



Luxury packaging printing with sheet-fed gravure

- H. C. MOOG is a family owned medium-sized company founded in 1950 by Henry Cornelius Moog
- For over 65 years our focus is the production of single- and multi-color sheet-fed gravure presses and special presses for the security and ink industry
- Moog has a team of specialists with an in-depth knowledge of worldwide service, installation and in-house training



- *Made in Germany* -



H.C. MOOG GmbH Sheet-fed Gravure Presses



High quality sheet-fed gravure printing is covering the complete range of gravure inks like water-based, UV, conventional gravure inks and functional inks for the luxury and folding carton industry in the field of beauty, health care, confectionary, premium liquor, tobacco and security printing.

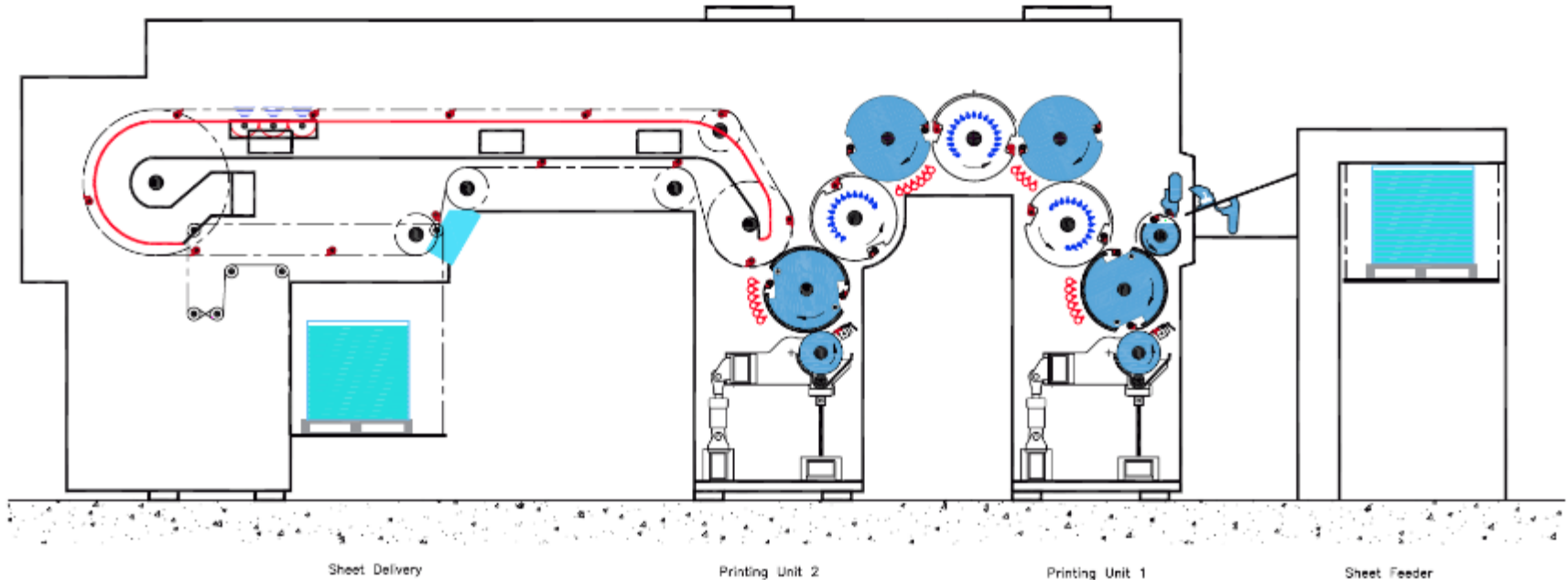
Value-Added printing in sheet-fed gravure in combination with other sheet-fed processes

