

4.2 Ends

Classic Ends

Classic ends, also referred to as sanitary ends are the traditional can ends, opened with a can opener. Classic ends must be able to withstand retort conditions and the ends must not warp or bend. As ends become larger in diameter it becomes increasingly difficult to prevent warping.

Step 1

Steel Coils are received into Food Packaging.



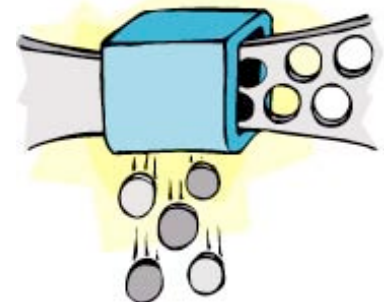
Step 2

Classic ends are made from cut sheets that are lacquered prior to manufacture.



Step 3

The sheets are scroll-cut to minimise skeletal waste.



Step 4

The end is formed by pressing the metal sheet into an uncurled end profile. The edges of the end are then curled in a second operation to complete the end.

**Step 5**

A precise bead of compound sealant is applied inside the curl.

**Step 6**

Our customers are supplied the ends in paper bags as separate items.

**Step 7**

The customer then double seams these onto the can after they have been filled with product.



Easy Open Ends (Ring Pull)

The manufacture of the Full Panel Easy Open End (FPEOE) occurs in two stages.

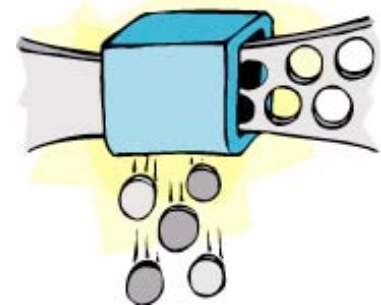
Step 1

Steel Coils are received into Food Packaging.



Step 2

The disc is stamped from a pre-lacquered sheet to produce what is called a shell. This is also curled following the stamping process.



Step 3

Next the edges are curled and compound sealant is applied.

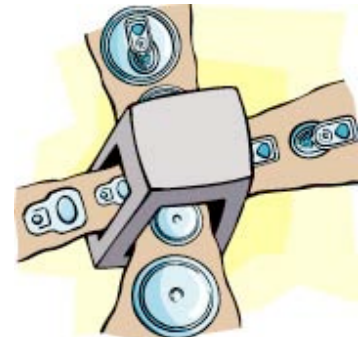


Step 4

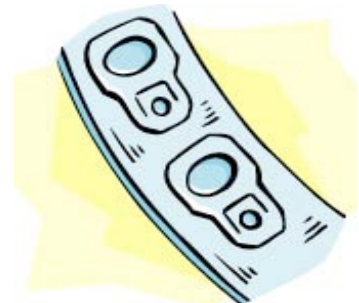
At the second stage the conversion press produces the score, forms the rivet, assembles the tab over the rivet and compresses the rivet to hold the tab. The shell is scored from the top, panel formation is complete and the formed tab is attached to finalise the FPEOE.

**Step 5**

The rivet is formed firstly into a bubble and then shaped into a button.

**Step 6**

The tabs are formed simultaneously from a separate narrow coil of metal and fed onto the rivet. Once the tab is in place over the rivet, the rivet is 'staked' by vertical impact.

**Step 7**

A lacquer is applied to the external surface of the end where the surface has been affected. The lacquer is applied by either spraying a liquid from a rotating nozzle onto the can or by electro-coating. Prior to entering the electro-coating tank the end is pre-heated. The end travels through a tank filled with a mixture of varnish and water. The end is electrically charged to positive so that the negative ions in the varnish are attracted to the areas of the end where tin is exposed. The end is then rinsed and cured.



4.3 Plastic Barrier Cups, Trays & VisyCorqs

Food Packaging provides its customers with plastic barrier cups, bowls and trays. (We also produce and sell extruded sheets to other packaging companies.)

The manufacturing process used is referred to as thermoforming.

We customise the sheet to match the requirements of the products end use. Whether it is for microwave use, extended shelf-life or placed into a freezer.

The properties of the extruded sheet depend on the number of layers in a sheet and the composition of each layer. We can manufacture sheet with up to eleven layers.

A brief overview of some of the plastics extruded by VisyPak, and their properties, is shown below.

	PP	Barrier PP	PET	PCR-PET	CPET	Barrier HIPS
Microwaveable	a	a			a	
Conventional Oven					a	
Translucent	a	a	a	a		a
Recycled Content	a	a	a	a	a	
Adaptable to multiple filling methods (hot and cold)	a	a	a	a	a	a
Freezer					a	
Extended Shelf Life		a				a
Variety of Colours Available	a	a	a	a	a	a

Extrusion Process (How we create plastic sheets)

Step 1

The raw material for extrusion is resin plus additives (such as impact modifier for CPET). The resin is loaded into a hopper. Depending on the properties of the resin, the moisture may need to be removed from the resin prior to being loaded to the extruder.



Step 2

The granules are fed from the hopper into the barrel of the extruder. Assisted by the heat in the barrel and the action of the screw the plastic melts as it makes its way along the barrel and exits the barrel to the feed block section in a molten liquid form.

