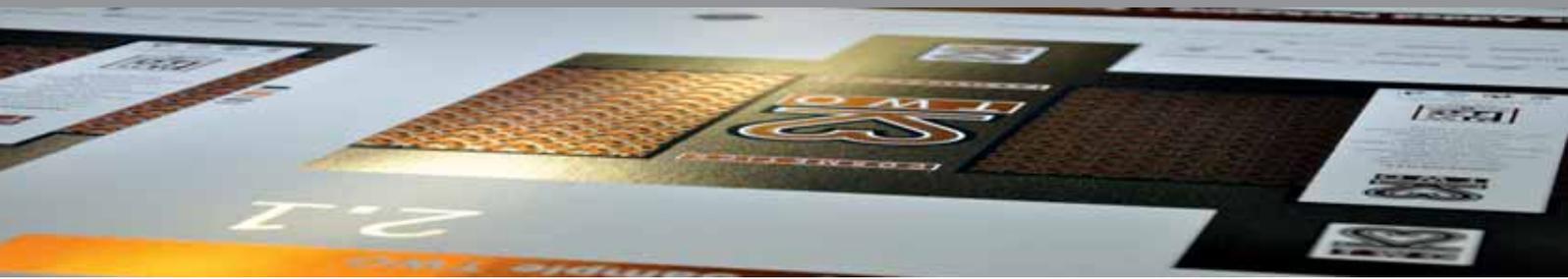


Value Added Packaging - Tutorial 2.1



TWO 2.1

USP:

Effects:

Suitability:

Machine requirements:

Design requirements:

Special features:

Highest possible effect contrast, through matt and gloss metal surfaces in gold and silver

Cold foil in combination with matt UV lacquer

Cosmetics industry | Food industry | Tobacco industry

Four-colour offset press with double coating unit; embossing press

Distinct motif edges that can be brought out in the cold-foil form

The print job was produced for low migration and is suitable for indirect food contact

Description:

This design is intended to illustrate the greatest possible contrasts when creating metallic surfaces. Cold-foil application in combination with the colour design obtained by overprinting was selected to this end. In this way, different metals can be simulated by applying just one foil. Moreover, the full-flood application of a matt UV lacquer, in combination with a relief structure created in the four-colour set, achieves the appearance of brushed metal surfaces, such as familiar on stainless steel and aluminium. The „silhouette effect“ known from cold-foil application results from excessive contrast ranges of the highly reflective cold foils and can likewise be greatly reduced by applying the matt lacquer and the resultant scattering of the light above the foil.

Remarks:

When preparing print jobs of this kind for the tobacco and food industries, it must be ensured that all the components used display low migration and have corresponding approvals and certificates. This applies both to the substrate used and to the printing inks and lacquers, as well as to the foils and adhesives.

In the job presented here, low-migration inks were processed in combination with a low-migration primer and a low-migration matt UV lacquer for indirect food contact on a likewise certified cardboard.

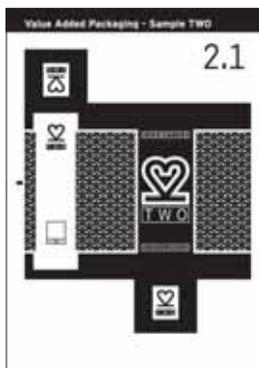
3D visualisation before going to press was performed using the Esko Studio Visualizer.

Value Added Packaging - Tutorial 2.1

Realisation:

When designing this job, we first select the matching foil and colour combinations. We decide to work with a contrast between matt gold and matt silver for design TWO 2.1. The standard Euroscale colour space is chosen to create the corresponding colours.

In order not to overdo the effect, we use a normal silver foil (Alufin® KPS-OF) as the cold foil. We now determine the colour shades for the gold tone. To this end, we select a medium brown colour, deliberately dispensing with cyan in order not to make the light reflected on the foil appear too cold (colour 0/50/100/15). We create the wide-area brush structure as a greyscale image in Photoshop, deliberately producing large areas of optical glare by means of layer mask gradients. This glare is later intended to emphasise the metallic effect and give the design greater depth. To avoid the typical dot fringes caused by the coating plate, which can have a negative impact on the motif, we dispense with coating cut-outs and instead apply a full-flood coating of matt lacquer to the packaging. The coating forms are created as spot colours, and all elements are set to overprint. In this way, we can safely put the coating forms on the topmost layers in Illustrator.



Cold-foil form



Matt UV lacquer

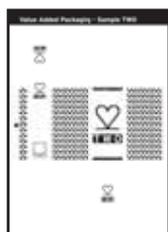
The next task is to elaborate the embossing forms for the deep embossing. For this job, we decide to bring out only the logos. These forms are now likewise created as over-printing spot-colour forms and put on top layers in Illustrator. Halftones can also be used in this case, in order to create three-dimensional embossing dies with soft edges or reliefs. The toolmaker need only be told whether high-relief or deep embossing is involved, and which halftone value is to have zero level. As a result, combinations of high-relief and deep embossing are also possible, which can greatly enhance the haptic and optical characteristics of the embossing, given an appropriate substrate. We, however, decide on simple deep embossing with sharp edges.

Once all the ink, coating and embossing forms have been designed, we proceed to full-page make-up in 3B format. A clear and complete job description for the printer, the toolmaker and the finisher is standard for jobs of this kind and helps rule out sources of error ahead of producing complex print jobs. In the case of large-scale jobs, it is also always worth while to contact all the service providers even during the creative phase and discuss the individual work steps with them. This can help not only to reveal technical problem areas, but also to rule out any technology and/or material incompatibilities. Moreover, when dealing with complex jobs outside the standards, provision should also always be made for rotary proofing, in order to test the interplay of all materials and technologies under production conditions and enable optimisation before the start of production.

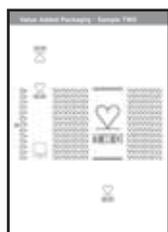
For final production of this job, we select a 13 cm³/m² hexagonal engraved roller both for the primer and also for the matt UV lacquer, the latter being applied offline in order to obtain the maximum effect. When using matt lacquers, the rule almost always applies that „less is more“.



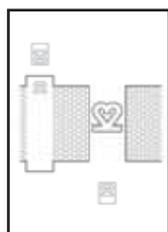
COATING
SENOLITH® WB GLOSS
PRIMER STAMPABLE
350520 by
WEILBURGER Graphics



INK
SunTec® FOILS
Process Yellow FOP26
by Sun Chemical



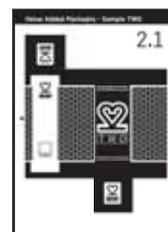
INK
SunTec® FOILS
Process Magenta FOP27
by Sun Chemical



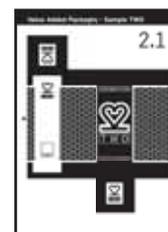
INK
SunTec® FOILS
Process Cyan FOP25
by Sun Chemical



INK
SunTec® FOILS
Process Black FOP46
by Sun Chemical



COLD FOIL
ALUFIN® KPS-OF
by KURZ



ADHESIVE INK