

**DIAMOND
PACKAGING**

Recreating a Snapshot in Time

by Kym Conis

The 1950s were a time of radical change and discovery. From the influence of Elvis and rock-and-roll to leather jackets, side burns, and 'tricked out' cars, a movement towards creativity and self-expression exploded on the American scene. As a by-product of this movement, a bold new pallet of colors emerged – one that added vitality and complexity to all facets of society. This decade of color and dimension is artistically showcased in Diamond Packaging's 2007 three-month calendar – an annual tradition for over 20 years!

This year's theme – a retro 1950s drive-in diner – captures the color, excitement, and newfound freedom of the times. From the vibrant three-dimensional reproduction of period cars to the neon glow of a diner right out of the sitcom *Happy Days*, the 2007 calendar transports you back in time in classic style. Through the skillful combination of second surface foil stamping, multi-level embossing, a unique printing process, spot matte and UV coating, intricate diecutting, and the integration and conversion of plastics, the Rochester, New York-based company successfully engineered a snapshot in time that truly promotes its diverse capabilities.

Capturing the Essence

As part of Diamond Packaging's promotional slogan 'Capture the essence of what's inside', the 2007 calendar seamlessly tied into the campaign. Designed with a 1950s retro theme that extends from the header, backer, and calendar pages to the Forte™ shipper, Diamond set out to create a promotional piece that would illustrate many of its internal capabilities, including creative design, stochastic printing, printing and stamping on plastic, spot coating, foil stamping, and multi-level embossing.

According to Marketing Manager Dennis Bacchetta, creating a calendar that conveyed dimension was one of the goals of the 2007 self-promotional piece.

Another was to show the company's plastic converting capabilities. "In-house Graphic Designer Mark McOmber felt that the combination of the 1950s imagery and plastic substrate would lend itself well to the effect that we were trying to achieve," explained Bacchetta.

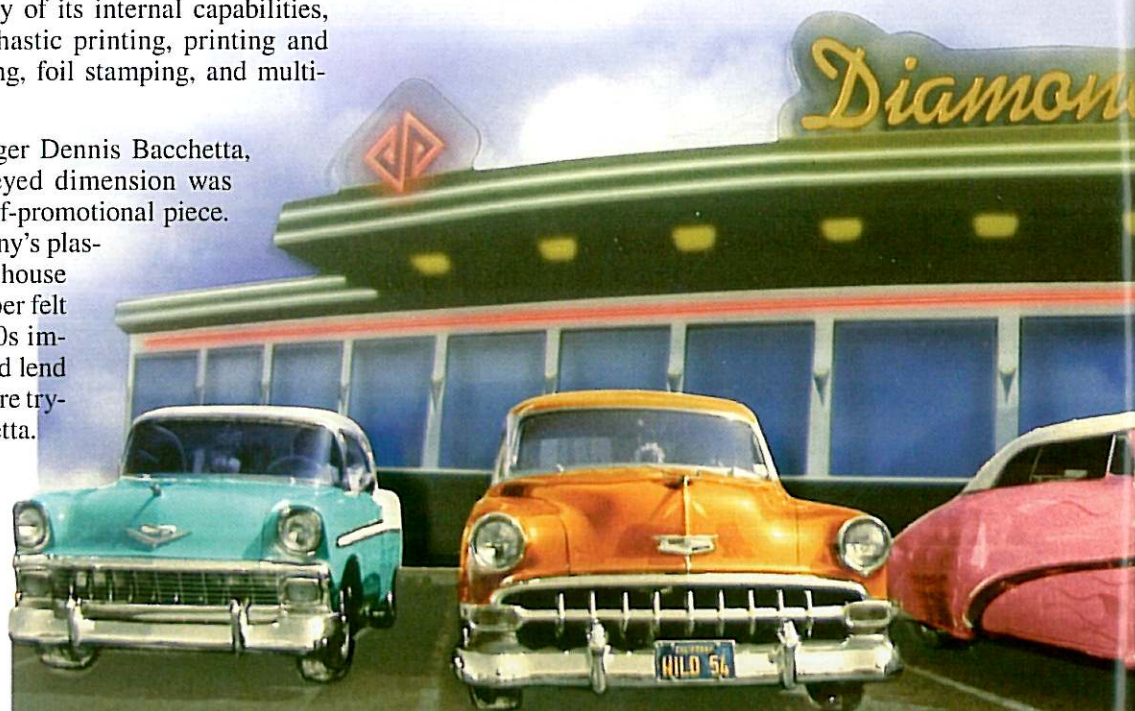
McOmber also worked with in-house Structural Designer Bethany Marconi to create the entire calendar package.

