For Thomas Dahbura, president of Hub Labels, a trip to the grocery store gives him a chance to see his company’s products in action. Every time a customer reaches for a bottle of Log Cabin syrup, Hershey’s chocolate milk or children’s shampoo with a bright, beaming image of Sponge Bob Square Pants, he knows that his company has done its job. Head-turning labels are a vital weapon in the battle of consumer packaging.

Hub Labels, headquartered in Hagerstown, Md., was founded in 1978 by Thomas’ father, Bud Dahbura. Today, it serves some 700 customers who make everything from perfume to greeting cards. The 110,000-square-foot facility, which has been expanded four times over the years, now houses more than 20 high-speed presses that turn out some of the packaging industry’s latest high-tech looks in product labeling.

Part of the company’s success comes from their early appreciation for what ultraviolet (UV)-light curing could bring to their process. “Over the years, UV has been our quiet partner,” says Dahbura. “Without it we could not have accomplished what we have.”

UV inks allow the company to produce better looking labels at a lower cost and with higher reliability than conventional technology. “UV allows us to produce some of the most sophisticated award-winning labels in the business,” says DJ Corbitt, key accounts manager at Hub Labels.

The UV process provides as much as a 35-40% increase in perceived dots per inch—the resolution that customers seek for their high-quality printing. This high-quality UV processing enabled Hub Labels to take top honors in the Flexography/Color Process category of the prestigious Tag and Label Manufacturers Institute awards.

Initial concerns over UV technology’s performance and reliability have long been put to rest. “When a high-speed press is running, even a short, unexpected interruption adds up to big losses in a hurry,” says Dahbura. “So,
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if I am hearing about a UV problem—that’s bad. But I don’t hear about UV problems.” In fact, UV has reduced downtime by an average of 8% per press, resulting in as much as 300 added hours of productivity per line each year.

To keep their UV process “quietly” humming away, maintenance technician Kevin Roof teamed press manufacturer Gallus with American Ultraviolet. “Loyalty has been a longstanding key to how we operate,” explains Roof. “This means loyalty from our customers, but also loyalty to our vendors. Our UV suppliers have a proven track record of working closely with us to provide excellent products and service.”

Roof worked with the curing unit engineers on customized UV lamp designs that allow his staff to service and maintain the UV systems quickly and easily. The high-powered, highly focused Ultrapack® design allows technicians to replace a UV lamp in just a few minutes. The modular design makes changing lamps as easy as replacing a printer toner cartridge. The old lamp slides out and a new one slides into place. The whole operation takes only a few minutes, with a minimum of downtime and hassle. Sophisticated electronic controls that give the press operators instant touch-screen control over each lamp’s output and other operating parameters allows the process to be precisely fine-tuned for perfect UV cure in each printing stage.

The resulting UV process enables the company to print labels with higher print quality and with more brilliant colors and top coatings that do not suffer from the delamination problems that plagued some of the traditional varnishes. The versatility that UV provides has allowed the company to print everything from labels for food and beverage to health and beauty products, and from membership cards to bumper stickers.

Since their founding, Hub Labels has grown in both the breadth of services they offer and in the technologies they provide. Not only do they offer up to 15-color printing (including 4-color process, varnishing and over-lamination) but also in-line hot stamping, cold foil, embossing, silk screening, die cutting and dozens of other value-added services. They’ve also pioneered the use of liner-less labels that eliminate the environmental waste associated with conventional liner backing.

Liner-less labeling and UV processing both reflect a green philosophy that focuses on environmentally conscious products and processes. The UV process fits nicely into their environmental mission—with a 10% reduction in annual solvent-related VOC emissions. And since UV-cured inks don’t evaporate quickly like solvent-borne formulations, they have reduced their overall ink consumption by an estimated 15% of its prior volume.

Changing an Ultrapack® UV module is as quick and simple as changing a toner cartridge on a printer.

Centralized UV lamp controls make it easy for technicians to quickly fine-tune the output of each curing station to achieve the perfect results.

UV plays a vital role in the increasingly high-tech demands of Hub Labels’ new business segments.

“We continue to work with our lamp manufacturers to develop better ways to use our UV advantage to drive our business in these new directions,” says Roof. “The label business has been transformed from a simple printing task into a high-tech business. We do things today such as holographic special effects and security labels with embedded anti-counterfeit properties. With emerging technologies, the push toward more variable data, rapid, high-quality UV curing will be an even more important competitive tool for us.”

—Jeff Stines is vice-president of Marketing and Communications at American Ultraviolet in Lebanon, Ind.