



10 Flexo Print Effects, Finishes, and Techniques to Enhance Your Packaging

GLITTER AND PEARLESCENT INKS/VARNISHES



Particle inks like glitter, pearlescent, and metallic are dictated first by particle size and shape, then by the vehicle/varnish that is supposed to carry them to their destination on the web. The engraving specification is based on the particle distribution, with particular emphasis on the maximum size and highest percentage size. The highest percentage size is of crucial importance as it will determine the shiny effect in the print. You want all of the particles to transfer through the anilox/blade area if possible. If the engraving is too small (shallow or narrow) for the particles, the anilox/blade combination will work to mechanically separate/exclude the larger particles and the larger particles will work to prematurely wear the engraving.



Glitter operates best in an channel engraving like our maxflo+ or Twinflo. Operating without a blade may be the best option if you can nip the anilox surface with a meter roll.

Anilox specifications:

100 µm particle size: 70LPI x 65cm³/m² TwinFlo

200 µm or higher: beyond metered flexo

TACTILE VARNISH



These coatings provide a two-dimensional feel to the package without the use of embossing or expensive tooling. This application has traditionally been done with the use of a rotary screen unit. Advancements in anilox and coating technologies have now opened the door for this application to be run flexo. The objective is to apply the ideal amount of coating that will produce a tactile feel. If the proper volume for the application is not accurately

identified it could be very costly in wasted coating annually. This application will require very high-volume rollers that will transfer large amounts of coating in a smoother fashion which is very challenging in Flexo.

Most suitable anilox for this application:
TactiLoX

SOFT TOUCH VARNISH



Soft touch varnish, creates an extremely smooth and subtle texture that feels like velvet. It also makes the piece look softer than one with a high gloss or textured coatings.

Best Anilox specification: 180LPI x 20cm3
MaxFlo+

METALLIC INKS

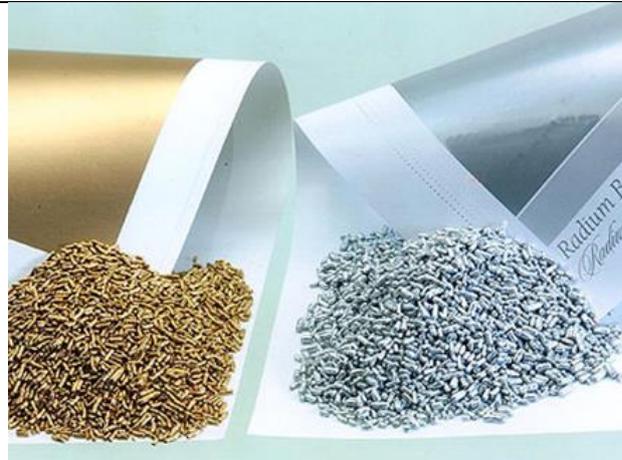


The shine or lustre of metallic inks in flexo has been always lower compared to screen or gravure.

Recent advancements on metallic flexo inks today can offer higher lustre.

Metallic inks are formulated with tiny metallic flakes which “leaf” together on the printed surface as the ink dries. This leafing of the metallic flakes creates a brilliant lustre. Aluminium flakes are used for silver and brass flakes are used for gold.

For the maximum brilliant lustre, the flakes must be distributed evenly and flatly and on the surface of the ink film. You want these particles on the surface for the highest reflectivity. If you drown the particles (with a too high volume anilox) you don’t get the shine. If you don’t have enough, then you may keep particles from getting through the blading.

