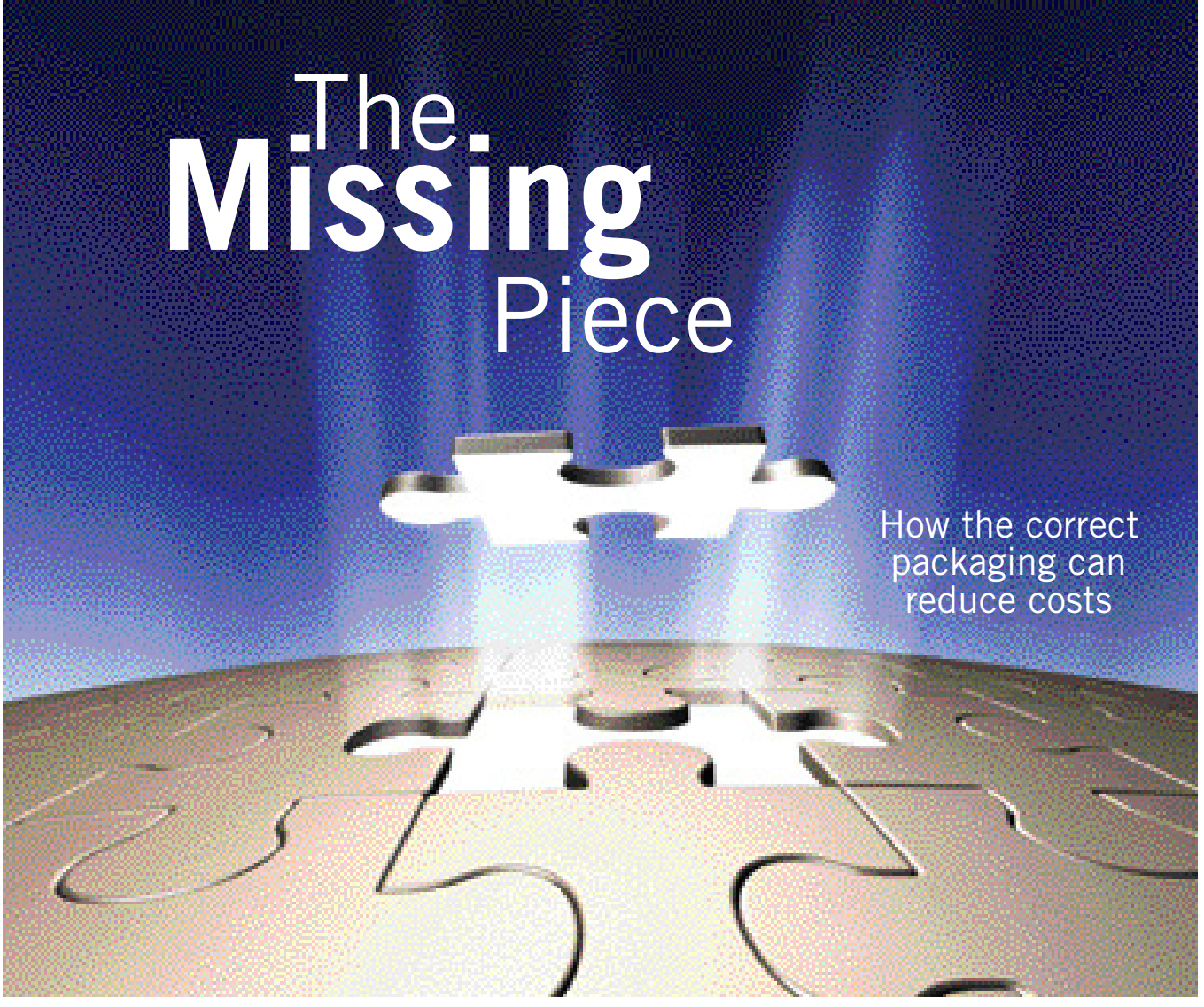

The Missing Piece

How the correct packaging can reduce costs

— By Bill Armstrong —

Whether a business's logistical operations involve shipping parcels around the world or from a central distribution center directly to the consumer, using the appropriate form of packaging can positively affect the bottom line. Trends that have recently increased the importance of packaging include the move by companies to outsource aspects of manufacturing and production to foreign countries and the move toward dimensional weight-based charges by carriers. Both of these trends offer shippers an opportunity to reexamine their current packaging processes to ensure they are operating in the most effective and efficient manner possible.

