



**TAYLOR**

# COATINGS AND THE CUSTOMER EXPERIENCE

What marketing and procurement professionals need to know about how coatings create value.



## Why read this white paper?

Fierce competition. Consumers bombarded with marketing messages. Continuous advancements in print and finishing technologies. **To stand out in today's crowded marketplace, it's vital that you find ways to outshine your competitors without overspending.** Marketing and procurement executives must seek new methods of maximizing value, developing brand identification and elevating end-user experiences through their print and packaging. By discovering what options are available and the impact they make, you can take your print product to the next level of presentation and customer engagement.

Design and marketing firms along with retail, automotive and numerous other industries are looking for new options to create brand separation, elevate the perceived value of their products and enhance the customer experience.

**Coatings create this differentiation.**

## Overview

This white paper is written specifically for marketing and procurement professionals who find themselves seeking enhancements that transform campaigns and amplify results. In it, we address the primary elements to consider when planning and executing coating applications in print production:

### Terminology

- Registration
- Spot coating
- Flood coating

### Coating types

- Varnish
- Aqueous coating
- Ultraviolet (UV) coating

### Key considerations

- Cost
- Visual impact
- Durability

## Defining the Fundamental Terms

An understanding of the following terminology is critical when selecting coatings to apply during the print manufacturing process: registration, spot coating and flood coating.

### Registration

Relating to the alignment and placement of images or artwork on paper, registration means placing any impression in the precise position it is intended. Print operations require a high degree of precision to ensure the impression is applied to the predetermined spot on the sheet, and it helps to know the registration tolerances of various printing operations in order to optimize for the best possible visual appeal.

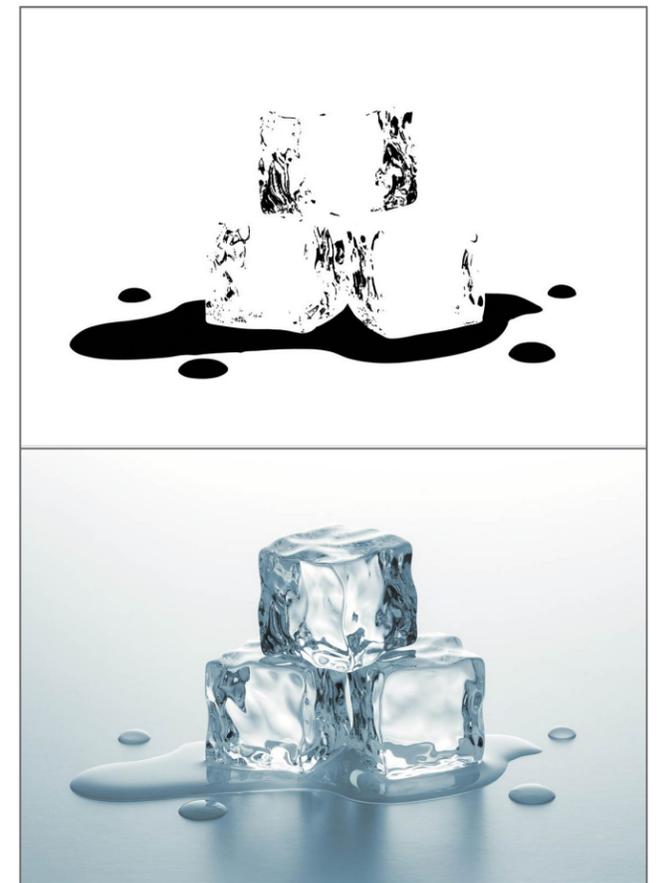
Registration is affected by either the setting on production equipment and/or the movement of the paper as it runs through the equipment. When positioning is not precise, it is commonly referred to as “the registration is off.” Some coatings allow for precise registration with printed art and thus are useful for spot coating within a printed product. Other coatings are more difficult and expensive to register and better lend themselves to flood coating.

### Spot Coating

This term is used to describe the process of applying coating only to a certain area — or areas — to add shine and depth to those specific elements on the printed product. One of the most brilliant effects you can add to a project, spot coating typically requires precise registration to ensure the coating aligns with the printed art. While all coatings protect the paper they cover, spot coating is a truly unique effect used mainly for its decorative appeal. To see finish options for spot coating, refer to the Coatings Guide on the next page.

### Flood Coating

This term is used to describe the process of applying coating to an entire sheet of paper so that all artwork is coated. With flood coating, the whole sheet and all the images get the same coating finish. Commonly used to help protect the final printed product, most flood coats can also enhance the visual appeal of it. To see finish options for flood coating, refer to the Coatings Guide on the next page.



