
- Intuitive user interface with clear presentation of information.
- Easily understandable representation through the use of symbols. Menu items such as recipe management, user-level control, in-line weighing function, machine configuration.
- Password-protected operator level (up to 15 individual users), thereby restricting access to injection and machine parameters
- Highest possible level of process reliability by avoiding incorrect operation
- Automatic brine request can be activated by BRIMAX.



Hotspot operation

ACI – Area Controlled Injection

The ACI function developed and patented by Schröder enables user definition of brine quantities for certain horizontal muscle zones (in transport direction).
ACI was originally developed for injecting pork loin as the absorption of brine at the same pump pressure is substantially greater in the tender shoulder area than in the tougher ham area. Using ACI, injection rates can be adapted to tougher and more tender areas of the loin in order to obtain even injection results (salt content/additive content) throughout the entire muscle.



ACI – Area Controlled Injection

BEC – Brine Exit Control

The BEC function developed and patented by Schröder enables user definition of vertical injection zones, i.e. control of the brine flow during upward and downward movement by the injection head. That means that in the case of products with fat/rind covering, for example, it is possible to prevent the covering also being injected so as to preserve its natural appearance.



BEC – Brine Exit Control

All information is subject to change, without obligation or liability for transmission or printing errors.

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