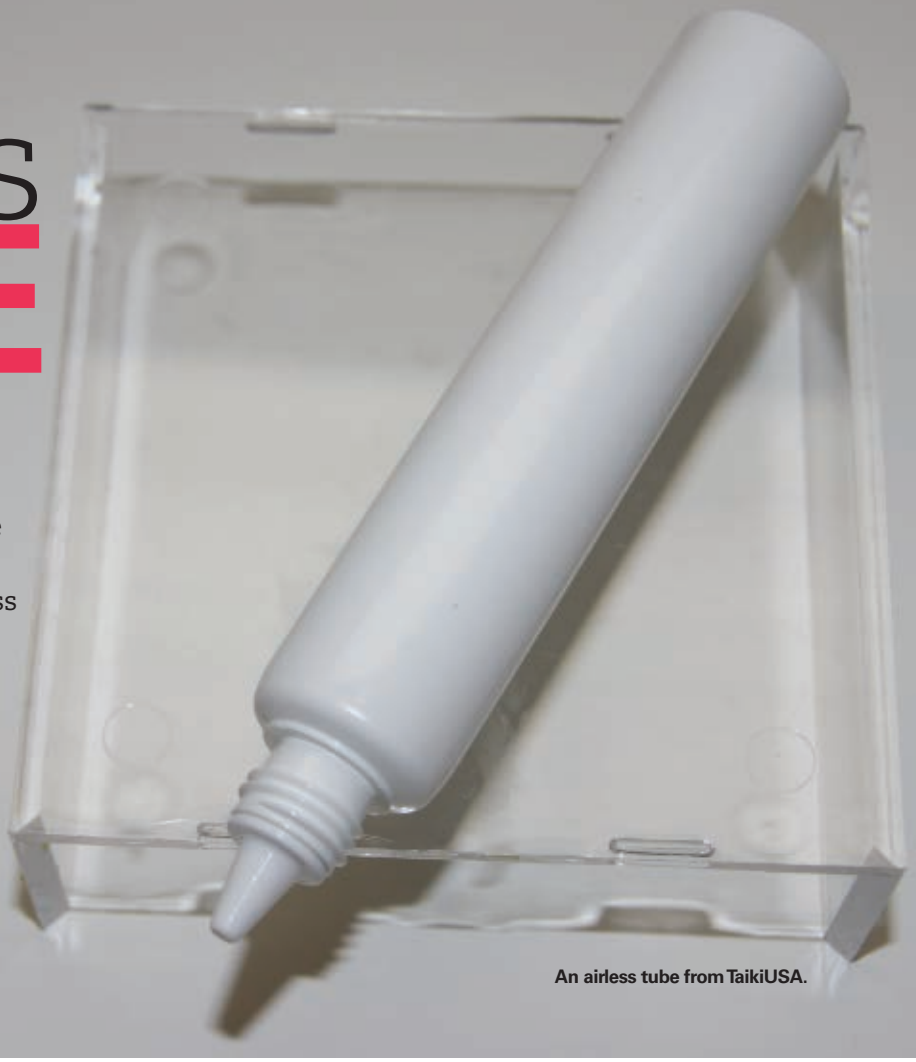
Written by Leah Genuario, Contributing Editor

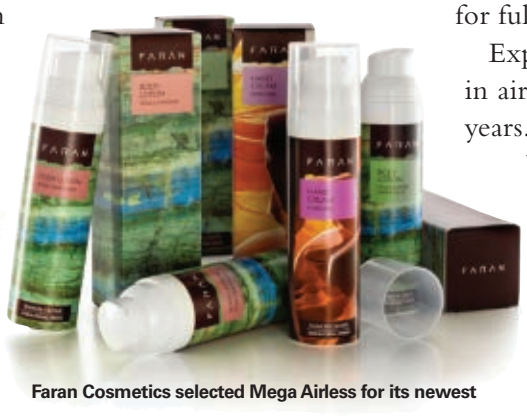
Airless TIME

Many brands are taking advantage of the range of benefits offered by an airless package. Choosing airless for the right reasons may benefit your brand significantly.



An airless tube from TaikiUSA.

