Vertical shrink wrapping streamlines multipacking

Central Garden & Pet's new multipack vertical shrink wrapping packaging line designed for its flagship insecticide product has **ENABLED HIGH-PROFILE PRODUCT PLACEMENT** in outside displays at thousands of garden centers and nurseries.

Jim McMahon, Contributing Writer

The Sevin line of garden insecticide products has long been popular on the shelves of thousands of nurseries, lawn and garden centers, and big box retailers. The dust product kills more than 65 garden pests, including ants, ticks, Japanese beetles and worms on vegetables, fruits, ornamental shrubs, flowers and lawns.

Central Garden & Pet Co., which manufactures Sevin dust, recently launched a campaign to better position the product for application on edible fruits and vegetables. A key focus of the campaign was to expand the placement of its 1lb dust flagship product, Sevin 5 Ready-to-Use 5% Dust, to secondary displays in the outside edible plants section at nurseries, and lawn and garden centers.

To make the product packaging more weatherresistant for outside presentation, the company redesigned the container to a plastic bottle format, incorporating a plastic lid design that would not accumulate water, and label coding that is faderesistant. What remained was for its multipack packaging to be redesigned for outside display, which presented challenges.

Sevin dust has been available in-store on shelves as a three-pack option to consumers for some time. Three containers were packed in a corrugated tray and shrink wrapped. This worked fine so



The new multipack eliminates a previous corrugated tray, saving on material costs and shipping space.

long as the product was displayed indoors. But outside at nurseries, and lawn and garden centers, where water from rain and watering are constant environmental factors, the shrink wrapping was unable to stop water from reaching the corrugated tray, causing it to deteriorate, losing not only structural integrity but degrading the appearance of the product packaging.

Further, to comply with Federal regulations on insecticides, the consumer needs to be able to read language about product content, usage and contamination. Because of the obstruction from the corrugated tray on the Sevin product multipacks, the information on the individual containers was difficult to read, requiring printing of the information on the bottom of the tray itself. When the tray became damaged from water, however, this information could become impaired.

"Central Garden & Pet wanted to do away with the tray altogether," says David Nettles of **Associated Packaging**, a packaging systems integrator specializing in flexible packaging, which was brought on by Central Garden & Pet to help come up with a solution. "Associated Packaging suggested a shrink wrap material manufactured by Bemis Clysar (now **Clysar LLC**) that was not only durable so it could withstand the elements, but it was also printable. They were interested in printing the product information on the film, instead of the tray."

"The company's existing horizontal shrink wrapper, however, was unsuccessful in applying product information to the film," continues Nettles. "Horizontal wrappers bring seal and aesthetic issues to vertical product packaging, therefore we recommended they go to a vertical shrink wrapping system."

The vertical switch

Associated Packaging specified a model 914 Orbital Vertical System (OVS) from **Texwrap Packaging Systems**, which designs and manufactures automatic shrink-wrapping systems. This shrink wrapper does not require a carrier tray to hold products in place while wrapping, and importantly, can use printed film to wrap the multipack.

The wrapper trims the film underneath the package, where it is hidden from view. This offers more packaging opportunities for the Sevin product, and does not compromise product presentation. The wrapper has a mechanism that



Outside of the dusty filling room, the system wraps the vertical containers without any special infeed handling.

cuts and trims away the film in one action to create a full bottom trim seal to enclose the product, instead of the traditional lap seal with horizontal shrink wrappers. This makes a very secure and attractive package.

"The seal is not interfering with readability," says Daphne Huey, senior brand manager with Central Garden & Pet. "It is located so that the words and images fit around it. We do not have to worry about the shrink drawing together at a certain point and making the information, graphics or UPC unreadable. We still have the UPC on the original containers, but we have them covered up by graphics on the shrink wrap so that the bar codes on the containers do not read through. This is just a much more consumerfriendly package because we have the entire shrink printed, from front to back. It makes for a very attractive package."

The sealing is done with a servo orbital-motion head, which eliminates the need for the head to move with the product while the seal is being made. The head moves in an ellipse, without the back and forth motion of typical sealing heads, which reduces vibration, improving registration and increases the throughput speed of the wrapper.



Printed film encompasses the containers, and displays the multipack UPC.

Infeed simplification

Another critical advantage to switching to a vertical wrapper for multipacking the Sevin product is the ease of handling for infeed into the wrapper. The company's prior horizontal wrapper required that the containers, after filling, be manually laid down on their sides on a conveyor, and the carrier tray be manually put into position to hold the containers together, horizontally, during infeed. This is typical with all horizontal wrappers when handling vertically-oriented products for shrinking into multipacks. With the vertical wrapper, however, the Sevin product containers go directly from the filler to the shrink infeed standing upright, where they are manually rotated into the proper position for input into the wrapper.

Although the vertical shrink line has a throughput capacity of 120 multipacks per minute, the line speed is set by the speed of filling, which is operating at 25 multipacks per minute. The filling area is kept in a separate room, and 50 feet from the shrink wrapping system because of excessive dust.

From the shrink wrapper, the containers are put through a dual-chamber shrink tunnel to provide a highly-controlled shrink, critical for achieving the precise placement of copy, graphics and UPC on the multipack. The product is then moved on to case packing and shipping.

Multiple savings

Completed in January 2013, the installation of the Texwrap vertical wrapping line has brought into play several other key improvements in metrics for multipacking of the Sevin dust product.

"With the elimination of the corrugated tray, the company has realized a 45 percent reduction in packaging material costs," explains Nettles. "Because the tray is no longer being used, end-of-line

packaging labor hours have also been reduced by 35 percent." Laborers are no longer needed to fold the corrugated trays, nor is manual placement required of the containers onto the trays before infeed.

Lastly, because the corrugated tray is now gone, so is the space that it occupied, one-half inch on each side. This amounts to 15 percent more Sevin dust multipacks

that can be loaded onto a pallet.

"The cut-down on the expense of our multipack shrink wrapping for the Sevin dust line is significant," says Huey. "It has expanded our merchandising options."

Jim McMahon writes on packaging automation for Zebra Communications, a PR firm for industrial and technology companies. Associated Packaging, 770-337-9668 www.associatedpackaging.com

Clysar LLC, 800-425-9727 www.clysar.com

Texwrap Packaging Systems 636-239-7424 www.texwrap.com







Efficient. Sustainable. Turn-key. Featuring limitless custom or off-the-shelf handle options, in-line applicator solutions and superior service. PakTech is the smart choice. We have your packaging needs handled.