Blind embossing, Micro embossing for brand protection and Hidden Images

Paper, carton board,
synthetics, stone paper

Substrate:
0.07 mm - 1.0 mm
0.0028 in - 0.0393 in

Multi-pass technology
for Mock-Up printing



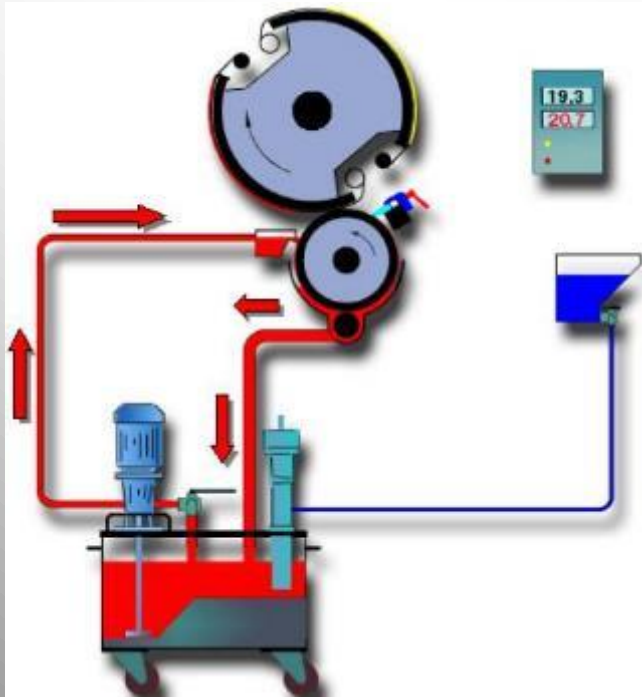
The All-In-One drying sections with frequency controlled high speed air knives and adjustable heating cartridges, as well as IR and UV, can be adjusted for any substrate and ink film thickness for most efficient energy savings

The most important advantage of this layout is the stress free drying of the substrate. Therefore Moog use a long drying section, with cold and warm drying sections to avoid shrinking or expanding of the sheet.

Economical sheet-sizes:

- 750mm x 570mm
- 750mm x 1060mm
- 1050mm x 1450mm

Inking



100%

50%

5%

Gravure is characterized as a direct printing process producing an exact ink film on the substrate. The ink volume/thickness of ink film is controlled by the engraved cells of the gravure cylinder. A doctor blade removes excess ink from the surface of the cylinder only, providing ink transfer out of the engraved cells.

A viscosity control unit determines the consistency of the ink. This assures a 100 % stable ink transfer over the complete print job.

This is the principal reason for exceptional print stability and quality over a wide range of applications practically unaffected by other process variables. Since each new product requires new cylinders or a new printing plate, cell configurations can be optimized for the substrate and the ink characteristics such as pigment size so that no unknown parameters can influence the final high product quality which results in a minimum amount of wastage.