IT IS EASY TO BE INSPIRED BY nature when your country's largest nature reserve sits in the backyard. Israel-based Faran Cosmetics, located in the Negev desert, borrows inspiration for its formulations from the nearby Ramon Crater. Carved by ancient waterways, this geological wonder showcases a wide array of rock colors and curious forms. True to its location, the company's EcoCert certified Nature Scent products are paraben-free, utilizing a blend of organic and natural ingredients aimed at promoting health, appearance and overall well-being.



Faran Cosmetics selected Mega Airless for its newest line of hand creams and body lotions.

In order to protect its creations while upholding the ideals it was founded on, Faran Cosmetics turned to Mega Airless, choosing an all-plastic airless pump design. Mega Airless' Mezzo pump was engineered for full recyclability.

Experts have seen a notable increase in airless packaging requests in recent years. The packaging star offers many benefits appealing to brands, with a large driver being a growing trend related to formulations.

"Airless systems offer increased stability and shelf life, as well as increased rate of restitution that traditional packages don't typically offer.

Another advantage with airless packs is that consumers can dispense the product in any position," explains Jan Wilson, vice president of development for TaikiUSA, Inc. The company has recently added airless products as an extension of its liquid dispensing category, currently focusing on airless tubes and airless pump tubes with plans to soon expand product offerings.

However, despite benefits, sometimes the choice of airless packaging comes down to pure necessity. "Given the increased interest in lower preservative formulations and paraben-free options, airless systems can then become necessary packaging considerations," Wilson adds.

Not all brands choose airless for purely functional reasons, however. There is also a branding component to the dispensing system. Today's airless systems "communicate to the customer brand prestige and increased value. Like most packaging, it is a matter of scale as to whether or not the higher cost of an airless package for purely esthetic purposes justifies the investment," says Michael Daum, director of sales and marketing for personal care packaging supplier VPI.

Brief Tutorial

Before airless technologies existed, brands chose atmospheric, or dip-tube, pumps. These pumps, in one form or another, have been in existence since the seventeenth century, says Jim Montgomery, director of technical services for Fusion Packaging, a company that focuses the core of its business on airless packaging. "At the time, it was discovered that air has weight, and high pressure will always move toward low pressure areas. When a dip-tube pump is actuated, it creates a low-pressure area in front of the product inside the bottle near the pump intake. The atmospheric air behind the product moves toward the low pressure and pushes the product in front of it until it is dispensed by the pump," he adds.

Montgomery sees airless systems as a "hybrid" of atmospheric dispensing. In the case of an airless container, however, there is a barrier between the air and the product.

There are two main types of airless pumps. The first and most used is the piston airless system. "A piston airless system uses a molded piston in the bottle, to help push the product out of its package. Airless systems by design create a vacuum. The piston helps maintain that vacuum. The primary benefits are aesthetic and [related to] product evacuation. The biggest challenges are tied to shape limitations—which are typically round or oval—and potentially higher costs than traditional packaging," says Earl Trout, director of marketing, beauty and personal care, for global packaging and packaging solutions provider MWV.

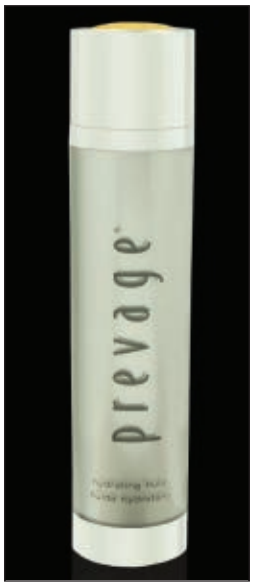
Capturing a small but significant percentage of the airless market, the pouch airless system is also in use today. "A pouch system is made of a rigid bottle containing a soft pouch with an airless pump. When the product is expelled, the pouch shrinks so that there is no air intake inside the pouch," says Jean-Phillipe Taberlet, CEO of Lablabo, a manufacturer of metering dispensers for the pharmaceutical and cosmetic industries, and inventors of the airless pouch system.

Taberlet adds that the pouch system is the optimal airless choice for protecting the most fragile of formulas, because it provides "more efficiency, more protection and the highest level of technical performance." Although it costs more than a piston system, it also overcomes shape and other design challenges associated with piston systems, enabling more choice in bottle material and structural design, he adds.

