

## Machines build boxes

Compact innovative machines that construct boxes from corrugated stock are being successfully marketed by a Richmond, British Columbia company, Western Packaging Systems Limited.

The small firm, founded in 1977 by Peter Sewell, president, and two partners, has been particularly successful selling machines internationally. Currently, Western Packaging exports 80 per cent of its automatic and semi-automatic case erectors and sealers to 26 countries and operations have been expanded to its two subsidiaries, one in London and one in Chicago. In the key United States market, it also has offices in New York, Atlanta and Delaware.

## Export goal

As the major aim of the company from the outset was to compete in international markets, it was essential to design machines that would be small enough to fit through the door of a freight aircraft and be less than 2.3 metres long in order to fit cross-ways for containerized shipping.

"While traditional equipment in the field is four to six metres long, one of the first machines we produced was a mere 1.4 metres long," said Mr. Sewell.

The use of heavy-duty aluminum for the construction of all the machines is also an important factor. In addition to being lightweight, it is corrosion resistant and easy to clean, both important qualities for the food industry, which accounts for some 60 per cent of the company's sales.

## Ready to use

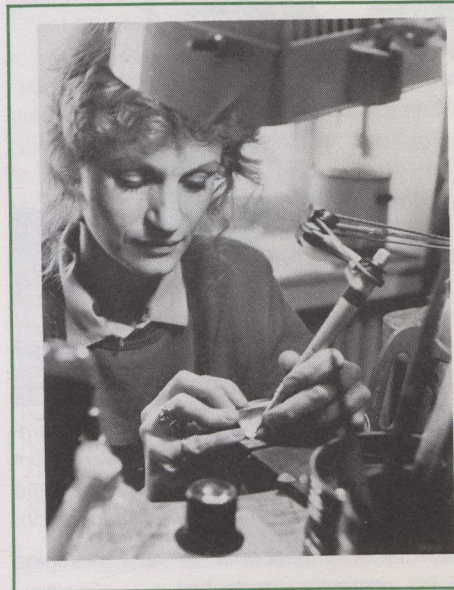
The machines are shipped fully assembled and they are easy to operate. Mr. Sewell said they "can handle corrugated material of variable quality, and the setup time for all of them is less than five minutes". As the machines are built in modules, each system can be replaced easily and upgraded when the company improves the function of any part of the system.

Mr. Sewell was responsible for some initial innovations in the machines. One was a design for a ram that makes the adhesive securing the flaps of a box work faster. He also designed a system that permits all the actions required to form and secure a box to be done in one stop on the machine.

The company has also made advances in the complex problem of miniaturizing glue spraying technology. While continuing to offer hot melt systems, it has developed a cold glue system that can seal 20 to 30 cartons per minute.

## Space-age jewellery

Louise Roper, a Vancouver goldsmith who makes jewellery from gold and precious stones, has expanded her craft and created a unique line of niobium jewellery that is being marketed in British Columbia boutiques.



Louise Roper creates her modern jewellery collection from niobium.

Niobium, a light weight metal with a high resistance to corrosion, is used in the construction of space craft and high-performance aircraft as well as in the chemical and food processing industries for equipment and for surgical bone replacements. Its melting point is 1 950 degrees Celsius and it cannot be soldered or easily cast.

To make the jewellery, Ms. Roper saws her shapes from the sheets of the metal and drills holes into the pieces that will be earrings so they can hang from a post wire. If two shapes are used, a rivet is often used to join them.

## Anodization process

The lustrous colours of the jewellery, ranging from a soft pink to deep purples and blues, are not painted on the objects but anodized to the surface through a high voltage process. The shaped piece is dipped into a bath and electricity is sent through the solution. The metal turns from its dull platinum grey to a vibrant colour depending on the strength of the voltage.

Once the primary colour is determined some of it can be buffed away with a drill and the piece can be redipped at a different voltage to add a second colour.

While the colour is permanent, Ms. Roper said that the colour can change according to light conditions, indoors or outdoors.

## Sausages satisfy tastes

Piller Sausages and Delicatessens Limited of Waterloo, Ontario, a family-owned small business, is growing rapidly in Canada's delicatessen and specialty meats market. The company has doubled its sales in the past three years and currently serves 1 700 stores across the country, mainly large chains and independent supermarkets.

Edward Huber, vice president of the company, expects the volume to reach 6.8 million kilograms by the end of next year. He also expects that the company will penetrate the United States market and suggests within five years, US sales should account for 30 per cent of the total volume of sales.

Piller makes 120 different kinds of products, primarily European-style cooked meats, salami and sausage. About six new delicacies are added each year.

Many of the recipes have been handed down for generations by butchers in Austria, Germany, Hungary and Canada and some of the recipes were used by Mr. Huber's great great grandfather in Yugoslavia.

Although Piller was founded 28 years ago, it remained a small local operation until it began winning international medals for its products. Competing in the International European Food Fair for the first time in 1981 against some of the best makers of gourmet sausage, salami and ham in the world, Piller tried for seven medals and won four silver and three bronze. In 1982, Piller won one bronze, four silver and 13 gold medals in the 21 categories they entered.

## No cream ice cream in the west

Alberta Toffait Manufacturing Limited of Calgary, Alberta introduced Toffait, a tofu-based, fat-free dessert that resembles ice cream but contains no milk products, throughout western Canada this summer.

Tofu-based desserts became a popular summer snack in the United States last year and "our research says that Canadians will switch to Toffait for the same reason — it's a healthy improvement on the world's favourite dessert," said company president Phillip Choy who worked with the Alberta Department of Agriculture to develop Toffait.

Toffait is available in 500 millilitre packs in vanilla, chocolate and strawberry flavours. The product is high in protein but contains less than half the calories of regular ice cream, said Mr. Choy.