



# Prevent & Save

## Packaging optimisation: Decision or Dilemma?





## HJ Heinz, Dundalk

# Bulk Containment

### Improvement

Changing the plastic drum packaging on a 20L wine container to a returnable bulk container of 240L capacity.

### Description of changes

The empty 20 litre wine containers previously had to be baled with other plastic for recycling. Heinz negotiated with their supplier who now sends in the ingredient in a bulk container of 240 litres. Trials were completed to ensure container integrity and strength. When empty, these containers can be collapsed, folded and re-stacked. The empty containers are then returned for reuse to the supplier.

### >> Environmental benefits

Use of bulk containment led to a packaging weight reduction of 8 tonnes.

### Problems Encountered

It was necessary to negotiate with the supplier to send containers of a larger capacity. A secure storage area had to be provided and a pump was designed to take the wine from the bulk container to sauce production area.





# Microsoft Ireland

## XBox 360: Evolution of Software Packaging

### Improvement

EnviroShell is a blister-corrugated hybrid package made from 65% recycled materials, including 50% post-consumer content. EnviroShell meets the criteria demanded by retailers and consumers, such as improved product and marketing visibility, theft deterrence, product support and stability, protection during distribution, and strength for heavy products. The solution has been lauded for its materials and size.

### Description of changes

The Xbox 360 game console, cable, literature, and two controllers are packed inside a 3'x2'x1' blister pack made of RPET. The front and back blisters are thermoformed from 24-mil RPET with feet that permit it to stand upright on display.

Graphics are carried on a sturdy insert sheet of corrugated that is folded, with four colour lithography on the outer liner. After the product components are packed, the RPET thermoforms are sandwiched between the corrugated. The corrugated is then folded over and around. The two corrugated layers are hot melt glued together with an ecofriendly, water-based adhesive. The corrugated's edges may also be crushed and heat sealed using a special process custom-designed for EnviroShell by Winterborne. This will enable substitution of corrugated for SBS paperboard, yet reflect the clean look and graphics quality of paperboard.



### Environmental benefits

This successful programme led to the elimination of approximately 164,000 kilograms of PVC packaging, and the elimination of approximately 3.5 million kilograms by December 2007.

### Problems Encountered

Complete elimination of plastics from product packaging was not a viable option. Customers (both retailers as well as individual consumers) demand that product packaging allow for visibility of products while on display, as well as protection of the product from handling and theft. For electronic products where plastic packaging is required, Microsoft has switched to use of the more easily recyclable PET plastics, in many packaging applications, using PET that contains at least 25% recycled content.





Jacob Fruitfield

## Change from PVdC to PP Laminate Packaging



### Improvement

A move away from difficult-to-recycle PVdC to a new PP laminate which is more easily recyclable

### Description of changes

Jacob Fruitfield historically wrapped some biscuit lines in PVdC film, as this was considered to have excellent barrier properties and was lightweight at 36micron. However, it is possible to laminate two sheets of PP together, printing the cover art inside the two layers, which provide a comparable barrier seal. The PP is eminently more recyclable than PVdC, but is heavier in weight at 40micron. This development creates a dichotomy between using plastics which may be more easily recycled and using plastics which are lighter in weight. There is an added cost benefit as PP film is cheaper than PVdC coated film

### >> Environmental benefits

This new packaging technique reduces the quantities of difficult to recycle plastic entering waste stream, because PP is easier to recycle than PVdC and a move away from PVdC means that the harmful bleaches associated with this plastic are completely eliminated.

### Problems Encountered

It was necessary to provide for the creation of a new printing technique to allow for continuity between previous printing process and the new PP Laminate packaging.





# Packaging optimisation: Decision or Dilemma?

A Repak report (2008) identifies the key decision makers within a number of packaging supply chains and highlights both opportunities and obstacles for packaging prevention and minimisation. The Report was co-funded by Repak and the EPA and carried out by the UK consultants Perchards. The Report examines a number of common products and works back through the supply chain to identify the factors and dynamics of packaging decisions. These include who makes decisions, for what reasons and in accordance with what requirements. A number of case studies based on this examination are included in the report.

The report requires that each company examine three stages of the production process by following three steps;

- Choose a specific product
- Work back through the supply chain for packaging design and purchasing decisions and establish why things are the way they are
- Consider the possibility of change and potential barriers to change

By following these steps, it is possible to clearly establish the benefits of changes to the production process, while also taking into consideration the difficulties associated with such changes.

Packaging targeted by the report includes any or all of the following

- Primary
- Secondary
- Tertiary

This is done in order to enforce the notion that packaging can be kept to the minimum adequate amount to maintain safety hygiene and acceptance by the customer, as set out in the Essential Requirements.

The report notes also that reducing packaging also reduces the cost of procurement, fuel consumption and vehicle movements. As a knock on effect of reducing packaging, many leading brands such as Unilever and Baileys have found that these reductions can in fact strengthen branding in the Irish market. The 'Persil Small and Mighty' campaign has been hugely successful in terms of encouraging customers to choose products with a low environmental impact. Baileys saw the new lighter bottle design as an opportunity to re-launch their brand on both the Irish and international markets.

The following case studies are a sample of those carried out in the report and reflect some of the issues highlighted and confronted by businesses.





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