When setting out to create a self-promotional piece (of which Diamond produces three to four each year), many

elements are taken into consideration. "We always try to create a graphically and structurally appealing design that highlights many of our capabilities, but do try to focus on one or two elements," Bacchetta stated. "This year the focus was on creative structural design and printing and stamping on plastic."

The header, consisting of three different layers, is a combination of plastic and paperboard substrates, which combine to present a three-dimensional view of classic hot rods and carhops set against a drive-in eatery. Diecuts in the paperboard header allow the APET piece to be interlocked into the paperboard, creating a slight radius. To add further dimension, Diamond combined vibrant color, spot UV coating, and tight-register, multi-level embossing to 'pop' the hot rods right off the sheet, thereby creating the appearance of yet another layer. A contrasting matte varnish was utilized to spot coat the carhops and the blacktop – further accentuating the three-dimensional cars.

The creative use of a plastic sheet to depict the diner with its neon lights and translucent windows was artfully crafted through the applications of six-color printing (utilizing stochastic screening), second surface foil stamping with a specialty foil, and diecutting. Stochastic screening utilizes a more random dot pattern than does conventional process printing, thereby creating more vibrant colors and better reproduction capabilities.



Bringing Life to the Design

The production process was broken into three parts: the header, backer, and calendar pages. All of the components of the 2007 calendar, including the Forte™ shipper, were printed on a seven-color Heidelberg Speedmaster utilizing Diamond's TruCOLOR™ color system.

"The TruCOLOR™ color system is a proprietary method of color control, color monitoring, and color matching, offering unparalleled quality and economic benefits compared to traditional four-color process printing," Bacchetta explained. "The system uses just six colors (4-color process plus two specially formulated colors) to accurately and optimally reproduce over 1,000 colors, while delivering near-photographic fidelity from an offset printing process." According to Bacchetta, the color system offers an efficient and economical method of reproducing a variety of vibrant and subtle colors without expensive plate changes.

Essentially, the Diamond TruCOLOR™ system incorporates frequency modulated (FM) screening, which is unique in that it varies the number of dots used as opposed to amplitude modulated (AM) screening, which varies the size of the dot. "Using the 20-micron FM dots process eliminates all issues related to screen angles, resulting in smoother vignettes and softer color-to-color transitions not possible with traditional four-color process printing," stated Bacchetta.

The header was constructed of two substrates: 12 gauge APET (amorphous polyethylene terephthalate) and 18pt. SBS paperboard CIS. The carhop scene with the clouded sky backdrop was produced six-up with printing (stochastic screening), UV spot coating, and matte varnish applied all in one pass. According to Director of Manufacturing Dave Ziembra, "Special coating rollers on the Heidelberg allowed for multiple types of coating in the same pass."

