PRINTING DATA

The enclosed printing samples were produced in accordance to the following printing datas:

prepress stage

screen 60er Raster AM

AGFA P 970 printing plate

printing format 60 cm x 80 cm (two up)

40 cm x 60 cm (1 up)

Printed to colours- Euroscale: printing ink

pdf

Alpha Foil from Huber Group Resista N from Huber Group

Saphira ink perfect from Heidelberg

Pantone Black 4 Special ink

fountain additive Substifix HD 8301-29 by Michael Huber München GmbH

varnish none

Heidelberger Speedmaster CD 72x102 LYL press

further information _Printed with oxidativla drying ink.

It is important to use as little dampening as possible in order to speed

up the drying process.

_In case of the special colour the colour was not adapted, therefore the little difference between uncoated (u) and coated (c) is clearly visible.

No additives should be added to the printing ink.

When printing the samples for comparison the offset printing process standard (PSO) was observed. With all other materials no standard was set, as the requirements concerning the dot gain differ a lot due to the different surface characteristics.

None of the printing was varnished

_Materials with strongly textured surfaces have a tendency to paper distortion (register-true printing). Therefore it is recommended to print individual repeats. In case of the printing samples at hand printing in the size of 60cm x 80cm was done two up and in the size 40cm x 60cm

individual repeats.

The above mentioned information is the printers' recommendation who printed the samples for us.



PRINTING RECOMMENDATIONS

PEYTAN, PEYPRINT, PEYDUR AND SURBALIN

Peyer-substrates are made of high-quality, mainly long fibred sulphate pulp and can be excellently printed and perfectly converted. In order to achieve an optimum printing result it is important to adjust the printing technological conditions to the substrates used. The following tips will ensure a problem-free converting process:

1 PRINTING INKS

- 1.1 Use oxidatively drying inks.
- 1.2 Use abrasion-resistant types of ink.
- 1.3 Printing ink manufacturers' recommendations (selection):
 - **EUROSKALA** of Michael Huber
 - IROCAT and CARTOSET of Hartmann Druckfarben
 - Euro-Eco-Yellow, Magenta, Cyan and Black of Epple Druckfarben
 - _Series TEMPO NATURE of SICPA Druckfarben _RESISTA N 9000 of Michael Huber Druckfarben LITHO-SET-HAT-Anti-Skin-Inks of Siegwerk Druckfarben SERIE EU 8195 of Gebr. Schmidt Druckfarben NOVAFIT F100 of BASF Drucksysteme
- 1.4 Drying additive: Grafodrier of Michael Huber Druckfarben

- 2 DAMPING SOLUTIONS 2.1 Work with as little flow of damping solution as possible.
 - 2.2 Do not use any glycerine-containing damping solutions! If the chemical composition of the damping solution is not known, you should work without any admixture to the damping solution at any rate. pH value of the damping solution should be 5.3-5.4, 5.6. would be even better.
 - 2.3 Damping solution manufacturers' recommendations (selection):
 - SUBSTIFIX HD 8301-29 of Michael Huber Druckfarben
 - HYDROFIX B 801309 of Hostmann Steinberg
 - _SICCO Damp 3521 of Vegra
 - _GRÜNE WELLE 50 260079-6 of Siegwerk
 - _AQUASTABIL F H 5320/5321 of Hartmann Druckfarben
 - _Waterfif of Epple Druckfarben SM 93 of SIPCA Druckfarben
 - 2.4 When working with alcohol damping systems not more than 8-12 % isopropylic alcohol should be used.
 - 2.5 It is recommended to add a small quantity of damping solution drying agent.

3 DRY SPRAYING

- 3.1 It is best to use only little powder or to avoid any use of powder at all.
- 3.2 Use only starch powder.
- 3.3 Grain max. 20 µ

4 VARNISHING

The coated quality PEYTAN

- 4.1 Abrasion-resistant dispersion varnishes which are applied by means of the printing units or an integrated varnishing unit will result in a clear improvement of the abrasion resistance.
- 4.2 Varnish manufacturers' recommendations:

Concerning the varnishing unit: concerning the ink unit: Huber dispersion varnish 670100/50 Huber acrylic varnish 570800/05 Siegwerk W.Univ.-Disp.-Lack 10-606121-0 Vegra dispersion varnish 1501

Epple dispersion varnish 1104 high gloss, 1105 matt

BASF Drucksysteme Novaset 3147

5 DRYING PERIOD

The drying period should amount to at least 24 hours in order to realize a problem-free converting process. In any case a longer drying period will lead to a improved result.

This information is supplied without liability. If you have any questions, please directly contact the respective departments of the printing ink and varnish manufacturers.

