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; conventional oil based or Curable, is spot applied using a litho plate and gloss coating; AQ or Curable, 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 litho 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. Both Smooth and Reticulation Strike-Thru can include aqueous or energy curable coating. It can employ conventional oil-based or energy curable litho OPV's. And can be used on various substrates. Reticulation Strike-Thru has an additional feature which are to allow for both fine and coarse texture. These effects are possible on any properly equipped offset press. With so many possibilities, it is important to note the following;

Coating – AQ, UV, H-UV and LED

Overprint – Oil, UV, H-UV and LED

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

Stock – paper, paperboard or other

To select the proper overprint, it is important to recognize the advantages and disadvantages associated with conventional oil-based versus 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.

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.

Additional tips for running curable OPV and coating together

In addition to the tips above, when running the curable OPV, it should not be cured before the coating is applied. Then the coating and OPV should be cured together. Depending on the substrate chosen, the coating application volume, the fount chosen and the amount used based upon the form, it may be necessary to cure the litho OPV to some degree before the coating is applied. This is a rare occurrence so wet on wet application should be tried first.

Kustom Strike-Thru Products

Smooth AQ coating for Paper

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

Nestle Compliant Smooth AQ coating for Paper

KB-8901 Matte Oil-based OPV
KS-7099 Gloss AQ Coating

Smooth AQ coating for Paperboard

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

Smooth UV coating with Oil OPV for Paper

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

Smooth UV coating with Oil OPV for Paperboard

KB-3011 Matte Oil-based OPV
KS-494 Gloss UV Coating

Smooth UV coating with UV OPV for Paper

KS-568 Matte UV OPV
KS-494 Gloss UV Coating

Smooth UV coating with UV OPV for Paperboard

KS-568 Matte UV OPV
KS-665LV Gloss UV Coating

Nestle Compliant Smooth UV coating with UV OPV for Paper and Paperboard

KS-4005 Matte UV OPV
KS-4127 Gloss UV Coating

Smooth UV coating 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

Reticulation UV coating with Oil OPV for Paper

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

Reticulation UV coating 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 coating with Gloss UV OPV for Paper or Paperboard

KS-599 Gloss UV OPV
KS-460 Gloss UV Coating

Extreme Reticulation UV coating with UV OPV for Paper or Paperboard

KS-836 Gloss UV OPV
KS-494 Gloss UV Coating

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

KS-899 Gloss H-UV OPV
KS-854 Gloss H-UV Coating
***For complete wet trap applications with curing of all components at one time.**

Reticulation LED coating with LED OPV for Paper

LED-028 Reticulation Strike-Thru Litho LED OPV
LED-019 Gluable Gloss LED Coating for Offset Gap

Please ask your Kustom representative to supply you the Technical Data sheets for the products that fit your need and read them carefully. If you are still unsure, please contact the Kustom R&D lab and we will be happy to discuss the set up and running of these products with you.