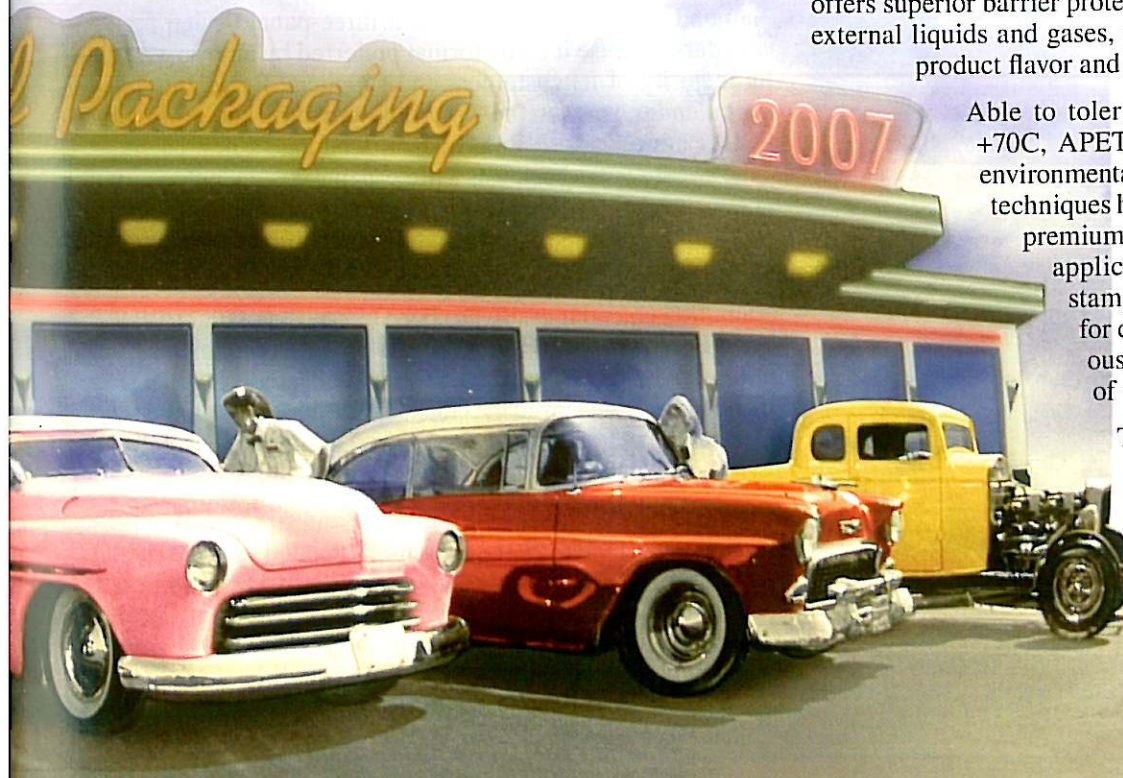
Next, the sheets were register embossed on an Iijima MJ1040-ES stamping and embossing press. The six sculpted, multi-level brass embossing dies and counters were supplied by ITW Davis Engraving. "In creating the cars, we went through several versions with different combinations of embossing to get just the right look," Ziembra explained. "Each time we received a proof, we'd add more detail, such as in the grids on the cars." Here, the embossing detail is so intricate that when viewed at certain angles (combined with the high gloss of the UV coating), the grids, window-trim, and overall trim on the cars shine as if they were made of chrome, yet no foil was utilized in these areas. Finally, the paperboard was diecut on a Bobst CER 40" press, utilizing a six-up steel rule die made in-house by Diamond Packaging.

The second part of the header, the diner, was printed and aqueous coated in one pass. Produced six-up, the APET sheets were then foil stamped with a second surface, silver metallic foil from API Foils and copper flat stamp dies from ITW Davis Engraving. The foil was flat stamped on the back side of the plastic sheet in registration to tinted areas printed on the front. "Utilizing the special second surface silver foil behind the tinted areas worked great in creating the neon effect we were after, as well as emphasizing our company name in gold, and logo and calendar year in red," stated Ziembra. The sheets were then diecut six-up with one steel rule die on the Bobst and then sandwiched between the folded paperboard stock to create the layers.

