

## Space is the new frontier for packaging

**No discussion of the environmental performance of packaging would be complete without a rigorous examination of how it uses space. Across the corrugated industry designers are finding new ways to maximise the use of space in storage, in lorries and on shelf. The potential gains are enormous.**

In some ways discussing space is a rather abstract concept. It's means asking 'what isn't there?' Much current discussion of environmental performance is focused on the sustainability of the packaging materials, and not on how the packaging is deployed. We would like to broaden the discussion to describe how corrugated packaging can make the most efficient use of space, thereby generating significant economic and environmental benefits.

For example, corrugated trays make much better use of space on pallets than plastic trays. A recent study showed that standard large corrugated produce trays (600 x 400mm) outperform plastic trays in terms of space efficiency - 91-98% utilisation vs plastics at 66-81%. What's more, because the height of corrugated trays can be calibrated to specific products, it is possible to carry far more on a pallet. More products per pallet lead to greater efficiencies, lower costs and fewer trucks on the roads.

Look at this specific example for sugar snap peas. The table shows that, for exactly the same number of items per tray, corrugated is 33% more space efficient, making 141 truck journeys unnecessary. (Source: Ceres Logistics 2007 data).

	Plastic crates	Corrugated trays
Number of items per crate/tray	8	8
Number of crates/trays used	1,310,400	1,310,400
Number of pallet loads	10920	7280
Number of vehicle loads	420	279

This principle of increasing space efficiency applies in general terms to corrugated packaging, not just for trays. Boxes need to be designed to fill lorries from floor to roof. If every single lorry on the road were filled to complete capacity, the savings in fuel costs and CO2 emissions would be huge. Corrugated can adapt itself to product after product. No other packaging material has such flexibility.

The battle for space is even more fierce on the shelf. Just imagine if you could use all three dimensions fully. With corrugated you can. More and more retail ready designs are aiming to exploit to the maximum the height, depth and breadth of the display space. Using today's sophisticated design technologies the size of the corrugated display pack can be related to the shelf fixture dimensions and linked to the rate of sale. By optimising space, retailers can increase availability or stock range.

Corrugated currently represents just over 30% of all packaging. One major reason for this is its total flexibility both in design and manufacture. As awareness grows of the need to explore the better use of space, more and more companies will take this into account in their assessment of supply chain efficiency and environmental performance.

### ENDS

For more information, please contact Andrew Barnetson, Corrugated Sector Manager, on 07775 771662 or email [abarnetson@paper.org.uk](mailto:abarnetson@paper.org.uk).

### Available Photography

- stacks.jpg "No waste of space"
- fullshelves.jpg "Making full use of shelf space"
- 04.jpg "Andrew Barnetson, CPI Corrugated Sector Manager"

### Notes to Editors

- For additional information on the UK paper industry, in the first instance, please contact Catherine Waterfield, External Affairs Coordinator, on 01793 889612 or email [cwaterfield@paper.org.uk](mailto:cwaterfield@paper.org.uk). Alternatively, please visit: <http://www.paper.org.uk>.
- CPI is the voice of the paper industry in the UK, representing papermakers, tissue manufacturers, corrugated packaging producers and recovered paper merchants.
- CPI represents 265 member sites across 60 companies, with a combined annual turnover of £4 billion and 24,500 personnel.
- Corrugated packaging accounts for more than 30% of all UK packaging.
- Over 80% of all corrugated packaging in the UK is recycled.