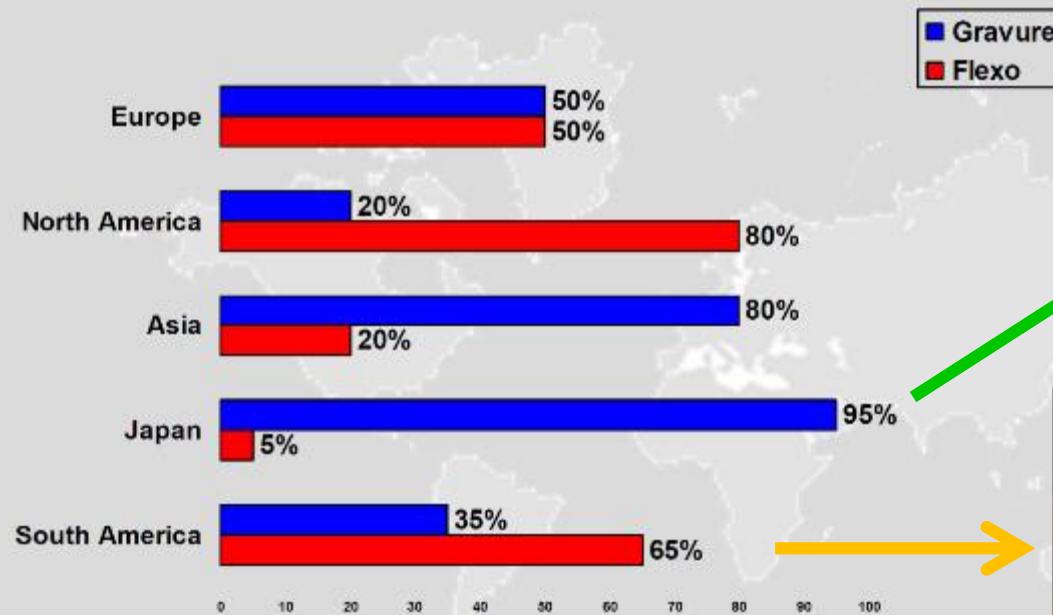


H.C. MOOG GmbH Sheet-fed Gravure Presses

Brilliant presentation on the shelf in Europe, Asia, Europe and Japan with MOOG sheet-fed gravure technology



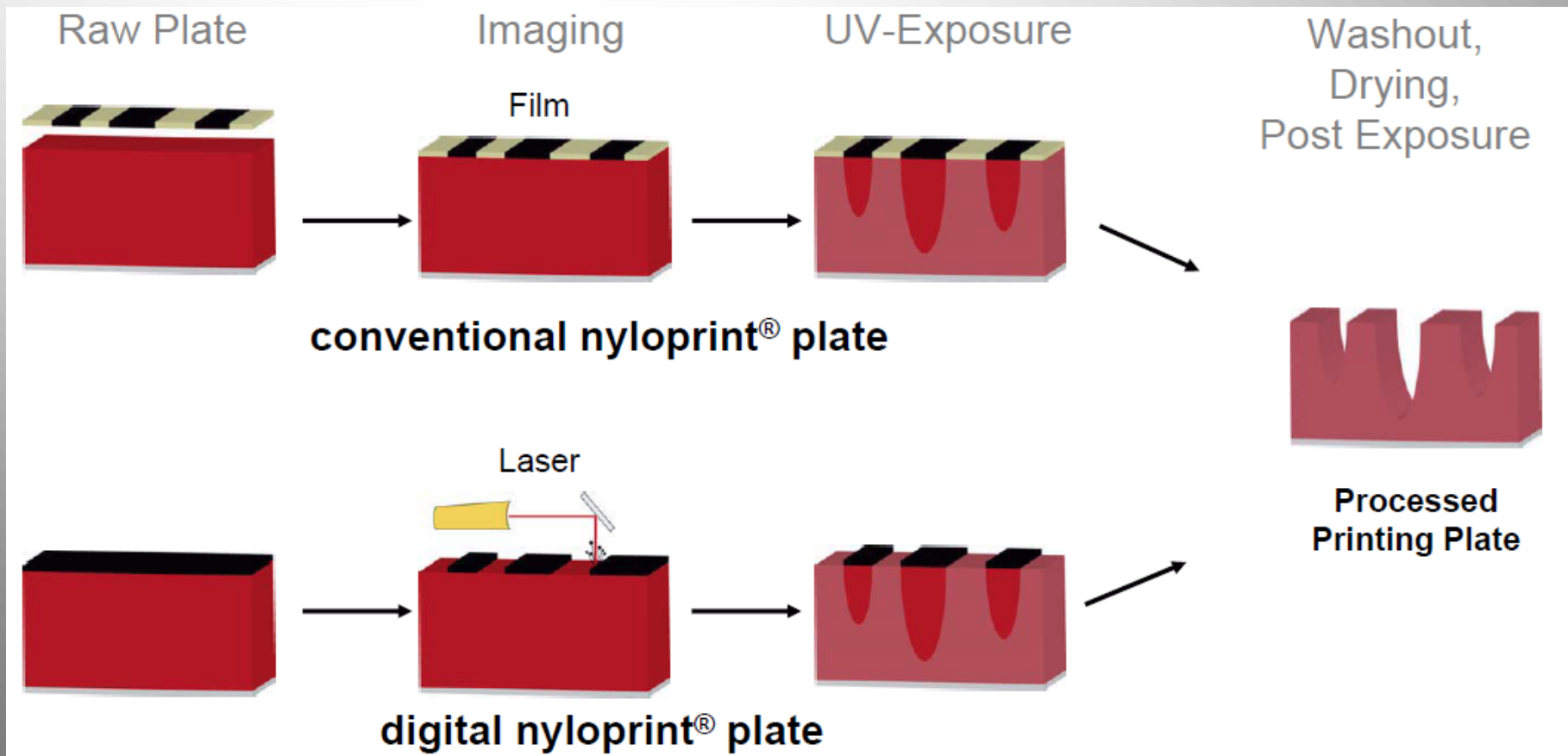
ERA Chart of Market Share:



