Written by Leah Genuario, Contributing Editor Aluminum packages offer a number of advantages. lere, a selection of containers courtesy of Condensa. Precious Metals

Metal continues to shine as a way to stand out on shelf.

HEN MOJO COSMETICS FOUNDER Jamion Blackwell set out to create his TITAN cosmetic line, he placed an unusual first call to aerospace giant The Boeing Company. Although the two industries seem worlds apart, Blackwell saw one common interest: the need for high-quality, metal parts.

In an effort to stand apart from competition within the high-end boutique distribution channel, Blackwell's goal was to create packaging that resembled aircraft parts. Although the call to Boeing didn't produce any fruit, Blackwell continued undeterred in his search for creative packaging, seeking and collaborating with aerospace subcontractors. The end result is a four-piece cosmetic container crafted from aircraft-grade alloy—a crush-resistant, hefty material comprised of aluminum, magnesium, manganese and titanium alloy. The TITAN package comes in titanium gray or pink and features an O-ring for easy attachment to keys or to wear as a necklace. It is refillable, housing either a lipstick bullet or concealer.

"[The aircraft-grade alloy] is really strong and commercially available so it was a great choice for us," says Blackwell.

Depending on who you speak to, metal use within the beauty industry is either increasing or decreasing. Some suppliers point to the high cost of using metal, the increased performance characteristics of plastic and plastic decorations, and shape limitations as reasons why metal use is either flat or slightly declining.

Others see a complete opposite trend, citing new growth markets within the developing world, new segments such as continuous spray sun care, and most importantly, the perceived quality it enjoys among consumers, who admire it for its aesthetics, weight and cool-touch feel.

For Blackwell, who is also a designer, the decision to use metal was a no-brainer.

"We wanted to make a component worthy of housing some of the finest lipstick in the world," he says. "If you're going to make something special, you also have to make it look special. We don't shortcut any of our processes and spend a good deal of time and money to make world-class products."

Like Mojo Cosmetics, many of the brands choosing to use metal are prestige. Cosmetics and fragrances will often use metal components, if "those products are positioned at a price point to allow it," says Ralph DeVito, director of packaging design and development for Topline Products Company, Inc.

Metal is closely associated with luxury and prestige brands, agrees Anthony Di Maio, vice president of global sales, Cameo Metal Products, Inc. "Customers are more accustomed to viewing plastic products as mass marketed products, so when a brand chooses metal for their packaging it immediately has a luxury appeal."

Metal also enjoys favor in the hair care and sun care markets, a nod to their use of aerosol technology. "Aerosol and foam [applications] make up the majority of primary packages using metal," adds Vince Bowman, director of structural product design for integrated brand design realization firm Kaleidoscope.



Cameo Metal provided L'Oréal with metal fragrance caps for Ralph Lauren's Big Pony fragrance collection.



No matter what its application, metal will always play a key role in beauty packaging. Today's market boasts a number of material and decoration trends.

Materials

For components and full-body containers, the metal of choice is aluminum.

Aluminum comes in several different grades, as Steve Rusch, director of marketing for Anomatic explains: "Aluminum

alloy is the most common metal employed for packaging. Common grades of aluminum are 5657 and 9020 for the cosmetics and health and beauty industries," he says.

Matias Levit, marketing and development director for Chile-based Condensa, lists multiple advantages of aluminum. Among them, "aluminum is stainless, corrosion-resistant, durable, and does not degrade the formulation," he says. In addition, "it is lightweight, recyclable, protects against UVlight and offers 360-degrees of decoration space."

Many brands tap into the benefits of aluminum. For example, The Body Shop's Hemp Shampoo leverages an aluminum container for its aesthetically pleasing look and its "environmentally positive brand positioning," says Bowman of Kaleidoscope. The aluminum container, accented with earth-toned labels, further promotes the brand's eco-conscious packaging initiatives.

While The Body Shop capitalized on the environmentally friendly qualities of aluminum, Bowman asserts that it is not the primary advantage revered by brand owners. "Metal as a primary container is rarely positioned in the marketplace as an eco-friendly alternative. It is almost always recyclable but the packaging focus falls more on the 'premium packaging' qualities."

Kaleidoscope also designed and positioned Alberto Culver's brand TRESemme 24 Hour Body. The aerosol and foaming products are housed in a "unique and structurally innovative metal container," says Bowman. Positioned as a "progressive brand," the line's distinctive packaging design "embodies bold color contrasts between the container and its dispensing accents," he adds.

Despite all of the advantages of using aluminum, there are also manufacturing challenges associated with aluminum that manufacturers have largely learned to overcome. "Although aluminum by itself has poor chemical resistance, when it is anodized properly it is very good. One challenge with aluminum is that metal bonding—such as soldering and welding—are difficult. Other techniques can be employed to produce similar results," explains John Fee-

most talked about beauty packaging metals, there are other metal material choices such as tin, struck brass or steel. The latter is used mainly "for internal weights," says DeVito of Topline, "which would normally be a simple shape or chopped from rod stock, sintered, etc."

ley, director of sales and marketing, Providence Metallizing.

There are also shape limitations. Aluminum is often used for collars and simple round caps. "The advantage is that these parts are relatively inexpensive and can be colored via anodizing. The disadvantage is that anything other than a round symmetrical design can be a challenging shape to form and only a few companies can do this," says Feeley.

