

COIR FIBER HAS THE PACKAGING INDUSTRY GOING 'COCONUTS' FOR RENEWABLE MATERIALS

In a struggle to find innovative solutions that satisfy product manufacturers' and consumers' desire for sustainability, packaging designers are taking their lead from the automotive industry and its use of natural renewable resources.

Ford Motor Co. is experimenting with soy-based seat foam to eliminate the use of petroleum-based materials, and **Mercedes Benz** has used

coconut fibers in seats. Researchers at **Baylor University** are experimenting with coconut-based trunk liners, floorboards, and car-door interior covers, according to an *MSNBC* report.

These same researchers founded **Whole Tree, Inc.**, a sustainable materials company that has teamed up with packaging design and testing company **Compadre** to develop inner packing solutions made in part of coconut fiber. Prototype transit testing is currently underway to evaluate how well the inner packs protect the shipping of manufacturing parts, small electronic components, and some heavier items.

"Major companies are contacting Whole Tree to help meet their sustainability objectives," said Blake Mosher, evp of Whole Tree. "We're very pleased to explore how our material can be used in the packing industry."

Coconut fiber, or coir fiber, has a natural resistance to mildew and microbial attack, as well as a natural resistance to burning because it is a lignin-rich natural fiber. Coconut fiber is also strong and stiff, which allows Whole Tree's material to be formed into various shapes for packaging applications.

Whole Tree calls its material coir form. According to Mosher, Whole Tree processes the raw coconut fiber to its secret



A new material made of coconut fiber is being tested as an alternative to corrugated packaging.

specifications and then sends the fiber through a nonwoven manufacturing process. Thermoplastics are combined with the fiber to offer additional binding characteristics. The outcome is a felted-like material that can be manufactured with different weights and variable combinations of properties. This material can then be pressed; and the pressed form is what Compadre sees as

attractive for the packaging industry.

While coir fiber has a higher price point than corrugated material, Compadre ceo Darryl Kelinske pointed out corrugated tends to be a single-use product whereas Compadre is developing multiuse product for its current clients. "The reusability factor makes the coir form a cost effective choice," he said.

Both Whole Tree and Compadre expect companies to choose coconut fiber-based packaging because it is a commercially viable, sustainable solution. "The market is starving for new sustainable products that are not petroleum dependent," said Henry Heil, vp of design and engineering for Compadre. "These companies want innovative packaging for their innovative products. Coir form meets their desire and it's a leap in sustainability."

Packaging Strategies Perspective: *Some companies are becoming dissatisfied with just reusable packaging and want something that will have a greater environmental impact. Natural, renewable resources meet that need if they can keep packaging out of landfills and are totally decomposable.* **PS**

'SKIRTED' CLUBSTORE PALLETS DRESS UP MERCHANDISE

Clubstores are always looking for unique or exclusive items, with packaging a crucial venue to achieve that goal. We came across a reminder of that in the latest issue of **Warehouse Club Focus** (WCF), a monthly newsletter that covers all aspects of the clubstore industry, including packaging.

WCF highlighted two **Microsoft** pallet displays that promote the company's new software release: *Office 2010*. Both pallet types are considered to

use pallet skirts, or "wraps," that offer a number of advantages for the club and the manufacturer.

The manufacturer is able to more effectively advertise the product and brand because the advertising space is larger. The skirted pallet creates the perception that the club is stocking a large number of the items, which in turn creates the perception that the item is popular and successful. Also, by limiting the number of selling

Pallet continued on the bottom of Page 5

THINKING OUTSIDE THE PIZZA BOX WITH MULTIFUNCTIONAL DESIGN

Dubbed the “pizza box of the 21st century” by *FOX News*, the *GreenBox* is a new take on the industry-standard pizza box. What makes this design particularly unique is that while it is made from 100% post-consumer recycled corrugate, it also breaks down into plates and becomes a convenient storage container for product leftovers.

“We’ve been able to take a single-use product and turn it into a multifunctional product,” said Will Walsh, ceo of **ECOvention, LLC**, the company that designed and manufactures *GreenBox*. “While the design eliminates the need for disposable plates for eating, it’s the storage container element that really offers environmental savings. No aluminum foil or plastic wrap is needed to wrap leftovers and the container easily fits into a refrigerator unlike the bulkier standard pizza box design.”

The recyclable content of the box, along with its multifunctional benefits, enticed **Whole Foods Market** to roll out the box in 27 of its Rocky Mountain locations. According to Jim McConnell, market supply specialist at Whole Foods, the product provides a good talking point with customers. “Whole Foods and its customers are socially responsible and any time we can reduce overpackaging it is appealing to us and our customers,” he said.

Manufacturing *GreenBox* requires no additional material and costs, said Walsh. Corrugated sheets, which meet FDA requirements, are put through a traditional roll dye operation. Perforations and scores are added to create the plates and storage container capabilities. A little red dye is added to give the corrugated some color. ECOvention can then place any company or store logo on the box for branding. Whole Foods created its own design for ECOvention to use.

All of ECOvention's *GreenBox* products are similar in

methodology -- turning a high-value package in a multifunctional design. The company is currently developing a salad box, a self-folding sub box, a sandwich box, and a wing container. There are also talks under way now between Whole Foods' Rocky Mountain region and ECOvention to design a wedge-shaped pizza box for customers who only want one slice of pizza.

Although there are no nationally-driven plans for Whole Foods to

A new corrugated pizza box doubles as a plate.



introduce the *GreenBox* pizza box

in all North American locations, as each of their regions operate independently, ECOvention is currently in discussions to supply the *GreenBox* to another seven of Whole Foods' 11 North American regions. For McConnell, the costs associated with *GreenBox* were comparable to the industry standard pizza box, so making the change was an easy one.

“Whole Foods says no a lot, especially to companies with new technologies that may not be able to third-party-certify their environmental claims,” admitted McConnell. “However, for responsible ideas to grow, someone has to give them a chance, if they have a viable, certified product.”

Packaging Strategies Perspective: Packages that eliminate the need for ancillary materials are more attractive to socially responsible companies and customers. **PS**



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units on a pallet, the club and the vendor are protected from an oversupply situation and inventory turns are maximized. **PS**

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Two side-by-side pallets both offer skirted designs used in clubstore circles.