Taking a global operating approach to business is a necessary step for most companies to succeed today — but in order to be borderless, organizational structures and supply chains must recognize the impact and costs associated with a longer distribution process and lead times, less sophisticated infrastructures and harder-to-maintain quality control to fully evaluate the benefits and risks associated with the entire product outsourcing process. These factors — along with the additional steps involved in transporting goods produced overseas to the US — often increase the risk of damage to the product.

Many of the emerging labor markets have underdeveloped roads and highways and often use manual labor to load and unload trucks — both of which can contribute to an increase in damaged products during shipment. Additionally, while the United States and other countries have well-established packaging guidelines, some countries may not have adequate quality control for either products or packaging materials. This could lead to an influx of damaged items, costing companies time and money in returns and shipping. Because of the long lead times associated with outsourced items, products damaged during shipment could take months to replace.

Packaging for Dimensional Weight Charges

Factors such as rapidly increasing fuel costs, lower-density packages and significantly increased shipments from distribution centers directly to consumers' residences have combined to put substantial pressure on carriers' bottom lines.

Because delivering single packages to unique addresses is an expensive proposition in time, fuel and labor, dimensional weight charges have been implemented to ensure shippers pay their fair share of the vehicle capacity that their packages occupy during shipment. These charges require a premium for lightweight, high-volume packages that used to be billed at the same levels as smaller packages of the same weight while occupying significantly more space.

One of the by-products of the trend of shipping individual products directly to consumer residences is that each order is most often placed in a corrugated container to facilitate safe shipment. These containers are typically larger than necessary to ship the specific order because making a custom shipping container for each order would be extremely inefficient and costly. Shippers, therefore, usually work with a small number of standard container sizes and fill any extra interior space with void-fill material. These low-density packages create low-density loads in the carriers' vehicles.

According to dimensional weight standards, if a package measures 2.9 cubic feet and weighs 15 pounds, the customer will pay based on weight. By increasing any dimension of the box by as little as an inch or two, the package can increase to more than three cubic feet. Once the package volume exceeds the three cubic feet threshold, the customer must pay the dimensional weight. A package measuring 3.2 cubic feet (5,530 cubic inches) would yield a dimensional weight of 28.8 pounds.

On the other hand, rounded up, the dimensional weight of this package is 29 pounds — almost twice the cost of the 15-pound package measuring less than three cubic feet. These standards should lead companies to consider new packaging solutions that take up less space in carriers' vehicles.

Protective Packaging Solutions

Global manufacturers of protective packaging materials provide high-quality packaging to companies worldwide, which can alleviate some of the risk of damage associated with global shipping and reduce the costs incurred from dimensional weight charges. There are numerous packaging materials that provide first-class protection while occupying minimal space inside the package.

Air cellular products provide secure blocking and bracing, surface protection, interleaving, cushioning and void-fill performance and provide better protection using less packaging material compared to loose fill. Inflatable packaging systems allow users to create air-filled cushions — reducing shipping costs with lightweight and potentially smaller packages.

Foam-in-place systems and suspension and retention packaging also use less material to provide highly efficient protection for products. Foam-in-place systems provide unique, high efficiency foams with superior cushioning properties to protect products during shipment.

Interior packaging designs can be created for a variety of void fill, cushioning and blocking and bracing applications. Suspension and retention packaging designs are based on strong, highly resilient low-slip film that surrounds products, protecting them from shock and vibration. ■

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