



airless at all retail levels

MARKET TRENDS, SUCH AS THE GROWING MASSTIGE ARENA, ARE PUSHING DEMAND FOR AIRLESS DISPENSERS.

Airless packaging continues to show up in all areas of skin care, including natural and organic products, mass-market and prestige facial products, and even body care products.

Initially, it may seem surprising that in these tough economic times, beauty brands are still investing in the sophisticated technology of airless. However, a couple of key skin care product trends are driving the need for airless packaging: advanced antiaging ingredients requiring protection from oxygen and contaminants, and natural and organic formulas looking to reduce their level of preservatives and thus requiring a more-protective container.

Another trend putting airless in demand is the growing masstige skin care market, with brands such as Olay now selling higher-end skin care products on mass-market shelves.

More-Affordable Airless

“What’s been happening, really in the last 12 to 18 months, is that the airless market has trended to include mass market and masstige,” says Earl Trout, director of marketing, personal and beauty care, for MeadWestvaco (Glen Allen, VA). With this in mind, suppliers such as MeadWestvaco are introducing more-affordable airless dispensers.

In 2007, MeadWestvaco acquired Keltec Dispensing Systems. Keltec’s airless dispensers feature rolling-bellow technology and fewer parts that make the dispenser more cost-efficient.

MeadWestvaco also offers two other rolling-bellow dispensers, its top-fill Pearl

Fusion Packaging’s Kurve airless dispensers, pictured with matching acrylic Kurve jars, feature tapered contours not typically seen on piston-airless dispensers.



Airless and bottom-fill Luna Airless dispensers. Olay uses the Pearl Airless for its Olay Total Effects line. As with Keltec, the cost-efficiency for both Pearl Airless and Luna is made possible thanks to a reduced number of components. “With Pearl Airless, we’ve taken something that’s typically a 10-piece pump and changed it to a five-piece pump, thanks to rolling-bellow technology,” says Trout. “The rolling bellow replaces six functions of a traditional pump. So by nature, reducing the number of components offers a better cost point than a traditional pump.”

In a few months, MeadWestvaco will launch smaller 15- and 30-ml versions of Pearl Airless, called Pearl Mini Airless. “It’s targeted to brands that are looking to extend again from a larger mass-market

package to something that might be a little more masstige,” says Trout.

MeadWestvaco’s Luna dispenser is a bottom-fill version of the Pearl Airless and has even fewer components. (Pearl Airless is a seven-part package, whereas Luna is a five-part package.) Trout says that Luna Airless has been used more in Europe so far.

Another supplier, PKG Group (Somerset, NJ), is also working on developing more-affordable airless dispensers to accommodate mass-market brands. “A few years back, airless systems were really dedicated to the upper echelon, the true prestige skin care brands. Now, we’re finding an increased need by mass marketers for airless systems,” says Benny Calderone, sales director for PKG Group. “We’re

Airless Tubes

Popularity for airless tubes continues to grow—although more so in Europe than in the United States.

Rexam (Purchase, NY) continues to supply an airless dispenser that can be snapped onto a tube neck. Clarins has been a fan of this package, introducing several launches in it. In the United States, Victoria's Secret is another customer using it.



Virginie Lemeunier, product manager, lotion, for Rexam's personal care division, says that the dispenser prevents air from entering the tube. The tube collapses slightly as product is pumped out, instead of letting air back in. The airless tube offers higher product evacuation "compared with a regular tube, which you have to press on in order to get everything out," she says.

Mega Pumps (Eatontown, NJ) has partnered with tube supplier Hoffmann Neopac (Oberdiessbach, Switzerland), putting its airless dispenser on Neopac's laminate tubes. The laminate tubes' foil barrier offers superior protection of sensitive products. "The foil barrier is the absolute best guard against moisture vaporization and oxygen transmission," says Terence Sweeney, director of sales for Mega Pumps.

creating lines that are more economical but that also take into consideration the manufacturing aspect—packages that are capable of being filled at high speeds and that have fewer components that require assembly," adds Calderone.

Such components include PKG's top-fill Jumbo and Slim Jumbo dispensers, which are single-wall piston-airless containers that are all polypropylene except for a metal spring in the pump located outside of the fluid pathway. Both ship in

only two pieces that are easy to assemble.

Cost-efficient airless technology benefits everyone in the skin care industry—not just mass-market companies. Ray Mauro, manager of product development for Origins, says, "Right now, airless packages are very expensive, and people may tend to shy away from developing an organic formula for that reason." Last year, Origins launched its USDA-certified Origins Organics skin care line, with some products in airless-

bag dispensers from Lablabo (Anness, France).

"You're going to see different variations of airless packaging being introduced that are a little less expensive," Mauro predicts.

Upscale Looks

In the prestige skin care market, aesthetics remain extremely important.

Shape options are somewhat limited when it comes to piston-operating airless dispensers. A container's walls must be somewhat straight to allow the piston to rise as product is dispensed. Nevertheless, suppliers are working on developing more-elegant profiles for containers, taking them beyond the standard cylinder.

