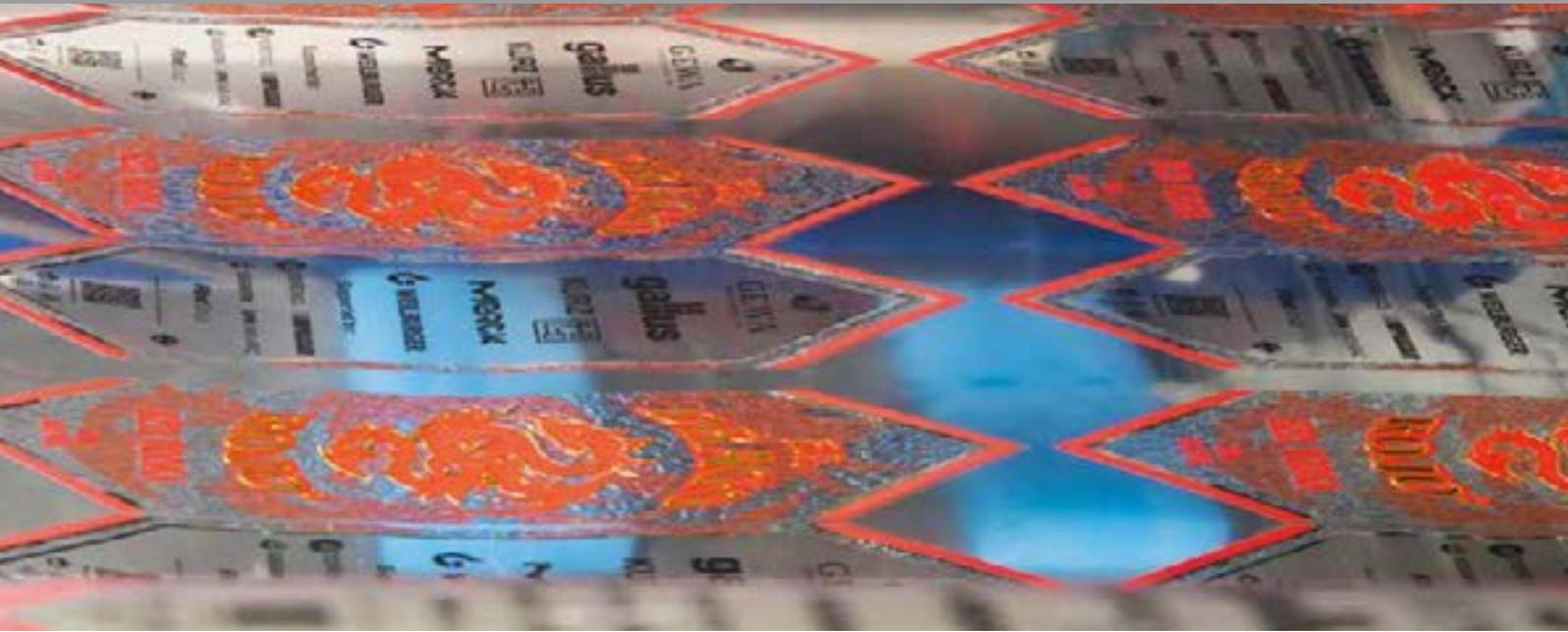


Value Added Packaging - Tutorial RLS-Label Rojo



USP:	Self-adhesive label for the high-end mass market incorporating sophisticated finishing techniques
Effects:	Metallic doming, cold foil, matt/gloss effects, special effect pigment and tactile screen-printing relief lacquer
Suitability:	Cosmetics industry Food industry* Tobacco industry*
Machine requirements:	Narrow-web UV label printing press with two flexo printing units, two offset printing units, three screen printing units, cold foil applicator, hot foil applicator and inline rotary die-cutter
Design requirements:	Distinct motif edges that can be rendered via cold foil finishing and the coating forms; a maximum of three inks, three coatings and two foils
Special features:	These labels supplement the folding cartons produced previously as outer packaging for a luxury drink. The label design therefore must closely reflect that of the folding carton. The labels are transparent and self-adhesive, such that the relief lacquers and the content of the bottle ultimately combine to create a three-dimensional effect, which is further enhanced by cold foil application and the new metallic doming technique.
Description:	The aim of this new project of the Value Added Packaging Initiative is to illustrate that even in the label sector, labels can be made to look and feel three-dimensional by intelligently combining a variety of finishing techniques. The novel metallic doming technique in particular supports hot foil applications for labels which come very close to the relief embossing effects familiar from the folding carton industry, and therefore enable entirely new label designs.
Remarks:	<p>For marketing reasons, the front and back labels in our example are produced as a single, connected unit. This of course would make no sense in real production, where the front and back labels would be printed in different production steps, or the web would be spliced to separate rolls in order to later have rolls with just one label type on the labelling machine.</p> <p>This production process is entirely UV-based because, owing to the nature of the system, no migration limits are defined for labelling glass bottles, even in the food industry. No migration of substances through the completely sealed glass bottle can be detected. The substrate used on this job therefore does not require approval for food contact applications. The UPM RAFCLEAR FTC 50 / RP 74 /PET 30 used is, however, generally suitable for use in the food industry.</p>

