

TRAY SEALERS



What makes our machine special?

SLB Tray Sealer

The keywords for the SLB Tray sealing machines are:

Speed and Simplicity

The SLB machine uses an innovative gas flush process to produce a Modified Atmosphere Packaging (MAP) in a rapid period of time. This process allows the SLB machine to operate without the use of a vacuum pump. Not using a vacuum pump gives this machine several big advantages over traditional equipment:

- Faster production speed
- No damage to delicate products
- Works well with liquids and products with high water content
- Easy to operate and troubleshoot
- Low maintenance

The technique which the SLB uses is a flushing of gas combined with a controlled turbulence inside the tray. This fast and simple system results in a short cycle time and increased production speed. The entire gas flush process is also extremely efficient, resulting in gas consumption that is not much more than with conventional machines. Under ideal circumstances a residual oxygen level of less than 0.1% can be obtained in the container. The use of high percentages of oxygen is also possible, making this machine ideal for packing products such as red meat.

The fact that the SLB does not pull a vacuum prior to gas flushing means that there is no damage to the product in the container during packaging. Machines that use a vacuum pump tend to impose a large pressure

difference on the products inside the tray, resulting in the possibility of internal product breakage or loss of water. The SLB machine minimizes this problem and is ideal for the packaging of delicate products like soft fruit, vegetables, raw fish, or tender meat.

The SLB machine is constructed of strong and durable materials for the food environment. The machine can be used for small batch packaging or for fully automatic applications. Tooling changeover can be done in a few minutes, making the SLB perfect for applications that require different tray sizes.

Please contact Audion or your local distributor for more information regarding the packaging of your product and the possibilities complementary equipment.

SLB 1007

The SLB 1007 is a manual tray sealer for modified atmosphere packaging (MAP) of cups and trays. The SLB 1007 offers the best combination of price and performance in the industry to pack and preserve food freshness using gas flush.

Technical specifications	SLB 1007
Capacity (max with seal only)	8 cycles/min
Capacity (max with MAP)	6 cycles/min
Max. tray size (LxWxH)	360 x 300 x 140 mm
Max. film width	335 mm
Printed film capability	Standard
Air consumption	100L/min (at 7 bar)
Voltage/Phase/Frequency	230 V – 1 Ph – 50/60 Hz
Power consumption	2000 W
Machine Size (LxWxH)	1200 x 1100 x 1480 mm



SLB 1007



SLB 1007

ATS 460

Audion Tray Vacuum Sealer

ATS 460 is Audion's newly developed vacuum MAP tray sealer. Different from the SLB series, ATS 460 vacuums the tray completely before it inserts gas. The machine is built in stainless steel for use in hygienic environment.

By pushing in the drawer, which is in fact the mould loaded with trays, the cycle is started. The machine starts the following cycle: vacuuming, gas flushing, sealing and cutting processes according to the selected program. Vacuum and gas flush parameters are controlled by a pressure sensor, while the sealing is controlled by a timer. It is possible to program the machine to skip vacuum and/or gas flush depending on the purpose of packaging. When a cycle is completed, the drawer

is pulled out and the trays are taken out manually.

The teflon coated sealing mould is designed to the shape of the tray. By changing the mould, different types of trays can be sealed with one machine. Depending on the type of the tray, it is possible to place several trays in one mould.

ATS 460 is specially developed with quick-easy-safe mould exchange concept. Pneumatic system supports the mould exchange work by holding the mould while it is being attached to / detached from the machine. The machine is also delivered with special mould holder with which a hot mould can be safely carried by hand and stored easily.

