

Optimizing Visual Impact of Decorated Hygiene Products

Videojet Application Note

➤ The Challenge

As personal hygiene companies become progressively more focused on optimizing the overall look of their products to impress customers, they increasingly look to product decorating solutions such as flexographic and digital printing. However, unintended variations in color and design can have a negative impact on brand perception and customer buying preferences.

➤ The Videojet Advantage

Videojet provides targeted solutions to specifically address the product decoration challenges of personal hygiene converters.

Videojet has a large installed base of inline digital printers in the personal hygiene industry, covering key applications in feminine care, baby care and adult incontinence.

Videojet's digital BX system delivers a proven, flexible solution ideal for large brands as well as smaller regional brands and private labels.

With unrivaled ink and application expertise, Videojet helps you make the right decoration decision for your applications.

What Shapes the Visual Perception?

There are several key factors at work that contribute to visual perception of decorated products:

Quality. Sometimes the quality imperative is equated to image resolution. While resolution is important, it is not the only factor to consider. For instance, an ink's color interaction with the product substrate can greatly impact an image's visibility and perceived quality. Ink suppliers, who have advanced development capabilities and the ability to match specific colors requested by the brand owners, will be advantaged against their generic competitors.

Other considerations include image depth and contrast. Some brand owners are looking for bold images that will capture the attention of the consumer, while others prefer a subtle design to complement the overall brand message. The various looks can be achieved by modifying the intensity of the image. Digital systems for decoration accomplish this by precisely placing dots of colored inks in desired areas of the product.



Integrity. Image integrity refers to the consistency of the decorated image. This is critical as brand owners strive to create a uniform and replicable appearance of their products.

Personal hygiene production lines are marked by a high degree of environmental dust created by the source materials used in the converting lines. Some materials, such as nonwovens and fluff pulp, are especially difficult to handle due to the fibers that detach from the substrate and potentially clog the impression roll of a contact (flexographic) printer.

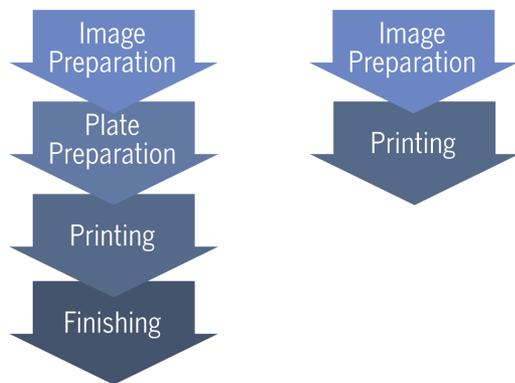
To combat this dust and debris, digital ink jet printers employ a non-contact method to deliver a clean image onto the material. Since the print head does not touch the substrate and positive air further aids in creating separation from debris, digital systems enable the decoration of a broad range of substrates. Image integrity benefits from this non-contact approach.

Another key to image integrity is the use of quick drying inks and fluids. They help minimize blurring and smearing on the product which can happen as the decorated product moves down the converting line and comes into contact with equipment and other products. Fast-drying inks and fluids use a mixture of solvents to achieve dry times of less than one second on common non-woven materials, thereby significantly reducing the chance of ink smudging and achieving image integrity.

Precision. Product decoration is often used in tandem with embossing. Together, these two methods create a powerful perception of a value-added product. However, it is paramount that the decoration matches the embossed area to realize the full benefits of the pairing. Precise registration is crucial. The decorating systems should automatically adjust to changes in production line speeds as well as any variability in product length.

Flexibility. As with other manufacturing industries, the personal hygiene industry has experienced the need to maximize production output while allowing for increased flexibility in product demands. In practice, this means that there may be multiple products manufactured on one production line, each with a significantly shorter run than in the past. The proliferation of product segments serving various market and regional needs has significantly heightened the need for flexible manufacturing solutions. This growth has ultimately impacted the consumer experience as customers have begun to expect fresh stimulation and targeted communication. Digital decorating systems offer this level of flexibility by minimizing time-consuming and costly image preparation as well as eliminating plate preparation and finishing (e.g. curing or drying) which are customary for flexographic printing.

Decoration Processes: Flexographic v. Digital



Comparison of typical flexographic and digital printing processes

The Bottom Line.

Quality, integrity, precision and flexibility are the four key elements impacting visual perception of decorated products. Videojet has spent years working with personal hygiene companies to understand their needs and deliver solutions that improve their business results. Whether your challenge is implementing product decoration for the first time or improving your current process, Videojet's team of chemists, engineers and application specialists can identify and design the right solution for your business.

Ask your local Videojet representative about a production line audit, sample testing in Videojet's specialized sample laboratories, or for more information.



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