Diamond chose APET for this job for several reasons. APET's amorphous composition uniquely combines structural strength with glass-like clarity for a substrate that looks good and performs well for a wide range of applications. APET resists cracking, does not whiten when flexed or bent, and is easily thermoformed. "In addition to its visual appeal, APET also offers superior barrier protection, keeping products safe from external liquids and gases, as well as promoting retention of product flavor and aroma," Bacchetta explained.

Able to tolerate temperatures from -40C to +70C, APET not only is durable but also, is environmentally friendly. "Advances in printing techniques have elevated APET to the arena of premium products," stated Bacchetta. "The application of custom colors and foil stamping greatly expands our options for creative packaging that simultaneously protects and reveals the beauty of what's inside."

The backers were printed six-up (two sets) on 28"x40" sheets of 18pt. SBS-CIS. The backer sheets were printed and overall UV coated in one pass. The calendar pages were printed and aqueous coated in-line on 70# text with a vellum finish. The shippers also carried





through with the 1950s retro car theme. Printed with the same TruCOLOR™ process and then matte varnished on 36pt. Forte™ board, the shippers are a perfect compliment to the entire package. With a closure flap designed and diecut to look like the front end of a classic car and a pair of fuzzy dice hanging from Diamond's logo on the front, the shipper not only remains true to the retro theme but also, generates curiosity as to what is packaged inside.

With the exception of the binding, which was produced at Rochester Binding and Finishing, and the stamping/embossing dies, the calendar was designed and manufactured entirely in-house at Diamond Packaging.

From a graphic standpoint, the most challenging aspect of the project was that it was time-consuming to create an accurate bleed for the areas that diecut to print, and to a lesser extent, that diecut to the spot coating and embossing. "The original image of the diner and hot rods had to be separated for reproduction on plastic and paperboard, respectively," Bacchetta explained. "It also was a challenge to create a reflective-looking surface that simulated the windows of the diner."

From a manufacturing process, tight registration from stamp to print was required when producing the plastic insert. Since many of Diamond's customers require tight registration with respect to stamping and printing, the company has the experience and



skill to achieve very accurate results. "Printing and converting plastic has more to do with special processes and techniques than it does equipment, but there are slight modifications to the machines that will make plastic easier to run," explained Ziemba, "specifically, static elimination and sheet separation on the in-feed."

A 'Happy Days' Ending

In the end, the 2007 Diamond Packaging retro car calendar was very well received and nearly all of the 2,500 calendars produced were distributed in early December to customers, as well as to Diamond employees and suppliers. Typically, the calendar project is worked on over the period of an entire year, in between customer work. Diamond employees brainstorm creative ideas and then once the design is pinned down, the production process takes approximately three weeks.

Diamond utilizes the three-month/three-panel design for its calendars because it is the format preferred by an overwhelming majority of its customers and suppliers. Recipients hang the calendar so that the previous, current, and following months are always visible. In fact, Diamond's first calendar some twenty years back was a three-panel design, but featured an educational theme instead. The calendar months included packaging definitions, styles, and other information such as packaging history.

"Our 2007 calendar easily has been our most popular to date," stated Bacchetta. "We have received so many compliments from customers, employees, and business associates alike, either stating how much they loved the calendar or asking if we could send them more." Already thinking ahead, Diamond is currently in review of creative concepts for its 2008 calendar.

From concept to design (both graphic and structural) to production, Diamond's 2007 calendar succeeded in reproducing the flavor and feel of the 1950s with great style and finesse. Parallel to that time in history, which in part, was defined by color, dimension, and self-expression, the 2007 Diamond Packaging calendar exudes those same qualities – transporting us back ... if only for a moment ... to an unforgettable snapshot in time. ■

PIGMENT FOILS

www.customfoilscompany.com



CUSTOM FOILS COMPANY
185 Foundry St., Newark, NJ 07105
Tel: 973-344-1434 Fax: 973-589-1617