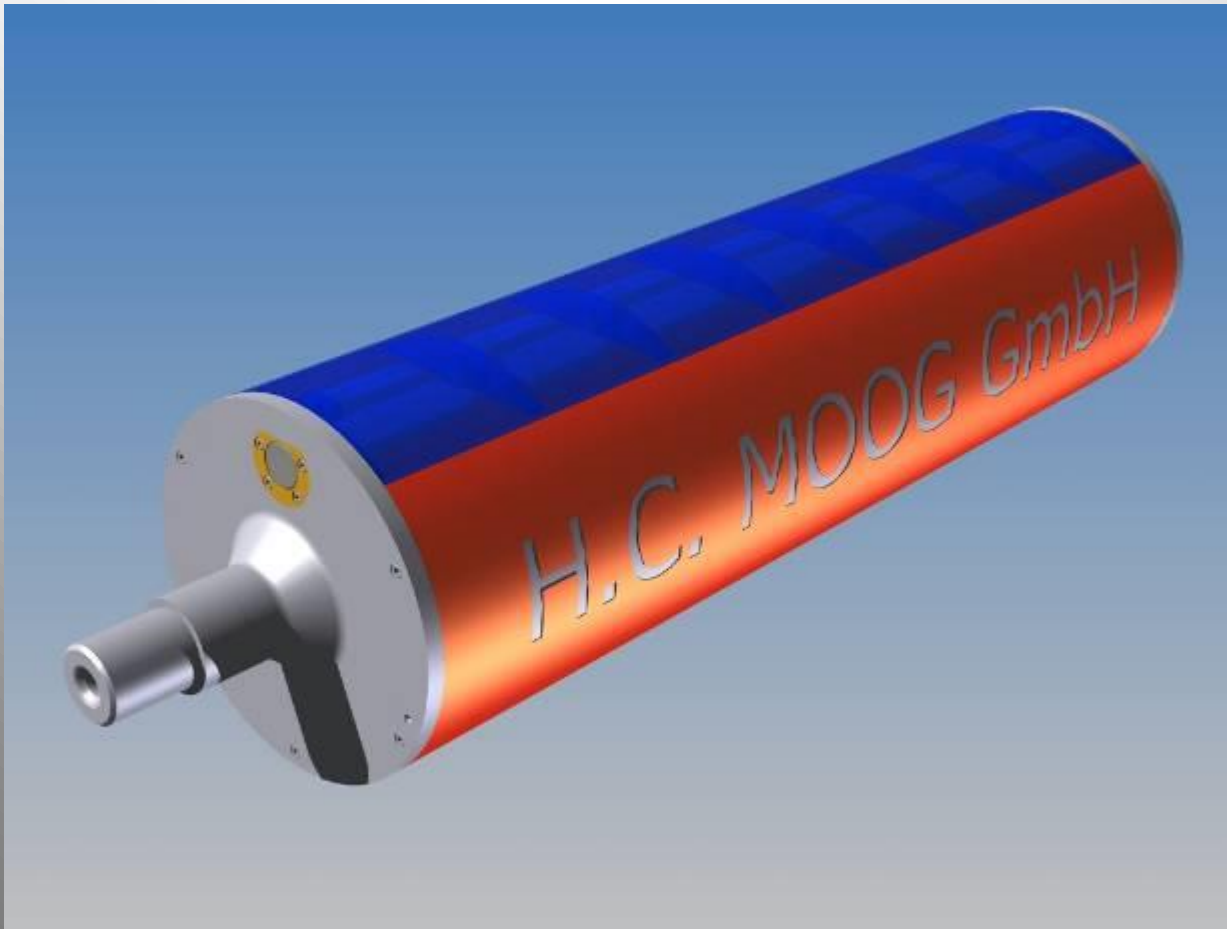


- + Sheet-fed gravure's cost efficient production for small to medium print runs is guaranteed.
- + Especially important if "special inks" are used for the production.
- + Benefits are far greater than cost: Scented inks; UV-inks, Special Effect Coatings, UV-curable Gloss-and Dull Coatings, tactile and dimensional Finishes, Metallic Process Colour system, Fluorescent and Iridescent Inks
- + Pre-printing of gold/silver/pearlescent for further processing in sheet-fed offset provides in addition a valuable feature

Processing of nyloprint® Printing Plates



Blind Embossing with Photopolymer Plates



A new developed Moog image carrier, for the easy use of photopolymer printing and embossing plates enables the printer in addition to re-use a plate.

The clamping mechanism works over the entire cylinder width for a most even traction.

Product range – embossing

- nyloprint® WS 58
- nyloprint® WS 58 Digital*
- nyloprint® WS 73
- nyloprint® WS 73 Digital
- nyloprint® S 58

