



RED MEAT POULTRY FISH

GSI **INJECTORS** *step-in models*



GAROS

INJECTOR MODELS

GSI (Garos Salt Injector) is one of the most advanced injectors on the market and is at the forefront of technological solutions. As the fourth generation of Garos injectors, its design has been refined over the years to meet the extensive hygiene and performance requirements of the modern meat industry.

With several models in three sizes, there are various needle configurations and injector head options. The GSI is incredibly versatile - different models can be used for either red meat, poultry, and fish products, including bone-in products.

Depending on requirements, the GSI can be tailored to suit and manufactured with either one or two injection heads with the potential third head for tenderising (for models 620 and up). With the varying head options combined with proper needle configurations, the GSI's injection rate can be as low as 5% to above 100%.



STEP-IN GSI 350



- ▶ Used for small and medium-sized production requirements as well as testing facilities.
- ▶ PLC controlled via touch panel.
- ▶ Suitable for any type of meat - red meat, poultry, or fish.
- ▶ Equipped with one or two needle heads for both bone-in or boneless products.
- ▶ Injector needle configuration from 40 up to 160 needles.
- ▶ The capacity from 0,8 to 2,5 tons per hour Uniform brine distribution.
- ▶ All standard components are manufactured and utilised from well-known brands.

ADVANCED GSI 420, 620, 820

- ▶ Developed to meet the requirements for uniform injection percentages and hygiene.
- ▶ PLC controlled via touchscreen or push-button manual control.
- ▶ Models suited for any type of meat - red meat, poultry, or fish.
- ▶ Equipped with one or two needle heads for both bone-in or boneless products.
- ▶ Additional tenderising head available also for either bone-in or boneless products.
- ▶ The needle configuration in the injector ranges from 48 up to 768 needles.
- ▶ Unique brine flow system - from the pump to the product.



For more information please see the GSI Advanced Brochure

GSI 350 - STEP-IN MODEL



► **LOW-MAINTENANCE**
pneumatic or mechanical valves.

► **INLINE PROTEIN FILTER**
optional feature - automatically cleaning, reducing the potential of blocked needles.

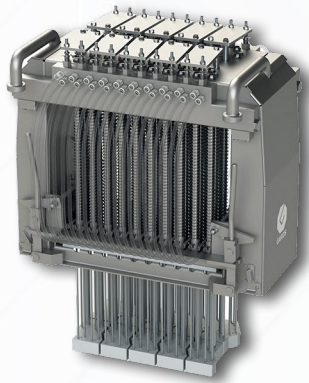
► **SEMI-AUTOMATIC LUBRICATION SYSTEM**
all moving parts of the injector having a central lubrication point, for quick and easy maintenance.

► **INTRALOX CONVEYOR**
for all types of meat.

► **SCREEN FILTER UNIT**
in conjunction with a standard 200 l trolley.

► **PLC**
controlled via a 4-inch touch panel which allows for intuitive communication with the injector.

NEEDLE HEADS

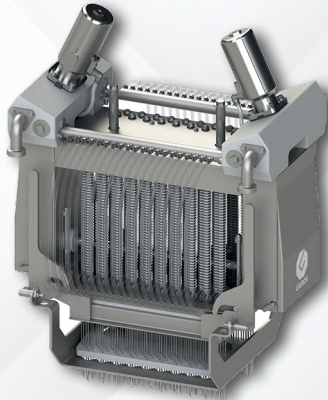


SD RED MEAT / POULTRY

Up to 160 needles.

Suitable for products such as red meat and poultry cuts, with and without bone. Mechanically controlled valves.

| | |
|-------------------|-----------------|
| Number of needles | 80 / 160 |
| Max product hight | 210 mm / 130 mm |



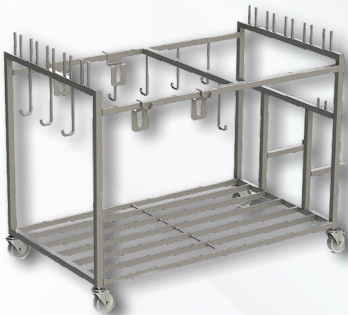
EXC. FISH / POULTRY

Up to 160 needles.