Zamac, a zinc/magnesium alloy, is another popular metal used in beauty applications and one that can often handle more complex designs. "Zamac is primarily used for luxury goods where extra weight is desired," says Brooks Markert, executive vice president, C+N Packaging.

Aside from the weight, Zamac offers other benefits. "Virgin stock is inexpensive relative to other materials, and, when properly cast, flows well with few pits. It also polishes very well," says Bob Adelstein, CEO of Metal Dynamics, a company that regularly uses Zamac for fragrance applications.

Zamac is often used for fragrance emblems, says Feeley. For example, brand Ralph Lauren worked with Providence Metallizing to create metal emblems for its fragrance bottles. The emblems were die cast with Zamac and electroplated with Palladium Gold.

Not all applications have to do with fragrance, however. Topline, for example, made use of Zamac for the eye cream applicators it created for Mally. The component was electroplated with nickel.

While aluminum and Zamac are the





Kaleidoscope worked with brand TRESemme on its 24 Hour Body line to create distinctive packaging.

Metal Mixing

Related to material choices, suppliers also report a trend of mixing metal with a completely different material. "We are seeing a trend for a combination of metal parts mixed with resin parts," says Adelstein of Metal Dynamics. The reason comes down to aesthetics: "Mixed media complement each other and have lots of counter appeal," he adds, pointing to winning combinations such as tortoise patterns and gold on one package.

Elizabeth Arden capitalized on the opportunity to mix metal with Surlyn, a resin produced by DuPont, with the introduction of its Juicy Couture Original. C+N Packaging worked with the brand to produce a heavy-metal collar and a massive Surlyn jewel, which increased the weight while providing the "desired reflective aspect," says Markert.

Metal has also been effectively mixed with glass. Providence Metallizing teamed with brand Halston and borrowed inspiration from its history in jewelry-making to create a metal collar that was cast over a glass vial.

Another trend is dismissing metal materials all together in favor of using metallized plastic."We see a trend toward metallic effects; whether that's achieved in actual metal or some other process is determined by the design," says Markert.

In the end, "the choice between using plastic or metal in primary packaging comes down to many variables, such as consumer preference, durability, flexibility, chemistry of products, dispensing technologies, and many others," says Bowman. "Understanding what is important to the end user is most important."

Decorating Metal

Decoration techniques on metal allow designers to further stretch the limits of imagination. "There seems to be a limitless amount of decoration methods for metal products," says Di Maio of Cameo Metal, citing decorations that manipulate the actual metal—like embossing—to secondary applications to a number of finishing techniques.

One finishing technique is anodization. Coinciding with aluminum's popularity, anodization is a widely used decorating method. "Anodizing is the electrochemical conversion of the aluminum to its oxide," says Rusch of Anomatic. "In anodizing, a thin film of aluminum oxide forms on the surface of the aluminum part and acts as a barrier against corrosion and oxidation."There is also double-anodization, which "is capable of combining two surface finishes and two colors on a single component," adds Rusch.

Metal Dynamics utilizes electroplating as a decoration technique for Zamac parts. Electroplating makes use of a metal material suspended in a liquid, such as gold. Through the combination of an electrical charge and time, the metal is drawn out of liquid suspension and is deposited—or plated—onto the component, says Adelstein.

Providence Metallizing recently completed a gold candle holder for Donna Karan, which was cast in white metal and decorated with gold electroplating. The company also utilizes



electroplating with antique finishes, created through application of a subsequent oxide coating which is then buffed or tumbled to reveal the electroplating. This technique was employed for the cap Providence Metallizing created for Gail Hayman of Beverly Hills. The lion-shaped cap was cast with white metal, then electroplated with white bronze and antiqued in a two-step process.

Reactive sputtering is a relative newcomer to metal finishing technologies, compared to other techniques, says Feeley. Typically applied over chrome plating, the technique can produce "simulated gold and other exciting finishes such as holographic patterns," he says.

Graphics and words are added in a number of different



Topline Products Company utilized Zamac for the eye cream applicators it created for Mally. process requires fast-cooling metals, and blow molding does just that. It is revolutionary because it is a very highquality print that can be applied to metal surfaces and the quick cooling time enables increased throughput and reduced cycle times at production." **b**



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ways. Levit of Condensa utilizes offset printing on metal packages. "There are other ways such as labeling, shrink sleeve and silk screen, but in my opinion, the best option will always be offset printing," he says.

Markert sees hot stamping, silk screen and tampo printing as popular secondary techniques, but this list is certainly not exhaustive and many other options exist.

For example, "Powder coating is a very popular process, which involves baking ink in powder form onto metal surfaces. The powder is applied and then is heated to the threshold when the inks melt into the metallic surface," says Bowman. Pad printing "has also increased in popularity due to increases in production efficiencies and economies of scale."

Secondary decorations can have a major impact on the final look. Cameo Metal effectively used silk screening for a Calvin Klein project. Starting with a high gloss, polished aluminum surface with a clear epoxy lacquer, the company added a light silver silk screen to mimic the look of laser engraving for a third of the cost, says Di Maio.

Despite the many decorating options out there, the industry continues to press for more. What could be next for metal packaging? Bowman infers a growing trend in the field of metal decorations and packaging design. "Exploration into blow molding metal has become very popular. Blow molding enables 3D designs on the exterior of the packaging, which before was not possible. The