nyloflex® FTC Digital

The Easy Way to Flat Top Dots and Fluting Reduction

Enhanced print quality in corrugated postprint

- Inherently flat top flexo plate designed to cope with all challenges in corrugated postprint
- Significant fluting reduction on various corrugated boards, from fine to rough flute, hence enhanced print quality
- Able to hold finest highlights

- Superior print resolution – precise reproduction of fine details, sharp and defined elements, text and codes
- Excellent ink transfer allows for smooth solids, with even ink laydown, thus improved and consistent print results

Easy and efficient

- Easy creation of flat top dots – no additional equipment, processing steps or consumables required
- Reduced complexity and efficiency gain in plate making
- Improved reproducibility and consistency due to less error sources during plate making
- Higher wear resistance and high print run stability allows for greater consistency

- Increased efficiency through quick press set-up, thus reduced start-up times and waste
- Higher productivity due to superior stability at increased press speeds
- Extremely durable and robust material provides the well-known high resistance to ozone and good storage capabilities of the nyloflex® printing plates

Advantages related to the Flat Top Dot geometry by using the standard digital workflow:

- Significant fluting reduction
- Less dot gain tolerances – on press the flat top dots are less impression sensitive than standard digital dots – improvement of production consistency
- Allows for a reduced bump-up and consistent dot gain over the whole print run
### Technical characteristics

<table>
<thead>
<tr>
<th>Base material</th>
<th>Polyester film</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour of raw plate</td>
<td>Red (with black LAMS layer)</td>
</tr>
<tr>
<td>Total thickness(^1) (mm) (inch)</td>
<td>2.84 (0.112) 3.18 (0.125) 3.94 (0.155) 4.70 (0.185) 6.35 (0.250)</td>
</tr>
<tr>
<td>Hardness acc. to DIN53505 (Shore A)</td>
<td>32 32 32 32 32</td>
</tr>
<tr>
<td>Hardness processed plate (Shore A)</td>
<td>40 36 34 32</td>
</tr>
<tr>
<td>Relief depth (mm)</td>
<td>0.9 - 1.2 0.9 - 1.5 1.0 - 1.5 1.2 - 2.2 2.2 - 3.0</td>
</tr>
<tr>
<td>Tonal range (%) at screen ruling (l/cm)</td>
<td>2.98 2.98 3.98 3.98 3.98</td>
</tr>
<tr>
<td>Fine line width (down to μm)</td>
<td>100 100 300 300 300</td>
</tr>
<tr>
<td>Isolated dot diameter (down to μm)</td>
<td>200 200 750 750 750</td>
</tr>
</tbody>
</table>

### Processing parameters\(^2\)

| Back exposure @ 19 mW/cm\(^2\) (s) | 20-60 20-60 50-100 60-120 80-200 |
| Main exposure (min) | 10 - 15 10 - 15 10 - 15 10 - 15 10 - 15 |
| Washout speed (mm/min) | 130-150 100-130 100-130 80-120 60-90 |
| Drying time at 60 °C / 140 °F (h) | 2.5 - 3.0 2.5 - 3.0 2.5 - 3.0 3.0 - 3.5 3.0 - 4.0 |
| Post exposure UV-A (min) | 10 10 10 10 10 |
| Light finishing UV-C (min) | 1-4 1-4 1-4 1-4 1-4 |
| Laser intensity (J/cm\(^2\)) | Approx. 15 - 20% higher than for standard nyloflex® digital plates |

### Suitable equipment

The nyloflex® FTC Digital can be processed with nyloflex® processing equipment and all similar devices and can be used with all laser systems suitable for imaging flexo printing plates.

### Printing inks

The nyloflex® FTC Digital is suitable for all water based printing inks.

### Washout solvents

Especially good results are achieved with nylosolv® washout solvents. nylosolv® can be distilled and reused.

### Processing information

A detailed description of the individual plate making steps, as well as detailed information about processing and storing, can be found in the nyloflex® User Guide.

### High quality standard

nyloflex® printing plates are manufactured according to DIN ISO 9001 and DIN ISO 14001 standards and requirements. This process guarantees our customers consistent high quality products and services.

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1 Standard thicknesses currently available – subject to change.
2 All processing parameters depend on, among others, the processing equipment, lamp age and the type of washout solvent. The above mentioned processing times were established under optimum conditions on nyloflex® processing equipment and using nylosolv® washout solvents. The values for the main exposure of digital plates were determined at an exposure intensity of >15mW/cm\(^2\). Under other conditions the processing times can differ from these; therefore, the above mentioned values are only to be used as a guide.

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You are welcome to contact us for further information.

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