Hybrid Printing Systems
The Freedom Concept available only at Hapa
Could you face tomorrow’s needs today?

Secure your competitive edge with the flexibility to meet evolving needs. Hybrid printing systems combine proven cost-effective, ultra-responsive and secure Just-In-Time technologies into one system. Developed by the only company offering you UV Flexo, UV Digiprint and UV DOD Inkjet pack print solutions.

**No one gives you more choices**

Only Hapa offers you all of the printing technologies available to meet any pharmaceutical print production need. UV Flexo technology is ideal for all bulk printing – runs in the tens or hundreds of thousands – and for product information and artwork requiring the highest print quality.

When batch sizes shrink, and runs shorten, in response to market or regulatory demands, digital technology becomes more cost-effective. Hapa offers both UV Digiprint, the efficient computer-to-print technology for medium-sized batches where more frequent changeovers are required, and UV DOD Inkjet, the non-contact, fully-digital print technology, ideally suited for the smallest batches, serialisation and track and tracing.

With the addition of the Hybrid concept, Hapa adds a new dimension of tailor-made solutions that can meet and anticipate any individual requirement.
The freedom of flexibility . . .
Choose the most economical way to produce every run. Operate the technologies your Hybrid combines either together or independently:
- When you need to change batch-specific information during large runs, use the technologies in combination.
- Use the UV Flexo function autonomously when producing large batches that have no variable data.
- Add variable data to blank or pre-printed materials using the digital technology only.

. . . and ease of operation
Data management couldn’t be more user-friendly. All Hybrid system processes are harmonised via one standard interface – ours, or yours. And the simplicity of line integration and operation belies a sophisticated functionality that ensures compliance with the stringent validation requirements of the pharmaceutical sector.

. . . with unlimited possibilities
Any of the technologies we offer can be combined. But Hybrid solutions are not limited to Hapa technology alone; we can even integrate the technologies of any other supplier. Hapa is ready to tailor an individual Hybrid solution to your precise specifications. Let your imagination run. . .

Allow us to introduce you to just two installed Hybrid solutions:

UV Digiprint / UV Flexo Hybrid
Uses UV Flexo for
- Different colour coding
- Quick colour change
- Product-branding print quality
- Homogeneous print areas

Individualises with Digiprint for
- Product/market-specific information
- Variable data print
- Quick artwork changes
- Composing artwork out of data base

UV Flexo / UV DOD InkJet Hybrid
Print standard batch artwork with UV Flexo
- Highly cost-effective
- Minimum usage of ink
- UV ink in all PMS colour shades
- Highest print quality (up to 2400 dpi)

Customise with UV DOD InkJet
- Market-specific information
- Language variations
- Bar, matrix and alphanumeric codes
- Serialised/randomised data
Hapa – Your total solution provider

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Technical Data

<table>
<thead>
<tr>
<th>UV Flexo</th>
<th>UV Digiprint</th>
<th>UV DOD InkJet</th>
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</thead>
<tbody>
<tr>
<td>Short description</td>
<td>Designed for printing larger volumes of flat pharmaceutical packaging substrates. This contact printing technology uses rubber or photopolymer mats for the highest quality reproduction of graphics, verifiable bar/matrix codes, and text – even at the smallest point sizes – in up to five colours. The reusable print mats can be stored for unlimited usage ensuring consistent results for each throughput.</td>
<td>This contact print technology is particularly suitable for the efficient production of medium-sized batches where more frequent changeovers or unit dose coding is required. From electronic artwork, an individual print master is generated and then used to print in a repeatable manner using a method similar to screen printing. The computer-to-print process is entirely automatic, and takes only a matter of moments.</td>
</tr>
<tr>
<td>Resolution, max.</td>
<td>2400 dpi</td>
<td>600 dpi</td>
</tr>
<tr>
<td>Speed, max. (m/min)</td>
<td>34</td>
<td>20</td>
</tr>
<tr>
<td>Print width, max. (mm)</td>
<td>600</td>
<td>290</td>
</tr>
<tr>
<td>Web width, max. (mm)</td>
<td>610</td>
<td>300</td>
</tr>
<tr>
<td>Print length, max. (mm)</td>
<td>350</td>
<td>285</td>
</tr>
<tr>
<td>Colours</td>
<td>Up to 5 in all PMS shades</td>
<td>Single colour in all PMS shades</td>
</tr>
<tr>
<td>Working mode</td>
<td>Continuous and intermittent</td>
<td>Continuous and intermittent</td>
</tr>
<tr>
<td>Computer-to-print capability</td>
<td>via Hapa Print Mat Laser Engraver, powered by Hapa’s Place-it software</td>
<td>via integrated print master production, powered by Hapa’s Place-it software</td>
</tr>
</tbody>
</table>

Printing Characteristics

| Type of fonts | All | All | All |
| Font size, min. (points) | 2-3 (depending on font) | 4 (depending on font) | 5 (depending on font) |
| Codes | All established bar codes and 2D codes | All established bar codes and 2D codes | All established bar codes and 2D codes |
| Variable data print | Yes via variable data strip | Yes via new print master | Yes fully-digital |
| Serialisation / Track & Trace | No | No | Yes |
| Press proof | Yes via print mat | Yes via print master | Yes via vision control system |

FOUNDED IN 1933, HAPA IS THE WORLD LEADER IN LATE STAGE CUSTOMISATION AND ON DEMAND PRINTING TECHNOLOGIES FOR THE PHARMACEUTICAL SECTOR, DELIVERING FAST, ACCURATE AND VALUE-CREATING PACKAGING SOLUTIONS. SINCE THE INTRODUCTION OF ITS FIRST OVERPRINTING MACHINE MORE THAN FIVE DECADES AGO, HAPA HAS DELIVERED A CONSTANT STREAM OF INNOVATIONS TO HELP ITS CUSTOMERS REMAIN RESPONSIVE AND COMPETITIVE IN A FAST-CHANGING MARKET. HAPA’S RANGE OF TECHNOLOGY – UV FLEXO, UV DIGITAL, UV DOD INKET, LASER ENGRAVER & HYBRID TECHNOLOGIES – MAKES US UNIQUELY QUALIFIED TO CONSULT WITH YOU TO FIND THE RIGHT PACKAGING PRINT SOLUTION FOR YOUR NEEDS. HAPA IS HEADQUARTERED NEAR ZURICH, SWITZERLAND, WHERE A TEAM OF OVER 100 SPECIALISTS ARE ENGAGED IN R&D, DESIGN AND PRODUCTION, SALES AND PROJECT MANAGEMENT AND AFTERMARKET. IN ADDITION, A WORLDWIDE NETWORK OF SALES AND SERVICE CENTERS PROVIDES PROFESSIONAL, LOCAL SUPPORT TO HAPA’S INSTALLED BASE OF OVER 8,000 MACHINES IN 50 COUNTRIES. HAPA IS A PROUD MEMBER OF COESIA GROUP, AN INTERNATIONAL, PRIVATELY OWNED ENTERPRISE. COESIA IS A FEDERATION OF AUTOMATED MACHINERY COMPANIES DEVOTED TO GROWTH AND MARKET LEADERSHIP.