And while airless systems do an excellent job protecting formulas with few preservatives, Taberlet adds that a no-preservative formulation must go a step further than simply selecting airless. It would need to be manufactured, packaged and filled in a sterile environment. "An airless pack is not a sterilizer and it could be very dangerous to remove preservatives from a formula without a serious study about the microbiological status of the product," Taberlet adds.

Eco-Friendly Not for All

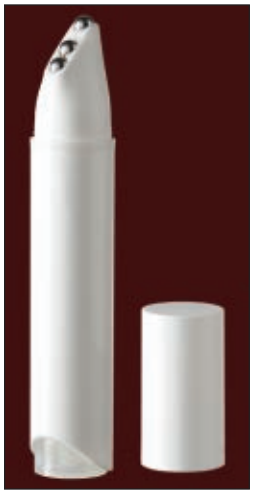
It is interesting to note that brands with natural formulations and few preservatives are a major user of airless dispensers. However, due to their complexity, airless dispensers often have trouble following suit and staying green from cradle to grave. Airless packaging engineers have worked hard to make airless dispensers as green as possible, while still maintaining high performance standards.



The Elizabeth Arden brand recently tapped Fusion Packaging's airless expertise for its Prevage line.

"Sustainability continues to be a buzzword in our industry. Therefore, we continue to innovate, develop and provide packaging solutions around this initiative," says Lesley Gadomski, vice president of sales, Fusion Packaging. The company has made strides in creating components made from polypropylene resin, a recyclable material. In addition, it is offering airless packaging that does not require an over cap. "Our 'twist to lock' actuating package designs not only address the environmental aspect of having one less component to produce, but also provide the brands the ability to promote the advantage of no leaks or spills when the package is in its closed, locked position," adds Gadomski.

The Elizabeth Arden brand recently tapped Fusion Packaging's expertise for its Prevage line. The brand's Hydrating Fluid is packaged in a custom, 50ml twist-to-open actuator, which offers a sleek and modern look while eliminating the need for an over cap.



Cosmogen offers airless packaging featuring a range of applicators, including the Pump'N Triball.

Eric Desmaris, business development director for Mega Airless, sees green attributes as one priority in a holistic approach that also includes a quality end-user experience and supply chain efficiency. To meet this demand, the company engineers 100% plastic pumps that are completely recyclable, Desmaris says.

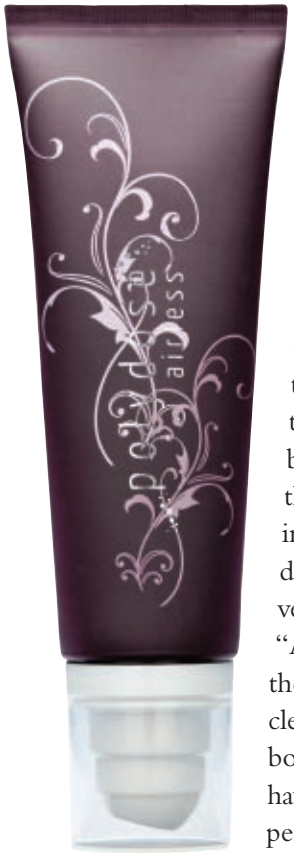
Cosmogen, a complete packaging solutions provider for the skin care and cosmetic industries, offers a Pump'N Range of airless packaging, comprised of four products featuring a range of applicators: Pump'N'Tint, Pump'N Triball, Pump'N Puff, and Pump'N Spatula. "The Pump'N range is precisely an eco-friendly airless system. It combines high performance thanks to a Rexam pump, recyclable materials—polypropylene—and a refillable cartridge which allows saving seventy percent of the packaging," says Denis Richard-Orliange, general manager.

PKG Group, a specialist in airless packaging, has introduced a package called Paper Blow based on the four "R's" of environmental friendliness: Reduce, Re-use, Recycle and Refill, according to Eddie Csaszar, vice president of sales. "The outer bottle and overcap are produced from recycled paper. The inner pouch is an ultra-light polyethylene, while the package is refillable."

PKG Group has introduced an environmentally responsible airless package called Paper Blow.