*The top image shows the separation of the specific area where spot coating will be applied to the bottom image.*



## What are the different coating types?

There are three industry-standard coating applications used in print production: varnish, aqueous coating and ultraviolet (UV) coating.

### Varnish

A varnish coating is basically an ink, just without the color pigment. Varnish is typically petroleum or vegetable-based (just like ink) and available in gloss, satin or dull finishes. Multiple varnish types such as dull and gloss can be combined in different areas of a piece to create a more dramatic effect. It is fairly inexpensive and since it is applied with a printing plate, like printed artwork, varnish coatings can be applied in flood or a spot coating with precise registration. All varnish finishes can be used on coated paper. For uncoated paper, only satin or dull varnishes can be used because gloss varnish tends to mottle.

**When using uncoated paper, adding varnish can add protection to your print project but the visual impact will be minimal.**

Varnish offers less protection to images than aqueous or UV coatings. In addition, the visual effect created by varnish is subtle compared to other coating options. Using varnish over dark ink artwork (i.e., black) can deliver attractive results when a piece is moved around under light. Using this coating can slow the drying process and requires a bit more time to complete the project. It is important to note that varnish on white paper has a tendency to yellow. For that reason, varnishes should not be used on items that are expected to have a long shelf life.

### Aqueous Coating

Aqueous coatings are water-based coatings. This makes them environmentally friendly, omitting few Volatile Organic Compounds (VOCs), as compared to petroleum products like varnish. These coatings are applied with rubber blankets in a coating tower after all the ink is printed. Aqueous coating is available in gloss, satin, matte and soft touch finishes. All finishes can be used on coated paper but only matte, satin and soft touch are recommended for uncoated paper as gloss aqueous can tend to mottle. The coating offers excellent protection to printed images and prevents fingerprints from showing on dark images. Soft touch aqueous coating offers an exquisitely soft velvety feel.

Brands like Apple™ have made soft touch aqueous their go-to finishing effect – this luxurious coating creates high-end brand appeal. Unlike varnishes, aqueous coating dries immediately causing no delay in the production cycle. Although possible, aqueous coating is both difficult and expensive to use for spot coating but is a viable and cost-effective alternative to varnish when applied as a flood coating.

**You can use a soft touch aqueous coating to elevate your design and enhance the customer's experience with its soft velvety texture.**

### Ultraviolet (UV) Coating

UV coating is a very glossy, shiny liquid coating applied to a printed piece and cured (dried) using intense UV light. The UV light creates a molecular reaction that hardens the coating much like an egg changes from a liquid to a solid when heat is applied. UV coatings omit no VOCs and are very environmentally friendly. Although the most expensive, UV coating offers the most dramatic effect and the highest level of protection of any coating. It can also be used as a flood or spot coating with precise registration.

**Dramatically draw attention to a portion of a design by using spot UV coating.**

Due to the thickness, UV coating has the highest gloss level of any coating and can also be used to create textured 3D effects. It is a clear coating and – unlike varnish – does not yellow over time. UV coatings are available in gloss, satin and dull, as well as special effects such as high rise, glitter and textured.



See how the gloss UV coating on the right pops vs. no coating on the left.

## Coatings Guide

Coatings	Visual Impact	Ability to Apply as Spot Coating	Ability to Apply as Flood Coating	Finishes
Varnish	Low to Moderate	Excellent	Excellent	Gloss, Satin, Dull
Aqueous	High	Difficult	Excellent	Gloss, Satin, Matte, Soft Touch
UV Coating	Very High	Excellent	Excellent	Gloss, Satin, Dull, High Rise, Textured, Glitter

## In Summary

It is well known that packaging and printed materials need to be functional to deliver a product or message. They also need to have attractive graphics to entice the customer to stop and look at it. Encouraging the customer to engage with and pick up your product – this is where coatings are key.

Coatings can elevate even the most creative design to a higher level of beauty and impact. They have the ability to create a customer experience that increases the perceived value of a product and creates brand separation. Invoking a customer's senses of sight and touch increases their engagement and the perceived product value. Competing brands and companies that have similar products often look for ways to differentiate

themselves in the marketplace. Coating applications can be used to contrast the packaging and create brand separation amongst competitors or a set of products. For example, one could use aqueous coating on all packaging and apply added spots of UV coating to create a premium appearance on high-end products.

Marketers must continue to find ways of designing and producing materials to maximize value, brand identification and end-user experience. Take your print product to the next level of presentation and customer engagement by exploring coating options. Use the guide above to get started.

# TAKE THE NEXT STEP

Let's discuss your needs and how we can help. Contact us today to learn more about the many commercial print solutions available from Taylor.



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