



FANTASIA[®]

COLORS AND SPECIAL EFFECTS FOR ENGINEERING THERMOPLASTICS FROM BAYER MATERIALSCIENCE

e Newsletter

Welcome to the Fall '05 installment of the Fantasia eNewsletter. This edition focuses on AURA color infusion technology, one of the five Bayer Fantasia technologies, as well as brings you up to speed on the latest Fantasia news.



AURA[®] Color Infusion Technology: Amplify Your Designs

What is AURA?

Simply put, **AURA[®]** lets you color already formed plastic parts. These parts can be already molded, extruded or thermoformed parts made from clear, translucent or opaque resins. Being part

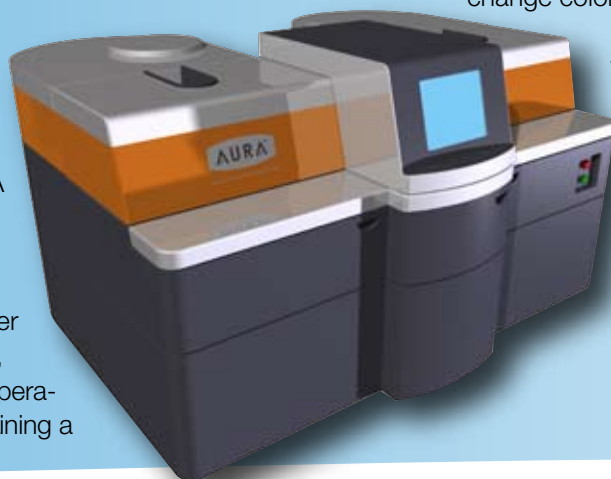
of Bayer MaterialScience's Fantasia line, you can expect a lot from AURA and get even more. Read on to learn the ins and outs of AURA uses, technology, existing applications, and how AURA can amplify your designs.

How does AURA work?

We call AURA color infusion technology because dye penetrates into the part, eliminating potential color rub-off. Another way to think of AURA technology is to think of it as a "nanoscale coloration" process. Dyestuffs, which are very small (nanoscale) colored molecules, are induced to enter into a part through the AURA process, adding color to it. The color infusion operation takes place in a heated bath containing a

mostly aqueous dispersion of dyestuff. The part to be colored is placed in the coloring solution until the desired depth of color is achieved, which can take from a few seconds to a few minutes. This means that customers have control over the coloring process, making customizing the end color a cinch. In order to enable this degree of control, AURA coloring equipment is designed to the customer's specifications and is set-up in-house to allow the customer to

change color easily and as frequently as they desire. Alternatively, customers who do not have AURA equipment installed in-house can have their parts colored by AURA Color Converters – companies who have the specialized AURA color infusion equipment and can color parts manufactured by other companies.



How can AURA be used?

Look around your world and you'll see a myriad applications that could be colored using AURA color infusion technology – some examples are furniture, lighting, small appliances, or electrical components. The AURA coloration process can also add color, character and style to countless other applications like sheet, film, signs, POP displays, or even ophthalmic and sun wear lenses.

What has AURA been used for?

AURA technology made its commercial debut in Sprox, Inc.'s, Sounddog wireless tabletop audio systems. The Sounddog system uses wireless technology that allows patrons to select and listen to any (up to eight) of a bar or restaurant's programmed TVs (which are usually muted) right at their table. Using AURA technology allows Sprox, Inc., to customize the Sounddog system housing to meet changing themes of restaurants and bars. You can find the Sounddog systems at the FOX Sports sky boxes at airports throughout the United States.

For more information on what the future holds for AURA color infusion technology, check out the [License to Color](#) article on Page 2.

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Now that you know what AURA is, how it works and where you may have seen it, read about the exciting future of AURA in the marketplace.

LICENSE TO COLOR

Bayer MaterialScience LLC has recently announced that 3form and Replex Plastics have licensed AURA color infusion technology. These agreements represent additional licensing of AURA technology in the United States. In April 2005, Bayer MaterialScience AG signed an AURA license agreement with Kling GmbH. Read on to find out more about these innovative companies and how they plan to transform their applications with the AURA coloration process.



3form

3form, the industry leader in both translucent materials for architectural applications and the services that support their creative use, has recently signed an agreement with Bayer MaterialScience to license AURA color infusion technology. The Salt Lake City, Utah, based company is recognized worldwide for unique architectural solutions and manufacturing materials that are visually pleasing, environmentally friendly and safe. 3form products range from resin panels ready to be shaped by your imagination to ready-to-use systems and comprehensive hardware. 3form's recent AURA licensing agreement with Bayer MaterialScience allows the company to add custom colors to their existing applications,

expanding the company's current palette from 50 colors to limitless color possibilities.

"3form loves the ultimate flexibility to add color through the AURA process," said Ray Goodson, 3form Chairman. "3form is in the mass-customization business and AURA technology is perfectly suited for this business model."

3form will have AURA equipment by the end of the calendar year.

For more information on 3form, visit <http://www.3form.com>

Replex Plastics

Replex Plastics, located in Mount Vernon, Ohio, has recently signed an AURA licensing agreement with Bayer MaterialScience. As part of this agreement, the company, a supplier of high-performance, optically correct domes, mirrors and formed plastic parts, will be able to use AURA technology to color their product line and will also be an AURA Color Converter (ACC) – allowing them to use AURA color infusion technology to add color to parts manufactured



by other companies. Replex Plastics is currently evaluating a number of applications that they can enhance using AURA color infusion technology.

