



## Application Note



# Thermal Transfer Overprinting Get more out of TTO

## The Challenge

Many baked goods and cereal companies carry a variety of flexible films for their bagging and flow wrapping lines. Companies can use different films on the same line for different product flavors, different customers, and potentially different countries and languages. Managing these different films leads to additional cost for the company. This application note explains how Thermal Transfer Overprinters (TTO) can be used to reduce the need for so many varieties of pre-printed film.

## The Videojet Advantage

Baked goods and cereal companies look to Videojet to provide innovative printing solutions backed by the industry's leading experts in TTO technology.

- With unrivaled application expertise, Videojet helps you make the right coding decision for your applications
- Videojet's patented clutchless ribbon drive increases mechanical reliability, minimizes maintenance-related downtime and maximizes ribbon efficiency
- Videojet works directly with most of the major OEMs to integrate printers seamlessly into your existing lines

## What issues can arise from using multiple films on the same packaging line?

### Pre-printed Film Management

Managing inventory levels of many film types can be challenging especially for products that do not run very often. Most baked goods companies will have to carry safety or excess stock for each film. Therefore, the amount of film at the plant can be much greater for companies with multiple films than for companies with only a few different films. More film on hand leads to more money tied up in inventory, more storage space and additional time and labor dedicated to inventory management.

Additionally, any changes to the packaging may require disposal of the old film and significant time and money to create new packaging.

### Changeovers

The activities required to changeover the packaging machine range from cleaning the machine to making adjustments based on the size of the new product. Typically, the film will also have to be changed. This requires identifying the film needed, bringing the new film to the machine, replacing the old film in the machine and returning the old film to its original storage location. The time required to modify the printer message will only be a fraction of the film changeover time.

The time to complete packaging changeovers can add up quickly over the course of the year. This is particularly important for smaller companies and co-packers who will changeover their packaging lines multiple times per day.

### How can TTO help deliver higher line productivity?

TTO printers deliver high resolution images on flexible packaging without the need for solvents. They are capable of printing variable information such as ingredients, logos, marketing information, bar codes, pricing and dates in different languages directly onto the flexible film. A baked goods company would benefit greatly by using generic standard film on its products and differentiating each product using the information printed with TTO instead of using pre-printed film.

## Pros:

**Reduced Changeover Time.** Changeovers could be dramatically simplified with the use of generic film. While most steps of the changeover would still be required, changing the film would no longer require the same time and effort. Instead of finding, replacing and returning the film, a simple code change on the printer would change the content printed from what is required by the old product to what is required by the new product. Digital printers have the capability to store codes for each product on the line.

**Quick Packaging Changes.** Whether required by a new regulation, design change or product introduction, any changes to the packaging would be dramatically easier and cheaper by using generic film with a TTO printer. If using pre-printed film for a specific product, changes to the pre-printed information requires ordering new film and potentially throwing away the old film still in inventory. With generic film and a TTO printer, all that is required is a simple adjustment to the content of the code using Videojet's CLARiSOFT® software.

**Reduction in Film Inventory.** By using generic film on some or all of the products, baked goods companies would be able to eliminate safety stock for multiple films. The amount of film in the facility should be drastically reduced leading to less warehousing space, inventory management and money tied up in inventory. In addition, by buying less types of film in larger quantities, the company could potentially receive volume discounts from its packaging suppliers.

## Cons:

**Multicolored Graphics.** A TTO printer has the ability to print logos and other marketing information. However, while ribbons are available in multiple colors, a printer can only use one ribbon at a time, and thus, the content on the package will not be in multiple colors unless multiple printers are used, each with a different colored ribbon. Therefore, one should carefully consider which content to pre-print on the package and which to print with the printer. For instance, it may make sense to pre-print standard marketing content on the film (such as the logo) and print product specific information (such as ingredients and nutritional information) with the TTO printer.

**Print Area.** When purchasing a TTO printer, customers have the option of determining the width of both the printhead and ribbon. The width determines the size of the print area on the package. If the print area is not large enough for all of the content, it may be worthwhile to focus on a part of the package where the content varies the most from product to product and to pre-print the remaining information.



## The Bottom Line

Using TTO to print on generic packaging film presents unique benefits and tradeoffs that should be carefully considered. Baked goods and cereal companies can save money, improve inventory management, reduce changeover time and simplify packaging changes. Customers will need to weigh these benefits against the color limitations and print width options inherent in TTO technology.

The decision to move away from fully pre-printed packaging film should be a thoughtful one, and Videojet stands ready to help you think through the best solution for your production line. With our patented clutchless ribbon drive that increases mechanical reliability, minimizes maintenance-related downtime and maximizes ribbon efficiency, Videojet has the hardware for the job. Videojet works closely with the major OEMs to ensure your printers will integrate seamlessly with your existing lines. And with dedicated technicians and knowledgeable sales engineers, Videojet has the expertise.

Solutions are available for your unique application, but the key is finding the right one. Ask your Videojet representative for more guidance, a production line audit or sample testing in Videojet's specialized samples laboratories.

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