The head was developed for injection of fish and fish fillets, boneless poultry parts. Pneumatically controlled valves.

| | |
|-------------------|-------|
| Number of needles | 160 |
| Max product hight | 75 mm |

FEATURES



GSI CLEANING TROLLEY

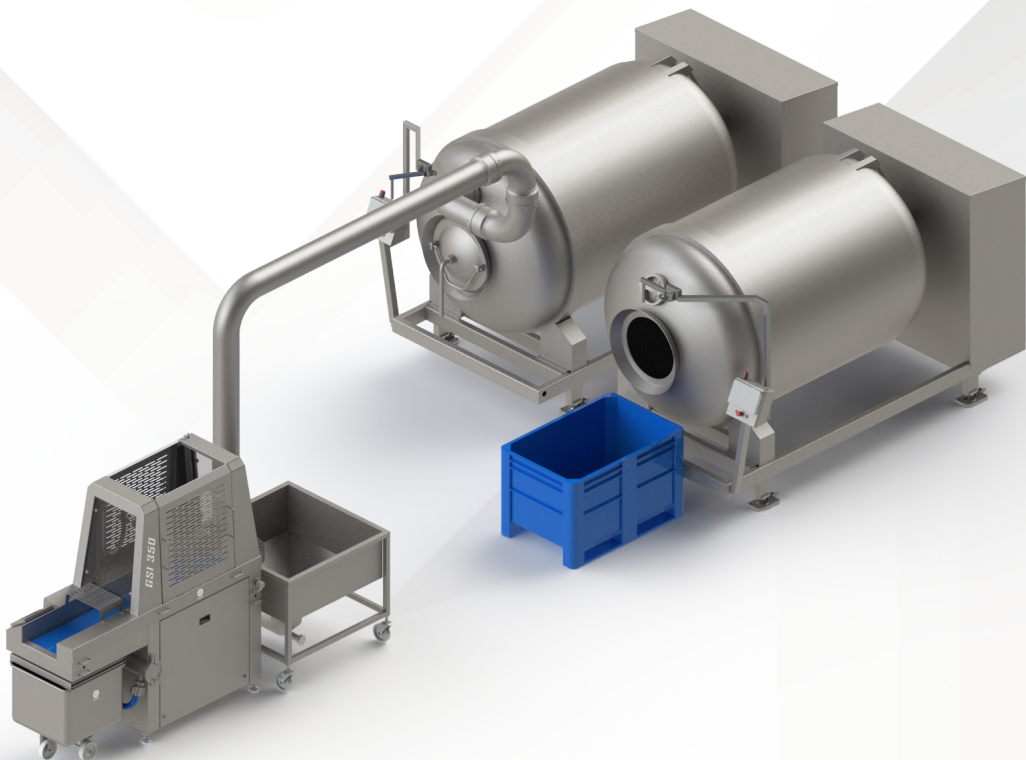
A trolley simplifies the cleaning of the injector. Allowing storage of all removable parts, during wash down of the injector safely, making it possible to clean the machine without any obstacles.



INLINE FILTER

Standard on most GSI's optional on others, Inline filter - an additional filter removing particles larger than the needle holes from the brine in order to avoid blocking the needles. This filter self-cleaning cycle takes place at intervals set by the user, ejecting the debris.

AUTOMATED
PRODUCTION LINES



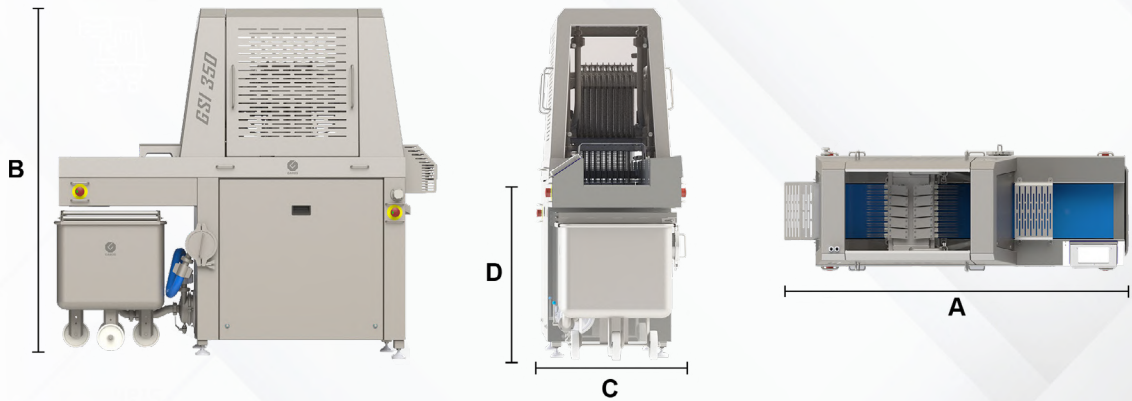
Automated Injection Lines – Efficiency and Precision

At Garos, we understand that efficiency and consistency are crucial in meat processing. That’s why we offer automated injection lines, designed to integrate seamlessly into your production process. Our lines incorporate Garos Injectors along with complementary equipment such as brine preparation units, vacuum filling systems, and tenderizers, ensuring a continuous and optimized production flow.

Our automated lines are built for precision, hygiene, and productivity, making them an ideal solution for large-scale meat, poultry, and fish processing. The integration of various Garos technologies guarantees maximum brine absorption, uniform injection, and reduced product loss, all while maintaining high-speed operation.

