

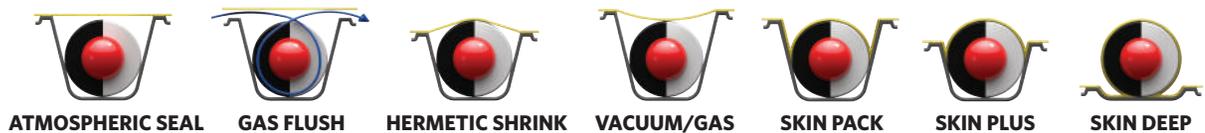


FISH AND SEAFOOD SEALING SOLUTIONS FROM THE MARKET LEADERS

Packaging Fish and Seafood

The bacteria present in the gut and gills of seafood produce works more quickly to decay the protein tissue, breaking it down and causing the food to expire at a fast rate. **It is therefore particularly important to package fresh fish and seafood properly, ensuring the food gets to the consumer in the safest, freshest condition having survived the vigors of the sometimes, long supply chain, and in-store handling.**

Fish and Seafood is an extremely varied food category, meaning Proseal can offer multiple varied packaging solutions coupled with leading edge technology and innovation.



Packaging Materials

- Lined Board
- A-PET
- C-PET
- R-PET
- Foil
- Polypropylene
- Polystyrene

Shelf Life Extension Solutions

Modified Atmosphere Packaging is a food packaging process where the Earth's atmosphere is modified inside the food pack to extend shelf life. This is achieved by 'flushing' either a single gas or a mixture of atmosphere gases into the pack, just before sealing. This process is generally used with a barrier film with low oxygen transmission and is usually referred to as '**Gas Flushing**'. **Each food product has its own ideal gas mixture to ensure the longest shelf life.**

Other shelf life extension solutions for fish and seafood include **Skin Packaging**, where all of the ambient air is extracted and the product is sealed in almost a second skin.

All of the above processes extend shelf life making the product better suited to the retail transit chain, while ensuring safety and freshness for the end user by considerably delaying the growth of bacteria.



Atmospheric Seal



There are many forms of top sealing, this one being a simple 'Atmospheric Seal' meaning the pack is simply sealed.

By changing the many variables of heat, seal time and seal pressure, **many materials of trays and film can be used in all tray sealing methods.** Product information can then be applied by using printed film, a label or sleeve after sealing.



Gas Flush



Food can be **Gas Flushed with or without using a vacuum system to prolong shelf life.**

However, common MAP practice employed by Proseal utilises a **speed efficient Gas Flushing System** without the need for vacuum.

Proseal has been instrumental in the creation and development of skinned board technology.

The board tray is skinned, and then once filled with product, top sealed making a hermetic seal possible, a seal previously unattainable on a board tray, **meaning the cardboard tray becomes air and water tight (hermetic).**



Hermetic Shrink



This process means the **product can be sealed tightly with a stretch film in a shallow base tray**, allowing vertical shelf stacking and minimal product movement in the tray.

This style reflects that of product that is shrink wrapped, like poultry regularly is. However, **it is fully hermetically sealed around the tray flange.** This process is ideal for categories of products where leakage of any liquid from the pack could pose a potential health hazard in a retail environment.



Skin Packaging



Skin packaging has become increasingly popular as **it greatly extends shelf life without the use of gas** and allows for vertical display on the retailer shelf.

Although the technology for skin packaging has existed for a long time, **Proseal has invested many resources into developing it even further.** We have brought skinning into the mainstream market, making this style of packing **easily available to all major food manufacturers.**

There have been recent advances in board skin trays and Proseal has been extensively involved with the development of this technology, working to design a highly efficient system. **Board trays have the advantage of being able to print directly onto the tray making for a more aesthetically pleasing end product.**

In markets where it is required, our machines are approved to run 10k OTR film to comply with FDA guidelines regarding film permeability with seafood packaging.