Blind Embossing with Photopolymer Plates and Conventional Cylinders

A plate or cylinder for blind embossing can be used in all Moog printing units. According to the maximum sheet-size, the pressure can be increased up to 900 Tons



The Moog clamping cylinder as well the conventional cylinder have a fixed size, no matter of the repeat size of the printed package. The right circumference of the base cylinder is consequently always 942,xxx mm. Speed to market for Cylinder Engravers and Printers!



H.C. MOOG GmbH Sheet-fed Gravure Presses

Micro debossing (Hidden Images)
with or without decoder card

Spot and full Varnishing of security prints,
Gravure Printing up to 10.160 dpi,
Heavy-film- and Thin-film- applications





H.C. MOOG GmbH Sheet-fed Gravure Presses

RGB-Printing for Luxury package printing and anti counterfighting purposes

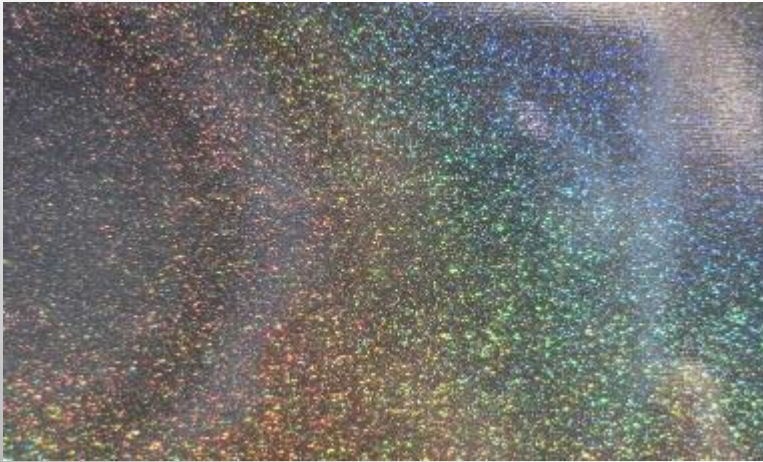




H.C. MOOG GmbH Sheet-fed Gravure Presses

Sheet-fed Gravure for the sustainable alternative instead of foiled substrate or foiling