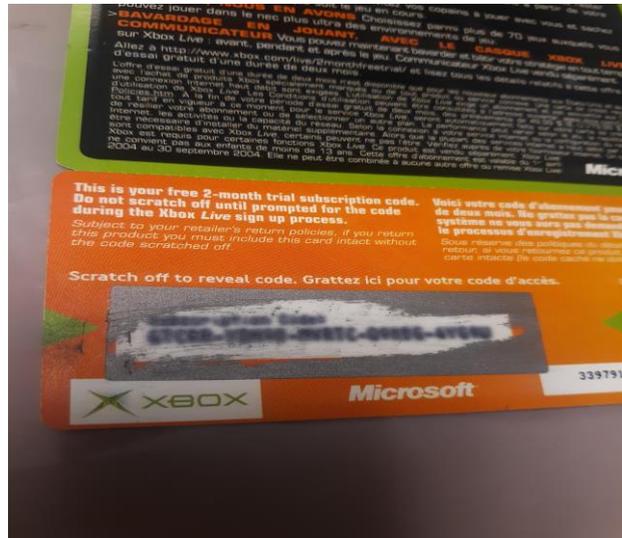


In our experience the best metallic inks tested had thinner pigments with rounded edges that offered higher gloss and mirror effect.

Water and solvent based inks generally outperform UV metallic inks in Flexo.

From the anilox perspective we have an engraving specially designed to offer the maximum metallic lustre:
100LPI x 25cm³/m² TwinFlo

SCRATCH OFF INKS



Anilox specifications for Water-based inks:

Water-based release coating: 500LPI x 6cm³/m² Maxflo
 Silver scratch-off ink: 300-460 LPI 7-12cm³/m³

Anilox specifications for UV inks:

UV release coating: 300LPI-400LPI 9-12cm³/m² MaxFlo+
 1st silver UV scratch-off ink: 200-360LPI 15-20cm³/m² MaxFlo+
 2nd silver UV scratch-off ink: 9-15cm³/m² 360-400LPI MaxFlo+

PEEL & REVEAL LABELS



Peel and reveal labels are a cost-effective way of producing labels if you have a lot of information to fit on to the label. Used in product marketing, a clever and attractive peel and reveal label can help enhance your brand image.

Recommended Anilox specifications:
 Filmic substrates: 500LPI-600LPI x 6-8cm³/m² MaxFlo+
 Paper: 460LPI-600LPI x 8-10cm³/m² MaxFlo+

SCRATCH AND SNIFF LABELS



Scratch and Sniff Labels can be used to enhance the awareness of your product and give your customers a true sneak peak of what you are producing.

Scratch and Sniff Labels use microencapsulated essential oils that are applied to the paper labels. The oil capsules are mixed with water which is blended with adhesives for printing. Then, these essential oils would be scratched, causing the capsules to break open and release the scent of the product being represented.

Recommended Anilox specifications:

Particle size >60microns: 120LPI x 50-55cm³/m².

SANDPAPER EFFECT



Sandpaper coatings are more subtle than grit coatings and provide only a slightly rough texture. The coating is similar to some unglazed clay work and gives plastics and paper products a slightly edgy feel.

In both coating applications, you can control the amount of texture that is applied on the sheet by the Anilox volume. The smaller the Anilox volume, the lesser the amount of coating it can carry and be applied to the sheet and vice versa for higher volumes.

Apart from the anilox volume, the type of engraving it's critical for obtaining the best results.

**Most suitable anilox for this application:
TactiLoX 2.0**

COLD FOIL



One of the most appealing decorative technologies in flexo is the use of foil on a variety of packaging substrates.

The cold foil process offers a very cost-effective alternative to embellish the package with striking design characteristics that will give it a luxurious appeal. It is as easy to setup as a print station with a photopolymer plate and a roll of lamination.

Identifying the proper line count and volume of the anilox roller is a key factor. Too much volume and it will be a challenge to hold small type and fine lines. Too little volume results in the possibility of the foil flaking around the edges. The best results for this application are found when the proper volume anilox roller is used for the specific adhesive.

**Recommended Anilox specification:
700LPI x 6 -7cm³/m² MaxFlo+**

It is recommended to thoroughly test for compatibility prior to production as similar substrates or inks can vary between manufacturers, and between batches from the same manufacturer.