Options:

- Extra sealing mould (incl. mould holder)
- Oxygen pump (for using gas mixture containing more than 20% oxygen, and for use of gas mixer connected to 100% oxygen gas bottle)
- 220V, 3 phases, 60Hz
- 380V, 3 phases, 60Hz

Technical specifications	ATS 460
Capacity	2 cycles / minute
Max. tray size (lxwxh)	410 x 265 x 135 mm
Max. film width	460 mm
Max. film reel diameter	270 mm
Min. film reel core diameter	90 mm
Seal temperature	120 – 170°C
Final vacuum	99,98 % (2 mbar)
Machine size (lxwxh)	910 x 610 x 1500 mm (1000 x 750 x 1725 mm when packed)
Weight	245 kg (285 kg when packed)
Voltage/Phase/Frequency	400 V, 3 phases, 50/60 Hz
Power consumption	4000 watt
External compressed air connection	G ¼" (internal)
External pressure (min. – max.)	6 - 8 bar
Air consumption	2 liters / cycle
Gas connection (where applicable)	G ¼" (internal)
Max. gas pressure (where applicable)	4 bar
Standard ambient temperature	5 – 40 °C
Pump capacity	21 m ³ /h (Busch)



ATS 460

Most commonly used trays

Nitrogen (N₂)

Nitrogen is mainly used to “displace and replace oxygen” in the package before it is closed. It prevents oxidation of pigments, flavourings and/or fatty acids. Nitrogen is inert, odourless, and has low solubility in water and fats. It has no direct antibacterial or fungicidal properties.

Carbon dioxide (CO₂)

Carbon dioxide is soluble in water and fat and is an antibacterial and fungicidal agent. CO₂ and water together form a weak acid (H₂CO₃). This acid has a bactericidal and anti-microbial effect, it slows down and reduces the proliferation of aerobic bacteria and molds, especially in the absence of oxygen. It is effective at concentrations above 20% in atmosphere. It has no stimulating effect on pathogenic organisms. Because CO₂ is very soluble in water and fats it may promote development of a slightly acidic taste if CO₂ use is not properly controlled. It can also cause the film on packaged

products to collapse. This may be either a drawback or a targeted effect.

Oxygen (O₂)

In general, oxygen is an undesirable element. In some applications, however, it is used as a constituent in a gaseous mixture.

It is used in particular for maintaining the red colour of meat. It also prevents the proliferation of strictly anaerobic organisms (e.g. for fresh fish).

Argon (A₂)

Argon is a chemically inert, odourless and tasteless gas. It is a ‘heavier’ gas than nitrogen, and is used to protect sensitive products such as wine. However, it is twice as soluble as nitrogen. Hence it can be used in a controlled atmosphere to replace nitrogen in most applications. Its solubility and certain molecular characteristics give it special properties for use with vegetables. Under certain conditions, it slows down metabolic

reactions and significantly reduces breathing.

Advantages of packing under modified atmosphere with our machines:

- The product retains its form and texture.
- The product looks better.
- The product retains its vitamin content, taste and fat content.
- The natural colour of the product is preserved.
- The product will not lose excessive liquid content (as with a vacuum packaging).
- This method does not require labelling declaration (no additives).
- The need to use preserving agents is reduced if not eliminated.
- Lower labour costs due to longer shelf life (no extra labour in evening/ weekend).
- Less problems during the logistic chain.

Most commonly used trays

	Microwave proof	Grease resistance	Cold resistance	O ₂ barrier	H ₂ O barrier	CO ₂ barrier
APET	-	++	++	+	+/-	+
CPET	+	++	++	+	+/-	+
HDPE	+/-	++	++	-	+	-
PP Homo	+	++	-	-	+	-
PP Copo	+	++	+	-	+	-
PS	-	+	+	—	-	-
Aluminium	Ovenable	++	++	++	++	++

— = Poor - = Moderate +/- = Reasonable + = Good ++ = Very good

Top seal film

Virtually every product needs a specific film, according to the exact needs and wishes of the client

- Do you want a peelable film or a fully sealed container?
- Do you need a high or a low barrier film to control the permeability of the gasses?
- Do you need a breathable film for controlled atmosphere packaging?
- Is the product to be stored in the freezer or in a refrigerator?
- What kind of a material is the tray made of?