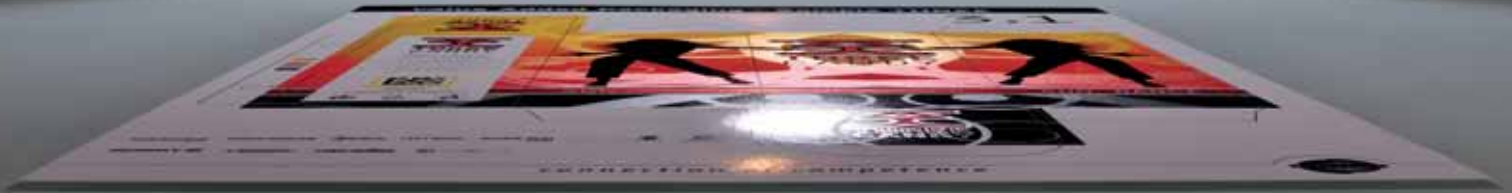


Value Added Packaging - Tutorial 1.1, 1.2, 3.1, 3.2



ONE 1.1



ONE 1.2



THREE 3.1



THREE 3.2

USP:

Effects:

Suitability:

Machine requirements:

Design requirements:

Special features:

Description:

Remarks:

Shiny and matt metal effects in hot foil stamping quality
 Combination of cold foil and UV-UV hybrid coating effect
 Cosmetic industry | ~~Food industry~~ | ~~Tobacco industry~~

Six-colour offset press (UV) with cold film applicator and a coating unit

Clearly defined motif contours that can be brought out in the cold foil finishing and the coating effects

All four designs are based on the same machine configuration and ink/coating sequence (cold foil/Black/Warm Red/Yellow/ink unit coating/final coating)

Since these four jobs are also intended to show that high-end print finishing can be economical - provided that the available printing systems and their costs are already taken into account in the creative phase and this information is incorporated into the design - the jobs are designed in such a way that their colours and the orientation of the effects are optimally matched to a ROLAND 506 LV CF. Printing and finishing are to take place in a single machine pass. All four designs are thus based on the same colour space (black plus two spot colours).

The variability of the effects, resulting from the different combination options, plays an important role in these jobs. For example, the cold foil finishing is brought out once without coloured overprinting and superimposed coating effect (Design 1.1), once in combination with printing inks and coating effect (Design 3.1) and once in the same combination on white and with orientation on gold (matt/glossy; Design 3.2). In Design 1.2, the cold foil is dispensed with completely and the textured/glossy coating effect brought out against a black background.

The special feature of the combination of cold foil and coating effects shown here is the particularly „soft“-looking cold foil finishing, which - particularly in areas over-printed in colour - is more reminiscent of pigment finishing than of the familiar cold foil finishing effects. This solution additionally makes it possible to achieve more homogeneous transitions between foil-finished printed areas and non-foil-finished areas. The harsh contrast familiar from cold and hot foil finishing is almost entirely eliminated by this solution, giving rise to completely new fields of application for cold foil finishing.

The prerequisite for this combination of effects is optimum coordination of the substrate (in this case Carta Solida from M-real), cold foil (ALUFIN® KPS-OF from Kurz), inks (SunCure® FLM from Sun Chemical) and varnishes (SENOLITH® UV OFFSET GLOSS VARNISH HYBRID 369402 and SENOLITH® and UV GLOSS LACQUER FP HYBRID 360453 from WEILBURGER Graphics). Incorrect matching of these materials could in this case lead to inadequate quality of the applied cold foil, inferior coating effects or unacceptable scratch resistance in the area of the foil finishing.

It must additionally be borne in mind that, being based entirely on UV-curing inks and coatings, this combination of effects is only suitable for use in the food and tobacco industry within limits, if at all.

Value Added Packaging - Tutorial 1.1, 1.2, 3.1, 3.2



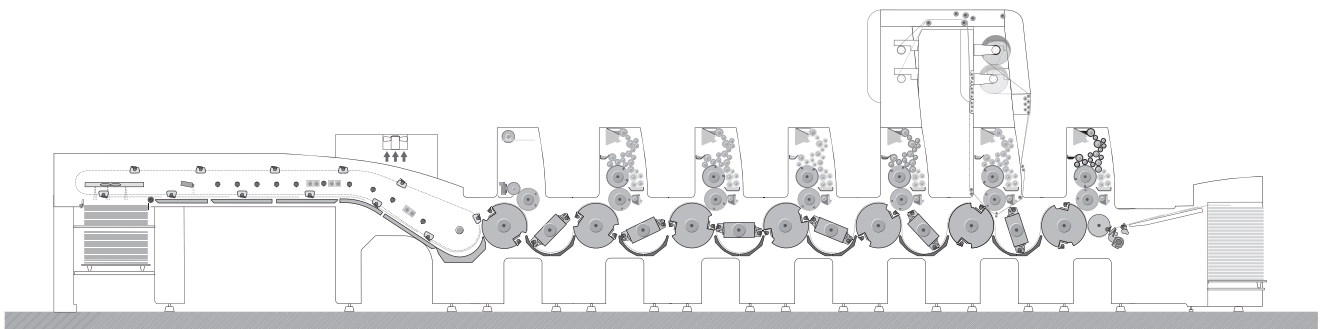
Realisation:

With these four jobs, it is first of all important to determine the suitable colour space, consisting of just two spot colours in addition to black. Since gold effects are also to be created, there must be at least one yellow (Pantone Yellow 012). A warm red (Pantone Warm Red) is chosen as the second spot colour. As a result, almost every colour between red and yellow, all the way to a crisp orange, can be achieved using the 70 l/cm screen selected. In combination with the cold foil, this choice of colours likewise makes it possible to produce a spectrum ranging from cold silver and all gold tones, all the way to a deep copper shade.

We can now proceed to the design of the individual printing formes. Regarding the spot colour form for the cold foil, it must be borne in mind that no continuous tones may be used, because a relatively coarse screen would be necessary to reproduce them in the cold foil. We therefore print solids throughout and decide to create optical depth solely through the design of the colours and the elaboration of the coating effects. Since the coating effects used here are obtained solely via the ink unit coating, meaning that no flexo plate has to be produced, we also have extensive creative freedom and therefore create the individual coating effects of the four designs as halftone forms. In this context, we bear in mind that shadows are equivalent to a strongly textured effect (matt) and highlights are equivalent to a weakly textured effect (glossy). On the other hand, if the effect is positioned over a cold foil-finished area, a solid tone means stronger scattering properties (matt-finish metal) and white means neutral scattering properties (bright metal). Intermediate tones are possible in this context and are to be specifically used to give the design optical depth.

The last form to be created is a coating form for the final lacquer, where the glue flaps of the packaging are left out.

In print production, an intermediate dryer has to be used after application of the ink unit coating in order to ensure that the latter is dry before entering the actual coating unit. The final lacquer is then applied using an 18 cm³/m³ ART anilox drum.



Printed on a sixcolor ROLAND 500 LV with ROLAND InlineFoiler Prindor



COATING
SENOLITH® UV GLOSS
LACQUER FP HYBRID
360453 by
WEILBURGER Graphics

COATING
SENOLITH® UV OFFSET
GLOSS VARNISH HYBRID
369402 by
WEILBURGER Graphics

INK
SunCure® FLM
Yellow 012 G17429
by Sun Chemical

INK
SunCure® FLM Resistant
Warm Red FLM36
by Sun Chemical

INK
SunCure® FLM Process
Black FLM46
by Sun Chemical

COLD FOIL
ALUFIN® KPS-OF
by KURZ

ADHESIVE INK