

Metallic Printing Inks

Rycoline's gold and silver metallic inks are designed to provide superior gloss and metallic appearance to high quality sheetfed printing. The newest vehicle technology and the highest quality metallic pigments combine to give the best appearance in sheetfed metallic inks. The maximum amount of ink should be run with the least amount of pressure to increase transfer and brilliance of metallics.

The metallic effect in golds and silver is caused by the leafing action of the metallic pigment. Golds also have a low tack and high pigment load. For these three reasons, golds should be run last on the printing press, otherwise, the other colours may lift the gold off while passing through subsequent units.

Our metallic inks can normally be used without modification straight from the can. If it is necessary to reduce the tack of the ink, use a liquid offset reducer. Add no more than 2% reducer. Any other tack or viscosity modifier can cause high gloss metallic ink to tarnish after several hours.

We do not recommend the use of water fountain drier stimulator when running metallic inks.

Metallic inks will trap over other colours. If you need to reduce tack, use reducer as noted above. Overprinting wet colour on dry gold or silver requires low tack and viscosity in the overprinting colour. Since the overprinted colour can only dry by oxidation, and not by absorption, you should allow sufficient drying time.

Metallic inks are not recommended for use in laser printers. Due to the high pigment-to-binder ratios of these metallics, results can be unpredictable. The high metal content may cause the gold to tarnish and even gum-up the printer's rollers when subjected to the heat. Use of a waxfree overprint varnish will prevent these problems, but only at the expense of losing the metallic brilliance.

Metallic inks are suitable for a wide range of paper and board. For very absorbent stocks, such as cast coated material, seal with a base colour or varnish before applying metallic ink. In some cases two impressions of the metallic ink may be preferred. Proof testing is recommended before your run.

To avoid tarnishing due to finger marking, atmospheric pollution, or contact with acidic materials, sealing the surface with a normal overprinting varnish is recommended.

Generally, when compared to other inks, metallics have poor rub. This rub can be improved greatly with the use of overprint varnish, but will decrease the brilliance.

In the front of your PANTONE Metallic Colour Guide, PANTONE has the following advice for achieving the best results when printing with metallics:

To ensure accurate reproduction of shade, PANTONE Metallic Colour blends must be **mixed and printed within 24 hours**. PANTONE Metallic Colours **should always be printed on coated paper** as different types of paper may alter the metallic appearance of the colours.

Unpredictable variations in the leafing properties, and/or strengths of metallic inks, as well as paper surface, may cause some formulations in this publication to require minor adjustments to achieve a visual match.

The metallic colours in this manual should be run using the same precautions as with any metallic colour. Ink film thickness, lift size, press conditions and fountain solution must all be taken into consideration when printing.

Special care must also be taken when varnishing, especially with ultraviolet or water-based coatings. It is recommended that tests be made to ensure correct interfilm adhesion.

Coatings Canada states:

Many metallic inks are unsuitable for U.V. coating. They contain flakes of metal which create a floating layer within the ink film which, like wax, prevents adhesion. Results are unpredictable and can vary from job to job.

Golds have a relatively short shelf-life of 2 - 3 months, yet when made into PANTONE Metallic Intermixes, this shelf life is shortened further by the acidic qualities of the mixing Inks. Refrigeration will prolong the life of metallics. Direct heat can cause the metallic ink to tarnish.