

1) Vacuum Tumblers – Lutetia (Brand)

This machine is cylindrical in shape, similar to a cement truck barrel. The idea for this machine is to extract the protein & massage the meat product inside. There are 3 gaskets which this machine uses. 1 is the **main lid**, which like it's name describes, is where the meat product is deposited into. 2 is the **inspect hatch** which is located on the side of the machine, 3 is the **vacuum canister** seals (one top & one bottom, this canister is located next to the machine normally at ground level) & as it's name dictates is on the vacuum line. We use extrusion # 1606 for these gaskets which basically form around a stainless plate which is the main & inspection doors, the plate simply pushes into the extrusion slot. The canister is a cylindrical clear tube (plastic or PPE ect I'm not sure) which stands up-right & similar to the doors, the edge of the tube simply pushes into the # 1606 channel to form the seal.

Main reason for replacement – physical damage to the main & inspection lid seals (either by operator or just material fatigue) , the canister being at ground level sometimes physical damage, but more likely for the seal to go hard & leaking vacuum or have bacteria growth starting to form on it / in it which can't be removed (normally material going hard & possibly cracking at this stage as well)



2) Tray Sealers & Thermo Formers – Multivac (Brand)

These machines are used in many types of food packaging (dairy, fish, meat, poultry, ready made meals ect) & can be in many different sizes & often form part of a larger conveyor system, but the principles are the same. It can be single sealing product (one item, e.g. a 'T' bone steak) or multiple items sealing (e.g. packets of cherry tomatoes) . These machines package food product using plastic film normally over a preformed plastic container (or in the instance of thermo formers, it also conforms the container) draws a vacuum inside the container & seals the plastic lid to the container. The gasket required to seal the lid to the container can be (as described) a single cavity or multiple cavity & is a 'T' profile with a pattern on the sealing face. The single moulded gasket is pushed into the die box & has a series of slots or holes to draw the vacuum & sometimes add a protective gas to the product before being sealed. Jehbco calls these gaskets 'Packaging Anvils'



3) Chamber machines – Cryovac / Multivac (Brands)

This type of sealing machine sometimes also found in smaller operations as it can come in a more compact size, but is slower to perform it's task & not always linked to a conveyor system. Normally a single item (but could be two or three smaller products) is placed inside a plastic pouch or folded plastic film & then put inside the chamber. Once the chamber lid is closed, a vacuum draws all the air from the product & heat seals the plastic pouch. This is often used for small goods or coffee ect. There is a heat sealing strip (or sometimes extrusion # 278) located inside the chamber which deteriorates over time as the heat bar (normally rapped in PTFE tape) pushes into the silicone strip & also a seal around the perimeter of the chamber lid which can deteriorate or suffer from physical damage, often a tube or cord type profile. The larger machines in different brands will be used for large bulky items like a Christmas Turkey or Ham but work in much the same way.



4) Emulsifiers Seals

There are many forms & brands of these, some use silicone seals, some do not. From an operational point, they are to blend product by mixing & cutting & often used when stabilizing agents & thickenings agents are added to food product. Small machines are often cylindrical in shape (as this shape is the easiest to clean & mix most product in) with at least one opening to add the product & often similar to a round 'hatch' type lid which will hinge on one side & have screw threads to bold the lid down into place around the opening. These can sometimes be a problem to seal as lids are often bent, hinges worn & a seal which needs to be able to be easily removed & refitted for cleaning. Sections such as # 671 & # 1701 can sometimes be an answer. The larger machines are more similar to a 'ribbon blender' & often a large rectangle shaped trough with a cylindrical blade which cuts through the product from the side rather than the bottom. This may have a hydraulic lid with a slot around the edge to simply push a seal into. These can be several meters in length, width & height so compressing a seal over that circumference can also be a challenge & soft extrusions such as # 1339 & # 2253 are sometimes used. (Note: some do not have this slot & are just two flat faces to try & seal)



5) 'Y' Blenders

Often used with powders (e.g. confectionary coatings or spices) & are in the shape of a 'Y' or 'V' & have a common shaft which run through the middle which spins the containers around. The cylindrical shape of these blenders mean a round lid is used on each end of the 'Y' or 'V' & normally just held in place with clasps. Profiles such as # 439 or strip are often very commonly used to seal.



'Y' Blender



6) Intensive Coolers

These are often large 'walk-in' size coolers which operate well below -50 degree C. Common seal types are our 'p' & 'e' shape profiles which are held in place with a stainless or alloy plate. The use of this machine is often used after cooking or roasting to quickly drop the product temperature to minimise product weight loss & be able to pack the goods sooner.



7) Cold Rooms

These are found everywhere – Basically two types of door, hinged opening or sliding. Our profile #1374 is commonly called ‘two finger’ as it’s a ‘u’ shaped profile held in place with the aid of an alloy strip through the middle of the channel, the other is our profile #1899 often referred to as a ‘balloon’ seal which is also secured by the use of an alloy strip but on the under side of the profile. The two finger used on the sliding door simply rubs along the surface unlike the balloon which compresses on the hinged door surround. These seals are commonly supplied in EPDM but Silicone with its anti-fungal qualities & available in colours other than black can sometimes be a selling point.



8) Ovens

There are a multitude of large industrial rack ovens in the market place, Vemag (# 1521), Revent (# 1937), Verinox (# 1966), Maurer (# 1540/1863) just to name a few. These ovens also take a multitude of different door seals, a large number we have , some we do not, but that's not to say we can not custom make the appropriate seal required. Some ovens will have a simple main door seal which pushes into a slot some will be held in place with a stainless strip plate ect. Some ovens will have smoke generators built in to smoke meats & fish, these will normally have a separate door to place the wood which will also require sealing & often does not take the same seal as the main door.

VERINOX OVEN



REVENT OVEN



MAURER OVEN