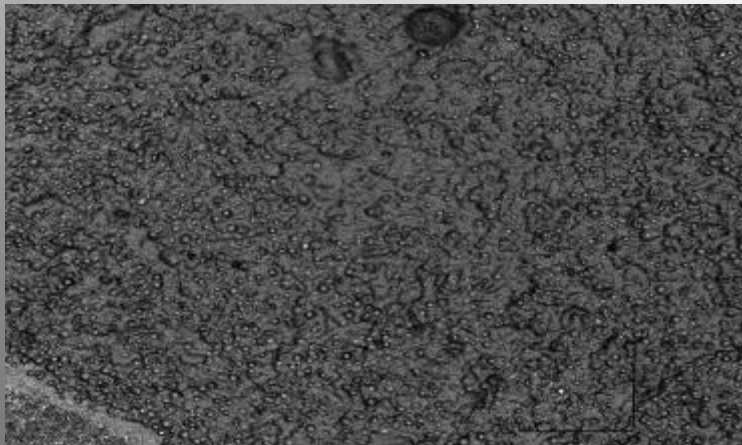
Rainbow Pigments (UV)



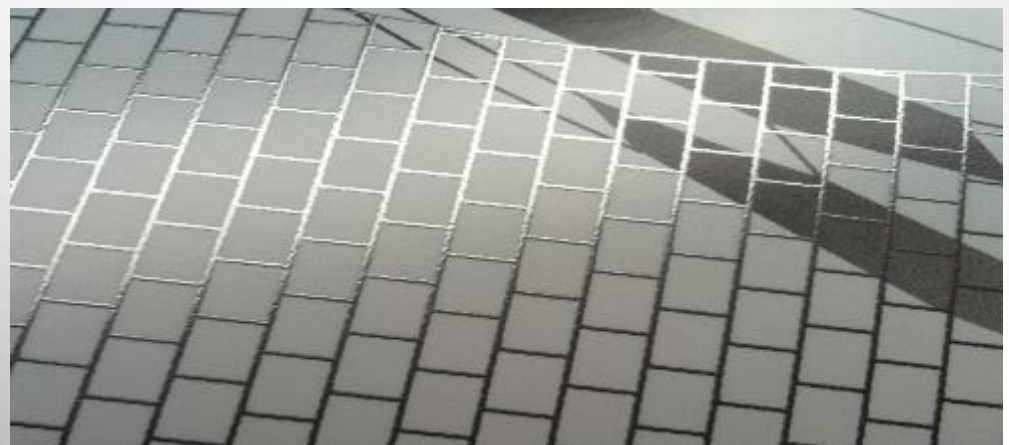
Ultra High Gloss Silver (VMP~130€/kg)



Scent Varnish (Waterbased)



Metallic Tactile Printing (UV)





Technical benefits for Luxury packaging Printing

- Color brilliance and process stability
- Widest color range
- Ink pigmentation up to 200 μ
- High net output , lowest starting waste
- Environmental friendly materials and substrates for perfect recycling results
- Very short make-ready time
- Multi-drying and curing systems in every station
- Optimized ink pans and ink container for minimized ink volume
- best flexibility in doctor blade angle and oscillation speed and travel
- Print medium from thin paper to thick cardboard and Synthetics
- Register true sheet-fed application for hybrid production
- High-pile nonstop-feeder and –delivery
- Short runs - Clamping cylinder for gravure and debossing plates



H.C. MOOG GmbH Sheet-fed Gravure Presses



1-TBR Compact

**SINGLE UNIT
AND MULTICOLOUR
SHEET-FED
GRAVURE PRESSES
AND OUR NEW MULTITALENT
1-TBR COMPACT**

- Production speed up to 16,000 sheets/hour
- Economical formats 780 mm x 1060 mm
1050 mm x 1450 mm
- Multicolour presses with up to eight units
- Premium gravure printing in the field of cosmetics, confectionery, perfumes, pharmacy, labels, tobacco, beverage, food industry as well as mock-up models and prototypes
- UV + IR + HOT-AIR dryers



6 TBR



Designed and Made in Germany

Makes the Difference

M00G Sheet-fed Gravure Presses for High Print Performance

H. C. MOOG GmbH Germany Maschinen fuer Druck und Papier
65385 Ruedesheim am Rhein · 56357 Miehlen im Taunus
fon: +49 (0) 67 22-90 00-0 · hcmoog@hcmoog.de

A warm welcome @ Drupa

MOOG Hall3 Stand 3A33

Thank you for your attention!