

Strike-Thru Guide

What is Strike-Thru?

Strike-Thru is an inline printing process utilizing a specific litho overprint and gloss coating combination to create a unique contrasting gloss or lay effect.

Contrasting gloss; or smooth strike-thru, is achieved when a matte litho overprint; oil based or UV, is spot applied and gloss coating; AQ or UV, is applied to the entire sheet. The specific combination allows the matte overprint to “Strike-Thru” the gloss coating. This inline process allows for high contrast differences without the use of special coating plates or multiple passes.

Contrasting lay; or reticulation strike-thru, utilizes the same process as smooth strike-thru only the coating will reticulate or not lay smoothly (textured) where the overprint has been spot applied. Reticulation strike-thru not only provides a visual difference in lay of the coating but added tactile benefits that can improve overall appeal of the final printed piece.

What do I need to know?

Strike-Thru has many options and variables for success. Smooth strike through can include aqueous or UV coating, oil-based or UV litho opv's and different results dependant on substrate. Reticulation strike thru can include oil-based or energy curable litho opv's, litho opv's that are gloss or matte, fine or wide, and produced with a heatset or sheetfed presses; UV or H-UV. With so many possibilities, it is important to note the following;

Coating – AQ, UV or H-UV

Overprint – Oil, UV or H-UV

Effect – Smooth or Reticulation; gloss or matte/fine or wide

Stock – paper, paperboard or other

In order to select the proper overprint varnish it is important to recognize the advantages and disadvantages associated with oil-based and energy cure. Oil-based overprints have typically provided the greatest range of contrast between the matte areas and gloss areas when read with a gloss meter. The disadvantage of oil-based litho overprints though is the additional time required for the overprint to dry before any secondary handling of the printed piece. While energy curable litho overprints may not provide the best gloss contrast, material printed with energy curable overprints can immediately be handled without any concerns associated with lack of immediate thorough drying.

Tips for successfully running

Inks should be coatable and not contain any surfactants that will significantly lower the surface tension after cured.

Absorbency and water content of the substrate should be checked to make sure that it is neither too high nor too low. If conditions are severe, a primer should be used.

Make sure press is properly clean prior to startup.

Mix coating prior to use for 5 minutes using a drill mixer.

Run thicker film of OPV; approximately 25% above normal.

Under pack blanket to allow for higher transfer of OPV to substrate.

Water setting should be minimal; approximately 10-20% lower than normal.

Coating applied between 6-10 BCM

Kustom Strike-Thru Products

Smooth AQ for Paper

KB-3074 Matte Oil-based OPV
KS-9000 Gloss AQ Coating

Smooth AQ for Paperboard

KB-3011 Matte Oil-based OPV
KS-9020 High Gloss AQ Coating

Smooth UV with Oil OPV for Paper

KB-3116 Matte Oil-based OPV
KS-453 Gloss UV Coating

Smooth UV with Oil OPV for Paperboard

KB-3011 Matte Oil-based OPV
KS-453 Gloss UV Coating

Smooth UV with UV OPV for Paper and Paperboard

KS-568 Matte UV OPV
*Must cure prior to application of KS-494
KS-494 Gloss UV Coating

Smooth UV over Wet Energy Cure Inks with Oil OPV for Paper

KB-3217 Wet EC Ink Smooth Strike-Thru SF OPV
KS-494 Gloss UV Coating

Smooth LED with Oil OPV for Paper

KB-3222 LED Smooth Strike-Thru Matte SF Oil OPV
LED-007 Gloss UV Coating

Reticulation UV with Oil OPV for Paper

KB-3115 Matte Oil-based OPV
KS-688 Gloss UV Coating

Reticulation UV for Heatset Press with Oil OPV for Paper

KB-3199 Matte Oil-based OPV
*Dried through oven prior to application of KUL-2300
KUL-2300 Gloss UV Coating

Reticulation UV with Gloss UV OPV for Paper or Paperboard

KS-599 Gloss UV OPV
*NOT cured prior to application of KS-460
KS-460 Gloss UV Coating

Extreme Reticulation UV with UV OPV for Paper or Paperboard

KS-836 Gloss UV OPV
*Must cure prior to application of KS-494
KS-494 Gloss UV Coating

Reticulation H-UV with Gloss H-UV OPV for Paper or Paperboard*

KS-899 Gloss H-UV OPV
KS-832 Gloss H-UV Coating
*For complete wet trap applications with curing of all components at one time.

Reticulation LED with LED OPV for Paper

LED-029 Reticulation Strike-Thru Gloss Litho LED OPV
LED-016 High Gloss Foil-Stampable LED Coating