INDIVIDUALLY QUICK FROZEN (IQF)

Freezing oysters to increase storage life has long been practiced by the industry (Figures 1 and 2). Borrowed from other sectors of the food industry, the IQF method of processing oysters certainly has its own niche in the market. Aside from the resulting decrease of microorganisms including *Vibrio* bacteria to non-detectable levels, extended shelf life is a major selling point of the process.

Fig. 1 Half shell oysters on a tray being frozen through the IQF machine tunnel.

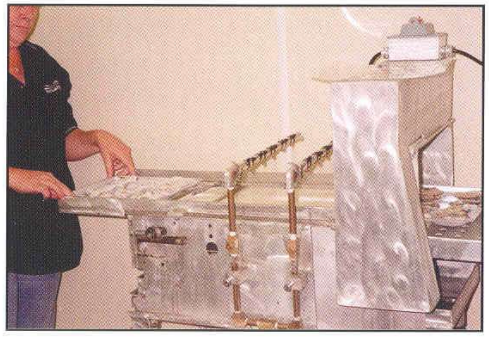

Fig. 2 Trays of half shell oysters go through the glazing machine to seal the natural juice of oysters.

HEAT-COOL PASTEURIZATION (HCP)

Pasteurization is a patented process using hot and cold-water treatment to lower the levels of *Vibrio* bacteria to non-detectable levels. In-shell oysters are placed in warm water (126 degrees Fahrenheit) for 24 minutes (Figure 3) and then immediately dipped in cold water (40 degrees Fahrenheit) (Figure 4) to stop the cooking process of the meat. The cold water dipping lasts 15 minutes before the oysters are packed for the half shell market or sent for further processing as shucked meat.

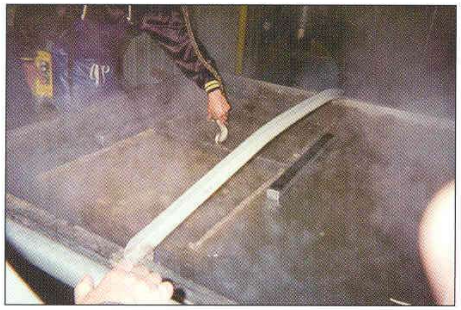

Fig. 3 Cartload of oyster trays dipped in hot water bath for 24 minutes.

Fig. 4 Cartload of oysters is immediately cooled down to 40 degrees Fahrenheit for 15 minutes.

HIGH HYDROSTATIC PRESSURE (HHP)

This is a patented process of treating harvested oysters using high pressures of 35,000 to 40,000 (psi) (Figure 5 and 6). Oysters undergo pressurization for 3-5 minutes in order to kill spoilage bacteria and decrease other microorganisms including *Vibrio* bacteria to non-detectable levels. This process can be adapted for both the half shell and the shucked meat of the oyster. The pressure helps in releasing the adductor muscle from the shell, making it easy to remove the oyster from the shell.

Fig. 5 Titanium-made isolators used in the HHP processing of oysters.

Fig. 6 Stainless steel cylinders hold oysters for the pressurization process.