

Attractive packaging is usually the first line of strategic marketing in order to maximise sales for organisations. However, in addition to focusing on the look of the product, organisations today also want to assure consumers of the authenticity and quality of their products. Brands strive to adopt various innovative mechanisms to make their products more secure. One of the major avenues to achieve this is with the use of holographic solutions and labels.

What are Holographic Solutions and Labels?

Holography is essentially a technique that allows the material to have an iridescent effect giving stunning rainbow-like images to the viewer. These images are completely customisable and can store a plethora of information like the manufacturing date, batch number or any other information that the supplier may choose to store - all in a single holographic image, instead of multiple labels. Moreover, they are visually appealing and can be made highly secured with attractive colour combinations and patterns, making them impossible to replicate.

Holographic labelling solutions help to protect products from the threats of counterfeiting and ensure that the product outshines on the retail shelves and reaches the end consumer in its most pristine state.

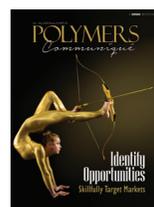
How does Holography Secure Product Packaging?

Due to advances in holographic technology, holographic solutions offer myriad features that not just facelift the overall look of the packed product, but also alarm about the unwanted acts the pack may have suffered at any stage of handling. Holographic packaging



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Market Trends in Holography

The demand for holographic product packaging and labels is expected to witness growth momentum in the developed and developing nations. It is encouraging to see a rise in purchasing power of consumers that will prompt affordability of holographic solutions by brands that will help them earmark the legitimacy of products for the end consumers, and fight the fakes.

can make a product come to life in the fiercely competitive world and can protect the brands from fakes or look-alike products.

Enhance the Visual Appeal

Today, brands are aggressively relying on holographic solutions to make their products stand out on the retail shelves and catch the consumers' attention. The holographic solutions used by packaging manufacturers and brands are made by integrating a wide variety of eye-catching colour combinations, which can be attractively patterned, differently shaped and sized to suit the product packaging requirements. Holographic solutions can make a product look unique, exclusive and visually aesthetic, allowing brands to be easily identifiable and different from the others. The superior and creative finishing adds an element of premium quality giving a sense of pride in owning the product.

Holographic solutions are economically priced and can be incorporated into the product packaging without significant addition of costs, given the quantum of benefits they provide.

Intelligent Labels

Holographic labels and solutions not only enhance the overall look and feel of the product, but also open a world of possibilities and added functionalities. Subsequently, these intelligent labels and solutions can store customisable information as required by the brands and consumers. They boost supply chain performance monitored with a linked digital bank of information that could provide information useful to any stakeholder of the product, such as information about product development, packaging journey and so on. It acts as direct communication between the consumer and the brand.

Today, beyond aesthetics, the scope of holographic solutions in packaging is growing manifolds. Due to its traceability that helps trace reverse logistics for the e-commerce sector, the legitimacy of transactions

can be assured, which is helpful to prevent unfair business practices and fraudulent returns.

Enabling Authenticity

Holographic solutions are high-quality, water-resistant and heat-resistant solutions that ensure no deterioration during the course of transit. Holographic stickers have strong adhesion and their tamper-evident feature is a yardstick for authentic transactions. Certain holographic labels are self-destructive

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“Some luxury brands have introduced holograms in which the image forms into something else at a different angle, which could be a logo or any other authenticating image. Such unique presentations give an ultra-premium appeal to the packaging.”

and trace features that can help users generate unique sequential, encrypted or random serial numbers. It also helps to identify and mark products overtly or covertly, either via special self-adhesive labels or directly onto the product using a variety of print technologies. This enables holograms to be used for a wide range of authentication and brand protection roles.

Holographic products such as QR codes, RFID tags, barcodes and other hidden patterns can create a valuable digital bank. This, in turn, can be used not only for product identification, but also as an integral part of the supply chain which helps in product tracking, routing and authentication.

It gets even more interesting to note how the information stored on holographic labels is getting more and more interactive while being creative. With growing product packaging compliances, many product packages now have to include detailed information about the ingredients and instructions on how to use the product. This creates a problem for smaller-sized products with smaller packaging. Here, a technology called lenticular animation comes to the aid. This technology allows a large amount of information to be shown depending on the angle at which the lens is held to view the package. This helps vastly in adhering to international information regulations despite space constraints.

Holograms have refreshed and reinvigorated brands with their advances in visual technology. Holograms can now be incorporated into packages to display stunning designs. Some luxury brands have introduced holograms in which the image forms into something else at a

different angle, which could be a logo or any other authenticating image. Such unique presentations give an ultra-premium appeal to the packaging. A new generation of optical structures is emerging with distinct visual effect features - which are easy to identify, yet extremely difficult to simulate - thus protecting brands from counterfeiting.

Holographic labels by nature are tamper-evident as they provide clear visual signs of any tampering action. Along these lines, an important innovation is the hologram security seal. When opened, the discreet white seal on the box's edge irreversibly turns holographic - ensuring that the box has been opened for the first time.

Growth Ahead

An intriguing future where shoppers can virtually talk to the products on the shelf is getting closer with the development of a new concept that adds a human hologram to product packaging. A recent technology that uses augmented reality to project the ultra-realistic hologram from within the product packaging ensures seamless interaction between brands and consumers. With the advent of such technical upgrades, the consumer need not wait for the salesperson in the store to address their queries, as the consumer can now rely on interactions with the tiny human hologram. The inbuilt tool is activated using a smartphone and the hologram can be viewed through the mobile phone camera. This technology is serving as a self-help handy kiosk for intelligent and data-curious consumers.

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in peeling, and prevent any malpractices that could eventually lead to losses. Due to the complexity of printing and incorporation of information, they are practically impossible to replicate, thus information can be tracked and monitored at any point of time to ensure the authenticity of the product.

Holographic solutions include solutions like QR codes, RFID tags, labels etc. that can be used on flexible packaging, cardboard and other surfaces. The holographic features are incorporated into a single label, making them an important tool in product enhancement by adding a dimension of security and distinctive visual appeal. Security authentication elements make it impossible to replicate the design and stored information, thus making duplication of products impossible.

Holographic labelling has proved to be a frontline weapon in the battle to thwart counterfeiters. This innovative technology helps tackle the menace of counterfeited goods and is an essential aid in helping consumers check for authenticity.

Emerging Trends in Holography

With the advent of e-commerce, the need to ensure the authenticity of products is of paramount importance. Holographic technology offers track