

Covidien counts on machinery and materials in package development

Kevin Mulligan, senior director, Global Packaging, Covidien, a Mansfield, MA-based global provider of healthcare products, describes how machinery and materials factor into the company's package design process.

Healthcare Packaging (HCP): Describe Covidien's process for package development?



Mulligan: With five different divisions ranging from pharmaceuticals and medical devices to retail products, we approach the packaging development process based on the needs of the consumer and the purpose of the product. Often a package will be integral to the functionality or design of the product or an extension of it, rather than just an outer casing.

We've also found it to be quite beneficial to integrate the graphics and engineering portions of our packaging divisions in the early stages of design rather than later in the development process when they can become costly in terms of time and investment.

HCP: What other elements should be considered early in the package design process?

Mulligan: Besides cost, design preferences are usually based on the individual's needs and can range from the aesthetic to functionality and ease of use. We'll also often consider how the package will be disposed of and factor that into the development process.

When selecting machinery and materials, we'll consider the supply chain as a whole to see how products will be tracked, such as bar-coding technologies, which are becoming highly regulated in the drug and device industries. Taking this approach allows us to determine upfront manufacturing costs and can also help us avoid unnecessary expenses and possible recalls down the line.

HCP: What are the drivers behind proper selection and use of machinery and materials when developing a product?

Mulligan: In the device industry you will find that regulations often limit how innovative you can be with design, but there are still many factors to be considered. What is the purpose of the end product? If a product will require a delivery system, for example, we need to examine the requirements behind the design to properly choose what equipment to purchase to manufacture it, and what materials best complement the design. We also have to analyze whether the new packaging can be manufactured on existing production lines or whether it will require an entirely new process.

It often comes down to a question of capacity--whether or not our existing machinery can withstand an additional product run. When we purchase new systems, it's often because we feel there is great potential in a product and need to run high volumes, or we are looking to launch a product with an entirely new design that our current machinery cannot accommodate.

Material selection is also vital to the success of a package from both a structural standpoint and overall design. At Covidien, our strategic sourcing teams work directly with our partners to select the highest quality materials that best complement the product. Cost is certainly a factor, but we recognize success requires a certain level of investment.

Editor's Note: This story is supplied by the [Packaging Machinery Manufacturers Institute](http://www.packagingmachinery.com), a trade association with more than 550 member companies that manufacture packaging and packaging-related converting machinery, machinery components, containers and materials in the United States and Canada. PMMI organizes the Pack Expo trade shows, including Pack Expo Intl., Nov. 9-13, 2008 in Chicago. Visit www.packexpo.com for more information.