(* Not suitable for direct food contact)

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Realisation:



The colour space and design elements for this label design were derived from the design of the folding carton. It was therefore possible to make a quick start on production planning and design. The first step was to develop a label blank for the front and back labels based on the bottle dimensions, calculated from the inside dimensions of the folding carton.

The front surface of the folding carton was used to define the shape, which can be described as a "partial rhombus". All pointed edges were rounded to at least 0.5 mm to optimise the die-cutting process. For marketing reasons, the front and back labels of this label blank are printed adjacent to one another so that they still form a single unit on the backing paper after the cutting step.

Modeled on this die-cut contour, the graphic design was then developed, gearing it as closely as possible to the design of the folding carton as well as to the label of the EL DRAGO VERDE product produced previously. A vector graphic of the texture was incorporated into the black form for this label as well, which serves as a basis for the transparent leather texture achieved in this version in relief lacquer. This gives the label greater optical depth and visually enhances the tactile characteristics and appearance of the finished labels created by the coating effects. All design elements that are ultimately to have a silver-metallic look were then created as a full-area spot-colour form for cold foil application.

The opaque white, black and Pantone red were then rendered on top and the three coating forms subsequently prepared. It should be noted in this context that no halftones can be used. The pigment coating form, which is to be underneath the transparent leather texture, was prepared first.

The coating form for metallic doming came next, separated by 0.25 mm from all other coating elements to achieve distinct separation. It must be kept in mind that all areas embossed in this way ultimately will appear as domed areas embossed in golden hot foil.

The relief lacquer form was made last. The fine, raised leather texture is reproduced here, which thanks to the built-up relief lacquer will later generate the desired "pebbled" structure on the label and, in conjunction with the reddish beverage inside the bottle, the desired visual depth.

When creating the forms, it is then necessary to select the right anilox rollers and suitable screens. The following were used: a Gallus Screeny RSS fabric for the opaque white, a 6.5 cm³/m² anilox roller for the cold foil adhesive, a Gallus Screeny DY fabric for the metallic doming, a 17 cm³/m² anilox roller for the pigment coating and a Gallus Screeny DW fabric for the additional water drop relief lacquer.

Siegwerk Screen printing opaque white	Siegwerk Offset black	Siegwerk Offset Pantone P 032 U	Kurz Cold foil Luxor/Alufin KPS-OP	Gallus Relief lacquer Metallic Doming	WEILBURGER Graphics SENOLITH® UV GLOSS LACQUER STAMPABLE GLUABLE 360145 with Merck 20 % pigment Colorstream F10-51 Lava Red	Kurz Hot foil LUXOR® MTS 232	WEILBURGER Graphics SENOSCREEN®-UV RELIEF EFFECT LACQUER WATER DROPLETS 363056	RotoMetrics Rotary die-cutter



Technical and graphic design, production management
Alexander Dort

Substrate:
UPM Rafiatac UPM RAFCLEAR FTC 50 / RP 74 / PET 30

Press:
Gallus RCS 330

Cold foil, hot foil:
Leonhard Kurz

Inks:
Siegwerk

Lacquers:
WEILBURGER Graphics

Pigments:
Merck

Prepress/flexo plates:
Flint Group

Anilox rollers:
Praxair

Die-cutting tool:
RotoMetrics

Rotary screen:
Gallus

connection of competence

