Figure 26.4 Countlines flow-wrap format.

26.2.3 Bulk chocolate

Although most bulk chocolate is now transported in liquid tankers, an appreciable market still exists for block or pelleted chocolate. In both cases, the preferred packaging method is PE-lined multi-ply paper sacks containing, say, 5 × 5 kg (11 Ib) blocks or an equivalent weight of pellets, flakes and so on. To maintain stability it is advisable to ensure that the outer paper ply is treated to prevent it slipping. It is advisable to place a PE sheet between the transportation pallet and the sacks to reduce any possibility of moisture or taint from the wood affecting the product. Liquid chocolate can be poured into a case, generally corrugated board, lined with a PE bag. When the chocolate has set, the bag and chocolate can easily be removed and is very stable for transportation.

26.2.4 Boxed chocolates

The variety of containers for boxed chocolates appears to be almost infinite, ranging from rigid handmade boxes with plinth bases, metal feet and tasselled lids (Figure 26.5) to machine-erected single- or double-wall cartons. In markets where the cost of labour is low, hand-erected pre-glued cartons are often used either in single- or double-wall format. Hand-erected cartons offer greater flexibility in box format than machine-erected cartons, as multiple change-parts for the erecting machine are not required; in addition, machine downtime is avoided. The materials used range from flock paper or chipboard to metallised or film laminated cartonboard. Rigid plastic can be used, to give a clear container that shows off brightly foiled sweets to best advantage. Alternatively, thin film in the form of a window can be combined with cartonboard to give the same effect.

The use of recycled boards for chocolate boxes is not recommended without a functional barrier sealing the product from any contaminants that may migrate from the board. Due to the taint potential of chocolate, it is recommended to use chemical pulp paperboard, for example solid bleached sulfite (see Section 26.4.2), for chocolate boxes without a functional barrier between the board and the chocolate. Mechanically produced boards, for example coated chromo board can

Figure 26.5 Chocolate boxes, rigid formats.

Figure 26.6 Chocolate box VFT format.

also be used for chocolate boxes; however, over time, there is a greater potential for odour generation from naturally occurring components in the board, such as aldehydes and ketones.

In contrast to the multitude of the outer container forms, the inner fitments of chocolate boxes vary relatively little from box to box. Plastic vacuum formed trays (VFTs) have almost completely replaced heat-formed glassine cups (Figure 26.6) which were once universally used to hold individual sweets. In