Key Benefits of Automated Injection Lines:

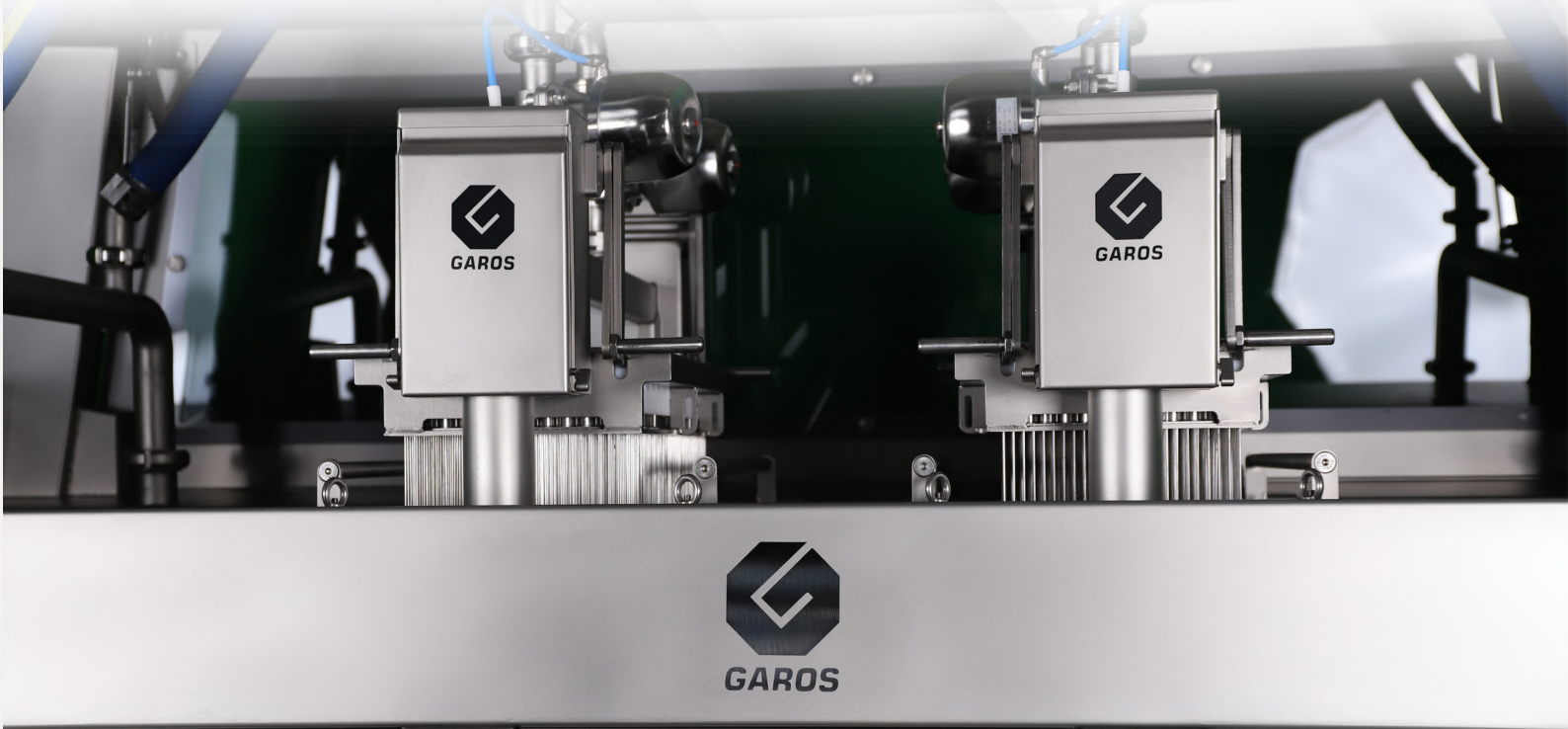
- **Consistent injection performance** – Ensures even brine distribution for improved product quality.
- **Seamless integration** – Compatible with injectors, tumblers, and vacuum metering systems for a fully automated workflow.
- **Increased efficiency** – Optimized production speeds with minimal manual intervention.
- **Superior hygiene standards** – Easy-to-clean designs with self-cleaning filtration systems.
- **Versatile solutions** – Suitable for a wide range of meat, poultry, and fish products.
- **Scalability** – Modular systems tailored to different production capacities.



| Technical specification | GSI 350 |
|---------------------------|------------|
| A - length [mm] | 2240 |
| B - height [mm] | 2015 |
| C - width [mm] | 826 |
| D - loading height [mm] | 1006 |
| Weight [kg] | 720 |
| Capacity [t/h] | Up to 2,5* |
| Forward feeder width [mm] | 350 |
| Forward feed [mm] | 30 or 60 |
| Rated Voltage [V] | 400 |
| Conected load [kW] | 3,5 |

* Depending on the product and brine type

GAROS reserves the right to make technical modifications in measures or design at any time.





RED MEAT



POULTRY



FISH

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