

## Sheet-fed gravure: a magic tool for print production

*Regarding quality and printing properties everybody knows the advantage of the gravure printing process when compared to other printing processes.*

When compared to gravure web printing, it is possible to produce short runs economically with sheet-fed presses, which is not possible with web-fed printing.

The market applications for a configuration of three to six printing stations are primarily the tobacco markets, since complete packages can be produced inline. Essential criteria is a totally odour-free and migration proof package, driven by the fact that tobacco is hygroscopic. Since the product is dry immediately after printing the sur-

ing passes are possible with total colour registration. This brings advantages for the printer since he is not forced to select his jobs based on the number of colours, but has the ability to dovetail his work to the available units of the sheet-fed press.

A pure-gravure printed sales pack, for example for the perfume and cosmetic market, is less prone to show fingerprints and stickers. This gives the impression of a fresh product not having been touched by other customers.



**The Miehlen/D facility.**

face is resistant to damage. In addition there is the opportunity for second or third passes through the printing press for additionally refinements. Since the printed gravure sheet neither expands nor shrinks, several subsequent print-

Increasingly the sheet-fed gravure market is applied in the product refinement area, as well as adding new functionality for the sales packs to optimally position themselves in the market place. It is especially in this retail environment

where the quality of a package translates directly into an advantage for the purchase of the item. Today basic »mass« advertising does not have the same impact as it did years ago.

Established brands have to protect their image against counterfeiters with enhanced print quality, which cannot be easily duplicated by other printing devices. An application of an RFID chip is still not enough to protect against counterfeited packages, since the customer has no information access. It is for these reasons that *H.C. Moog GmbH* of Rüdeshheim/D is supporting the special applications with sheet-fed presses.

A single-colour unit or a two-colour press is particularly suitable for basic printing with metallic and/or pearl gloss pigments, which can be handled subsequently in other processes. Multi-colour configurations find their primary application in the cosmetic and perfume industry where the packages can be refined inline with additional features such as embossing. This embossing can be taken care of economically by an embossing cylinder or plate, eliminating the need to get this done offline with a separate dedicated machine.

In addition, a special function utilizing a micro-embossing pattern, that effectively is hidden, can be produced with the same embossing cylinder. It can then only be recognized by checkcard decoders and consequently is extremely effective against product counterfeiting and piracy, since the pattern cannot be duplicated.

Gravure printing stations are



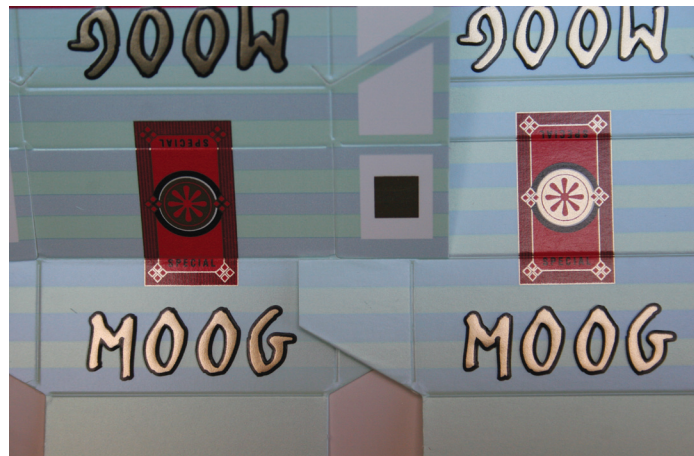
**Six-colour version of a Moog sheet-fed gravure press.**

most suitable for refinement with gold, bronze, silver, fluorescence, high gloss UV lacquers or pearl gloss.

In gravure the gold has a higher brilliance than the highgloss gold coating applied by indirect processes, which is in addition twice the cost. In gravure the available high gloss metallic pigments are equivalent to either offline hot or cold stamping that only becomes viable at coverages above 50%.

With a single printing station customers can offer a wide variety of value added functions in printing and embossing without any modification of the basic machine, eliminating the need for special machinery and with inline separate processes requiring a costly investment. More flexible and cost effective are then the offline solutions since the units are becoming more compact.

Combinations with other printing processes are possible, opening the door for product synergy. Examples are cigarette packs in which



*Pure-gravure ...*



*... and combination print samples.*

the precautionary labels are printed in brilliant colour, using gravure and the images are printed in four-colour offset.

production and printing quality for every product is the determining factor for today's and tomorrow's markets.

To be able to maximize printing

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