"The Aura technology is a needed breakthrough in the manufacturing of custom plastic parts," said Mark Schuetz, President of Replex Plastics. "The ability to custom color post formed parts consistently and accurately will broaden the use of color and revolutionize the plastics industry."

Replex Plastic's licensing of AURA color infusion technology is part of the company's commitment to innovative products and lean manufacturing capabilities. In addition, AURA supports Replex's goals to open new markets and lower costs on short production runs.

For more information on Replex Plastics visit: <http://www.replex.com>

Kling

The first company to license AURA technology in Europe, Kling GmbH, is located in Birkenfeld, Germany. The company designs and produces high-quality POP market displays for selling jewelry and watches. Kling is devoted to using forward-thinking technology like the AURA color infusion process to continue a tradition of ambitious design, quality and innovation.

For more information on Kling, visit <http://www.kling.de/>



Why choose AURA? continued from previous page

The AURA coloration process adds speed and flexibility to production. Because customers control the customizable AURA process in-house, the result is true coloration on demand. This means that customers can monitor color, design and fashion trends and then respond to these trends by adjusting the color and style of their applications in almost no time at all. In addition, coloration on demand eliminates the requirement for minimum orders/run quantities, helping to reduce obsolete inventory and related costs while increasing speed to market. **Quite simply, AURA color infusion technology is ideal for short-run, made-to-order, customized thermoplastic parts and is especially beneficial for applications that need to be produced in a variety of colors.**

Contact a Fantasia representative to find out if AURA technology can amplify your next application. For more information about AURA color infusion technology visit, www.BayerFantasia.com



AURA – Infusing the World with Color

As part of Bayer MaterialScience LLC's Fantasia marketing initiative, AURA Color Development Labs are working around the clock and around the world. Established in close proximity to key markets, the Pittsburgh, Pennsylvania; Filago, Italy; and Shanghai, China labs are committed to addressing evolving trends and producing high-quality color infusion technology.

Fantasia's regional marketing representatives, strategically positioned at these same locations around the world, are available to answer questions about AURA and the four other Fantasia color/effect families in the Fantasia program and can explain how the different technologies can enhance your next application's appearance.

The latest color trends exposed: BayerFantasia.com

Let your colleagues know that they can receive the latest news from the Fantasia color and special effects program by subscribing to Fantasia eNewsletters at www.BayerFantasia.com.

If you're reading this on the Fantasia Web site and are not a subscriber, don't forget to sign-up to receive the next Fantasia eNewsletter in your inbox.

In case you missed them the first time around, or want to revisit past Fantasia eNewsletters, addressing topics like special effects and color trends, they are archived at www.BayerFantasia.com.



Leda® reveals six new color effects

Six new LEDA® effects join Bayer MaterialScience LLC's expansive Fantasia color and special effects program. Following the design and fashion industry's hot trends for 2005 and beyond, the new LEDA compounded color effects options for Makrolon® polycarbonate can be described as belonging either to the Fashion Forward or Sophisticated Luxury categories.

Tangerine, Flamingo and **Wicked** belong to the MINA® metallic family. These Fashion Forward color effects are a bright orange, vibrant pink and intense light green, respectively.

New additions to the Sophisticated Luxury category belong to the metallic appearance MINA family, as well as the color-travel and pearlescent appearance MIRAGE® family. They include the lustrous and iridescent metallic and color-travel appearances

exhibited by a deep chocolate brown **Bittersweet**, a member of the MINA family, and a purple/dark green **Borealis**, and a pink/brown **Desert Rose**, members of the MIRAGE family.



We Were There – IDSA National Conference and Design Gallery



Never ones to miss a meeting of visionary designs and designers, Fantasia representatives were on hand for the Industrial Designers of America (IDSA) National Conference and Design Gallery in Washington D.C. from August 24-27.

The conference theme was "Rethinking Design for the Real World" and there was significant buzz about the practical application of responsible design following the keynote address by William McDonough, co-author of Cradle to Cradle. Industrial designers and up-and-coming design students expressed interest in the wide range of possibilities Fantasia offers to make their next products more appealing. The growing demand for good design in everyday items is a welcome force to plan for, and industrial designers are at the forefront. For more information on IDSA visit: www.idsa.org



Skabardonis named Chairholder in Color Marketing Group

In May 2005, John Skabardonis, Fantasia & Consumer Markets Manager North America, was granted Chairholder status in the Color Marketing Group (CMG). CMG is a not-for-profit, international association of 1,300 color designers involved in the use of color as it applies to the profitable marketing of goods and services. In addition, Skabardonis is Vice Chair of CMG's TechKnow committee. TechKnow is a platform for teaching new technologies in various fields of application, as well as the place for knowledge exchange in colors, surfaces and materials.

This Just In...

The latest AURA licensee is Apollo Color Coating, based in Roseville, Michigan. Apollo has decades of experience in Automotive applications and the decorative finishing industry and plans to also be an AURA Color Converter (ACC). Look for more details in the next Fantasia eNewsletter. For more information on other AURA licensees, read about them in [License to Color on Page 2](#).