



OPERATION MANUAL

SLS-5

1. INTRODUCTION AND SAFETY WARNINGS

Seles SLS-5 is a high-performance tray sealing and vacuum packaging machine with integrated protective gas (MAP) capabilities, designed for packaging fresh and cooked foods under hygienic standards and extending their shelf life. Please read this manual carefully before operating the machine.

- **Surface Control:** Place the machine on a flat, stable, and rigid surface.
- **Electrical Safety:** The device operates on 220V electricity. Absolutely do not use it with power outlets that do not have a grounding line.
- **High Temperature Warning:** The upper sealing plate of the device operates at high temperatures. Do not touch this plate with your hands during operation or immediately after the device is turned off (Risk of burns).
- **Cleaning Warning:** Always unplug the device from the power outlet and allow it to cool down before starting the cleaning process.
- **Water Exposure Warning:** Do not wash the device by spraying water directly onto it or by pouring water into the chamber.

2. PRE-INSTALLATION INFRASTRUCTURE AND TECHNICAL REQUIREMENTS

In order for the machine to operate smoothly, stably, and under the manufacturer's warranty, it is mandatory that the following technical infrastructure is ready in the installation area:

- **Air Line (Pneumatics):** A minimum 100 m³ air compressor must be connected to the system so that the machine's automatic cover mechanism and molds can operate stably with millisecond movements.
- **Gas Line (For MAP Models):** In facilities that will perform gas-flushed modified atmosphere packaging (MAP), a food-grade gas cylinder must be connected to the system. It is mandatory to install a high-pressure resistant and precision-adjustable gas regulator (gas gauge) at the outlet of the gas cylinder.
- **Electrical Line:** A dedicated 220V grounded power outlet line must be installed to ensure the machine is powered safely and to prevent electrical failures.

3. MACHINE OVERVIEW AND CONTROL PANEL LAYOUT



- **1. Vacuum Chamber and Upper Lid:** The internal chamber where the trays are placed, and the upper lid mechanism that automatically closes and opens when the operation cycle begins.
- **2. Analog Vacuum Gauge (Manometer):** The round gauge that displays the instantaneous negative pressure (vacuum) value inside the chamber during the operation cycle.
- **3. Temperature Indicator:** The small red display located just below the bottom left of the digital screen, showing the instantaneous temperature of the teflon-coated sealing plate (e.g., 160°C - 165°C).
- **4. Digital Adjustment Panel:** The main screen located in the center area, featuring "+" and "-" buttons, where vacuum and sealing times are precisely programmed.
- **5. Start Button:** The green button located on the top right that initiates the cycle and triggers the automatic closing of the lid.
- **6. On/Off Switch:** The illuminated rotary switch located directly below the Start button, which provides the main power supply to the machine.

4. UPPER FILM (FOIL) INSTALLATION AND DIRECTION

A. Film Installation Steps

- Mount the sealing film (upper foil) onto the stainless shaft bearing located at the upper rear part of the machine. Ensure that the unwinding end of the film hangs toward the back of the machine (facing downward).
- Pull the end of the film forward from underneath the first guide/tension shaft located directly below the roll.
- Route the film coming out of the tension shaft upward and pass it over the moving cylinder located behind the upper lid of the machine.
- Extend the film smoothly over the upper lid toward the front of the machine (the area where the blade and the sealing jaw are located).

B. **CRITICAL WARNING: FILM DIRECTION**

- Adhesive Surface (Facing Downward): The matte and glued surface, which will adhere to the tray when heat is applied, must absolutely face downward (looking toward the trays).
- Printed Surface (Facing Upward): The branded, logoed, or glossy outer surface of the film must face upward (looking toward the ceiling). Installing the film upside down will cause the upper teflon plate to burn and become contaminated.

5. STEP-BY-STEP OPERATING INSTRUCTIONS

- **Step 1 (Power On):** Turn on the On/Off switch. Check the temperature setting on the digital panel and wait for the heating element to reach the set temperature.
- **Step 2 (Tray Placement):** Place the standard-sized trays containing the food products properly into the aluminum automatic mold slots.
- **⚠ IMPORTANT WARNING:** Ensure that the edges of the trays (the sealing areas where the film will make contact) are completely CLEAN AND DRY. Food residues or moisture will prevent the film from fully adhering to the tray under the effect of heat.
- **Step 3 (Initiating the Process):** Press the green START button located on the right side. The upper lid will close automatically, and the system will sequentially initiate the vacuuming, modified atmosphere packaging (MAP) gas flushing, and hot pressing operations.
- **Step 4 (Automatic Cutting and End of Process):** During the sealing process, the Seles SLS-5 automatically and smoothly cuts the foil from the tray edges using its stainless steel (inox) blade. When the processing time is complete, the upper lid opens automatically. Remove the ready trays and repeat the process for the next operation.
- **Waste Film:** The waste film will be wound into a roll automatically by the automatic film collection system.

6. DIGITAL PANEL PROGRAMMING AND TIME SETTINGS

The time parameters must be programmed correctly to ensure the efficient operation of the machine, prevent bag/tray deformations, and achieve the maximum shelf life for the food products.

Vacuum Time	20 - 30 Seconds	Varies depending on the product structure and storage purpose. While 20 seconds is sufficient for white cheese to be consumed quickly, 30 seconds should be set for cheddar cheese to be stored for a long time. Since 98% of the air in the chamber is evacuated within the first 30 seconds, exceeding this time is inefficient, except for special medical products.
Sealing (Resistance) Time	4 - 6 Seconds	Depends on the thickness and quality of the upper film used. The time should be extended for thick films, and shortened for thin films to prevent welding line deformations caused by excessive melting. The general range is 2-6 seconds.
Gas Flushing Time (MAP)	4 - 6 Seconds	In models equipped with a gas kit, this is the duration for flushing food-grade gas into the chamber to preserve the freshness of the food.

7. CLEANING AND PERIODIC MAINTENANCE

- **Use of Damp Cloth:** Turn off the device, unplug it, and allow it to cool down at the end of every working day. Clean the stainless steel body and the chamber by wiping them only with a damp or wet cloth. Absolutely do not pour water directly onto it or wash it with a hose.
- **Protecting the Vacuum Hole:** During cleaning, pay utmost attention to prevent any liquid, food residue, or dust from entering the air suction hole (vacuum hole) located inside the vacuum chamber.
- **Sealing Plate Maintenance:** Never allow hard or metal objects to come into contact with the machine that could scratch or damage the structure of the teflon-coated upper heating plate.