Fusion Packaging (Dallas) has launched Kurve, a piston-airless bottle whose sides taper gently toward the middle of the bottle. "You've seen round airless bottles and you've seen square airless bottles, but you've never seen an airless bottle with curves like these," says Derek Harvey, cofounder of Fusion Packaging. "I am constantly asked by skin care companies why all airless bottles are either round or square. Kurve is the answer they've been searching for."

Suppliers are also raising the bar when it comes to cylindrical dispensers, offering more-attractive designs. DieterBakicEnterprises' (Munich) new Pan dispenser—the supplier's first airless design—matches the contemporary look of the rest of DieterBakic's packaging line.

Cospack (Edison, NJ) offers three new airless dispensers, named Rio, Kobe, and

Green Airless

While development of green airless packages has been slow, a few companies have made moves to offer more eco-friendly options.

Promens (South Bend, IN) has launched an airless-bag dispenser made partially from recycled materials. The dispenser's bottle contains the recycled material. The multilayer coextruded bottle has an external layer of recycled PE. The bottle's inner layer is made from virgin material. The bottle's pump is by Rexam (Purchase, NY).

The bottle's inner AirFree pouch comes into direct contact with the product and is therefore made from virgin materials—virgin PE, adhesive, and EVOH barrier material.

PKG Group (Somerset, NJ) has taken a different approach to eco-friendly airless packaging. The supplier has launched 100%-PCR paperboard overcaps for its Jumbo and Slim Jumbo airless dispensers.



PKG Group now offers PCR caps for its Jumbo and Slim Jumbo airless dispensers.



Cospack's Miami airless dispensers

Miami—each with a distinct design. “We’ve found that the way an airless dispenser looks is the number-one factor for our clients in choosing a particular model,” says David Hou, marketing director for Cospack. “Our clients know that they can expect a quality functional airless dispenser from us. The choice for them is to select a model that matches the aesthetics of their brand. The more design options we can offer them, the more likely they are to find one design that fits their brand.”

Skin care brand Rejuve MD chose a piston-airless package with a dispenser head that rises when customers rotate the bottle’s neck. “It has a very elegant, clean look to it,” says dermatologist Alex Khadavi, developer of the product line. “It actually took us more than a year to find the exact bottle and the right manufacturer that we wanted to use. We went through a number of manufacturers’ technologies, which were similar, before finding one that worked well.”

He adds, “For a lot of airless packages, there is a failure rate of 5 to 10%. If you buy an airless package from Europe or South Korea, they’re very high end. We tested a lot of airless dispensers from China, however, and they seemed to have very high failure rates.”

Bells and Whistles

Higher-end dispensers often have additional high-performance features.

Rexam’s (Purchase, NY) Prodigio dispenser carries the supplier’s Clean-Point self-sealing orifice. After dispensing product, Prodigio’s actuator channel mechanically closes, preventing residual product from accumulating at the mouth of the orifice. This feature also prevents air from entering the orifice, enabling the airless package to further protect products from air and contaminants. “You don’t get the drying out of product that you typically see around a dispenser’s orifice,” says Virginie Lemeunier, product manager, lotion, for Rexam’s personal care division. So far, she says, two European companies have launched products in Prodigio.

Mega Pumps (Eatontown, NJ) also offers a self-closing actuator on its all-plastic airless dispensers. A membrane in the pump’s orifice automatically seals once a product has been dispensed.

Other features of Mega Pumps’ dispenser lend it to superior performance. “For one, it is an all-plastic dispenser,” says Terence Sweeney, director of sales for Mega Pumps. “Most other airless dispensers have a metal spring. And some of the ones produced in Asia are actually converted tube pumps. Suppliers just remove the dip tube from a pump and attach the pump to a container that has a piston on it, whereas the Mega Pumps airless dispenser was designed to be airless from the start.” He says that the converted pumps are still considered airless, but they don’t always generate enough of a vacuum to pull the piston up.

Mega Pumps’ dual-valve system is self-priming, meaning that the dispenser can pump product through any air pockets. “It has a valve above and below our plastic bellows, which allows the pumping through air. It doesn’t need fluid to operate, whereas single-valve systems need fluid in order to pump product,” he says.

Product Filling


Airless packages offer additional benefits when it comes to product filling.

MeadWestvaco’s Trout says that



Rejuve MD’s airless packages feature a dispenser head that rises when customers twist the bottle’s neck.

airless packages are especially well suited to highly viscous skin care products for the body, such as body butters. “Especially for something like a body butter, you want to have an airless package because it can support high-viscosity formulations better than a standard pump,” he says.

Airless packaging may also help maintain decorative product fills. One popular fill design is a swirl. Airless technology can help a product’s swirl design maintain its form as product is being dispensed. (Nonairless dispensers can also be used.) Mega Pumps clients such as DDF and Olay Definity are taking advantage of this benefit that airless offers. 

A Glass Airless Package

Lumson S.p.A. (Capergnanica, Italy) unveiled an industry first at April’s Cosmoprof trade show—an airless dispensing system in a glass bottle. Lumson calls the package TAG—Techno Airless Glass.

The company kept specific details about the packaging confidential until the trade show, so no other information was available by the time this article went to press. However, more details about the TAG dispenser will be available in the May/June issue of *CPC Packaging*.