The results of these eco-friendly initiatives can be significant. MWV helped a customer save 800,000 pounds of plastic per year by switching from its existing pump to its Pearl Airless system. The Pearl Airless and Pearl Mini Airless systems use fewer components, reduce material and eliminate metal completely.

Despite the plethora of new airless products promising green attributes, some experts say that best efforts aside, eco-friendly options are still a challenge to execute in the marketplace. "I think eco-friendly is more of a politically correct attitude than a real request," says Taberlet. As an example, he explains that Lablabo launched an eco-friendly design two years ago, with a reduced number of parts and less materials. However, in the end, his clients "asked for a cap and because of the design, chose a cap made in SAN, which has a nice look but is the worst material for recycling."



Neopac has launched the Polydose airless tube for makeup and a version, *pictured here,* using Softtouch material.

Airless Updates

Besides a nod to the environment, several other trends have emerged.

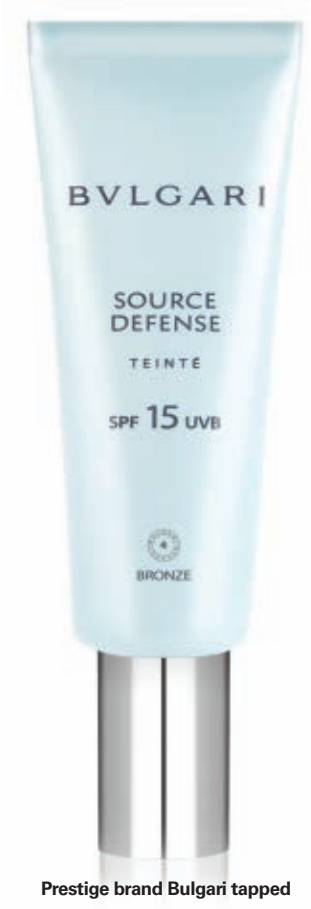
While airless bottles make up the lion's share of airless packages, there has been an uptick in airless tubes. Neopac is a Switzerland-based tube manufacturer serving the cosmetic and pharmaceutical industry. It has launched the Polydose airless tube for makeup and a version using Softtouch material. "At the moment, the market is clearly led by airless bottles, but tubes have made it to ten percent market share of airless packaging in Europe over the past three to four years," says Cornelia Schmid, marketing manager. "We are still expecting continuing growth in this sector."

Neopac also works with Mega Airless to provide airless dispenser tubes. "The airless dispenser tube is an exciting alternative for companies that desire optimal formula protection, enhanced aesthetics and functionality for their product," says Desmaris. "True airless dispenser tube systems protect today's viscous formulations and offer consumers precision dosing, nearly complete evacuation, 360-degree application and a sense of quality that exceeds the simple squeeze tube."

Airless dispenser tubes have additional, less obvious advantages. High-viscosity formulas—the kind often housed in tubes—are viewed favorably by consumers, says Carole Grassi, category manager—cosmetics for Rexam Personal Care, a global airless packaging solution provider. However, she says these types of formulas can be prone to discoloration and drying when used in tandem with traditional tube dispensers. Airless dispensers take care of these challenges.

In response to consumer demand for airless dispenser tubes, Rexam Personal Care has recently introduced the Nea and SP 343 pumps with soft actuation and smooth application, as well as the LX 500 pump for tubes up to 250ml. "They are cost-efficient, designed for high-speed filling on existing equipment, and handle the most viscous formulas with excellent evacuation rates," says Grassi, who adds they additionally project a "prestige aura to consumers."

Nearly complete evacuation is an important benefit of PKG Group's airless pump tube lines, says Csaszar, a feat made possible by the pump engine's strategic placement. It currently offers two lines: Luxefoil, a laminate construction line with maximum barrier properties, and a standard extruded tube available in coex or mono layer construction.



Prestige brand Bulgari tapped Rexam Personal Care for an airless dispenser tube.

Cosmetic Packaging Resources, a packaging manufacturer and distributor specializing in offering airless packaging with low minimums, is in the development phase of introducing dispensing tubes to its portfolio. "It's an up and coming area," says Cyndi Mathews, director of sales. "They've been around for a couple of years, but the cost is prohibitive because there's a secondary process involved with a tube that isn't there with a bottle. In time, however, as more people transition to airless tubes, the cost will move down."

