



The benefits of transfer metallized packaging materials for printers and converters

A white paper that explains the characteristics of transfer metallized packaging materials

Transfer metallized materials are widely used by printers and converters as base materials for packaging and labels. Nevertheless, transfer metallizing is a sophisticated process and not elaborated on in many publications. Therefore this white paper will explain the process of transfer metallizing, the characteristics of the products applied to it and how printers and converters can modify, apply and benefit from using these materials.

Outline

- What is metallizing?
- How does the process of transfer metallizing work?
- Silver, gold and holographic patterns
- Modification of the substrate after transfer metallizing
- Applications
- Easy to print on
- No swarf, improved die cutting and less machine wear
- Overview of the characteristics of transfer metallized materials
- About Amsterdam Metallized Products



What is metallizing?

Metallizing refers to the process of adding a thin layer of aluminium to a substrate (paper, board or film). The layer of aluminium adds a bright metallic and high gloss effect. These metallized substrates are subsequently used as base material for packaging, labels, promotions and publications.

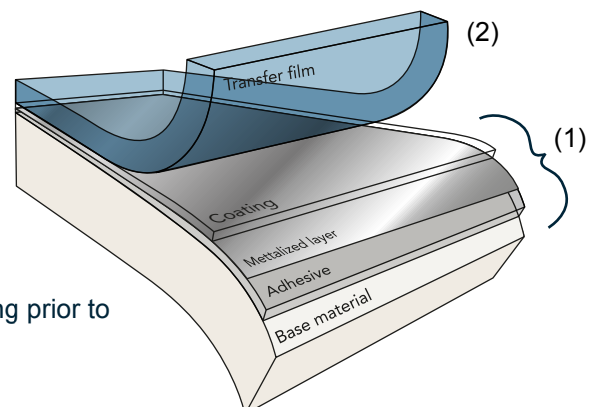
How does the process of transfer metallizing work?

In the previous paragraph the process of metallizing is explained. The transfer metallizing process is however different. The process of transfer metallizing starts by gravure coating a proprietary release lacquer to a carrier film. On top of this coating a thin layer of aluminium is deposited by vacuum metallizing. Following metallization the coated and metallized film is laminated onto a substrate, which can be paper, board, film or any material that is supplied on a reel. The original coating together with the aluminium layer can then be released from the carrier film. Once the lamination has taken place the carrier film is removed. What remains are (1) a substrate laminated aluminium and (2) a separate film. The carrier film can be re-used several times.

Silver, gold and holographic design patterns

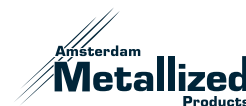
Transfer metallized materials can be supplied in:

- Silver : created by transfer metallizing as described above.
- Gold : a gold effect is created by adding a pigment to the release coating prior to metallizing.
- Holographic design patterns : an extra glitter/brand protection /security effect is created by pre-embossing the release coating prior to metallizing.



Modification of the substrate after transfer metallizing

After the substrate has been transfer metallized, the layer of aluminium is Corona discharge treated. This treatment improves the printability. A printer or converter will then print onto the metallic surface and cut/punch it into the right shape.



Applications & industries

Product categories			
Packaging	Labelling	Publishing	Special projects
Paper Board	Paper Film	Paper Board	Customer driven product development
Applications			
Folding Carton Twistwrap Blistercards Giftwrap	Self Adhesive Non- returnable Tubewrap Boxwrap	Covers Advertisements Inserts Brochures	
Industries			
Tobacco Wine & Spirits Health & Beauty Food	Tobacco Wine & Spirits Health & Beauty Food	Publishing Advertising Promotional Catalogues	
Silver – Gold – Holographic – Lenses 3D			



Printability

Transfer metallized materials can be printed on with various printing techniques; conventional, U.V., offset-Litho, letterpress, flexographic and gravure. Dependent on the design the print can cover between 0 and 100% of the metallic surface. Even when you chose 100% coverage of the surface without any silver being visible on the packaging or labels, a unique colour depth is achievable, especially when using transparent or semi-transparent inks. This colour depth will provide a luxury and high quality appearance. In the cosmetics, wine and spirits industry adding colour depth to packaging and labels is widely applied in order to create brand preference.

No swarf, improved die cutting and less machine wear

Another important element of the processability of transfer metallized materials is removing the carrier film. This results in no swarf, less machine wear, improved die cutting compared to alternatives and better optimization of the waste stream. This is not the case with other metallizing products where the metallized film is not removed and the final product, usually referred to as Metpol, still contains plastic film or in some cases aluminium foil.

Overview of the characteristics of transfer metallized materials

- Bright metallic effect will offer a luxury and high quality image.
- Supplied in high gloss silver, gold and holographic patterns.
- Applied to all kinds of paper, board and film.
- Excellently processable; printing, folding, gluing, die cutting, embossing and twisting. Less machine wear.
- Printability : conventional, U.V., offset-Litho, letterpress, flexographic and gravure.
- Weight saving; only 6 g/m² is added to base weight of substrate.
- Ideal base for blister packs - full fibre tear (essential for security).

About Amsterdam Metallized Products

Established in 1968, Amsterdam Metallized Products is the inventor of transfer metallizing and we are specialized in (transfer) metallizing, developing and applying special coatings, and laminating of films and foils onto paper and board. We offer to converters, printers and brand owners a one-stop-shopping concept for shelf appeal enhancing materials. Our products, which are used as base material for packaging, labels publishing and promotions, are applied in the tobacco, wine, brewing and spirits, personal care and cosmetics, and food industries. We are based in Amsterdam, the Netherlands, from where we distribute to our worldwide customers' portfolio.