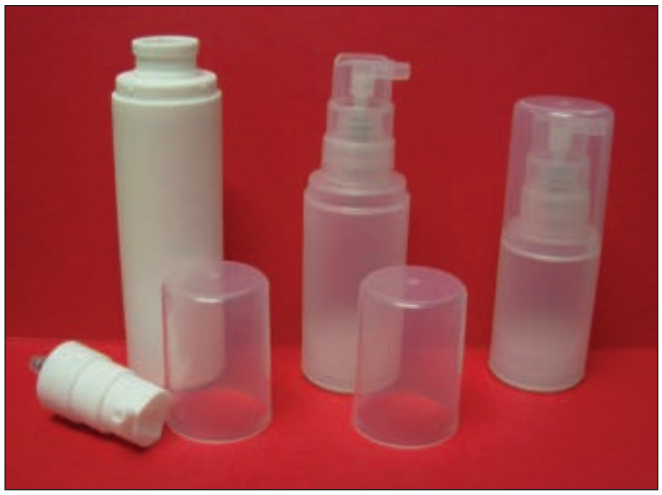
Airless tubes aren't the only hot topic making news in the market. Csaszar also notes another trend regarding airless, completely unrelated to packaging form: "We are currently in the process of airless packaging moving from class to mass. The mass marketers have watched the luxury skin care market grow rapidly over the

past few years, and now must raise the bar on their packaging offerings to meet the demand. We, on the other hand, are in the process of building higher speed, more productive lines to lower production costs to meet the growing demand. The resulting costs will end up somewhere in between current mass packaging costs and existing packaging costs."

It makes sense that airless pumps are a popular choice among prestige brands." The benefit clearly is the evacuation, size impression and also the beauty of the package itself," says Vonda Simon, CEO/president of SeaCliff Beauty Packaging and Laboratories, a turnkey provider of custom and stock packaging, custom formulation, contract manufacturing and fulfillment. "On half-ounce and one-ounce containers, the size impression is incredible compared to a regular tube or bottle and pump, so airless is a very popular item that we sell. Since these sizes are popular for day creams and eye creams and are sold for a higher price, the size impression is important and many brands are moving to airless," she adds.

An airless package from SeaCliff Beauty Packaging.

Luxury skin care has been a main user of airless technology, but many airless component manufacturers now report a blurring of the lines between prestige and mass clients. "We actually experience that not only luxury brands buy this, but also—and mainly—those brands that need the dosing function," says Schmid. "Our customer range reaches from mass market hair serums through luxury brands offering sensitive facial cream or makeup."



Arrowpak has introduced a line of polypropylene airless bottles well-suited to mass market sales. Shown here are the 20-, 30- and 50ml bottles.

In response to this ongoing trend, Arrowpak has sourced a line of polypropylene airless bottles ranging in size from 5- through 250ml. "This line is perfect for mass market when you not only want the airless technology, but also need an inexpensive package," says Jim Slowey, VP of sales.

Do I Need This?

With all of the buzz surrounding airless packaging, brands still using traditional dispensing methods may wonder if it's time to jump on the airless bandwagon. Trout offers this checklist of questions for brands wondering if now is the right time to switch:

Is your current pump performing? If it is, Trout advises a closer evaluation of whether you are using the right pump for your formulation. A switch to airless won't help performance if the pump you are using does not work with your product.

Is the consumer able to dispense the entire product? "If your formulation has a higher viscosity or sheer rate, then an airless package might increase her satisfaction with your brand and the perceived value she is seeking," Trout adds.

Do you have a competitive threat from an airless package? If a key competitor is transitioning to airless, it may be a good time to further invest in your shelf presence. Trout says brands should consider all options to offer a competitive package, such as more decoration, another packaging format or switching to airless.

MWV works strongly in the skin care industry and Trout sees an opportunity for brands in this space. He says, "The skin care market is still dominated by traditional dispenser packages and tubes. Airless is a significant and growing part of that market. Choosing airless for the right reasons will benefit your brand significantly."