sedak ceramic-ink printing
Printing glass of unique dimensions
sedak printing know-how

Ceramic-ink digital printing or full-coverage roller-coater technique

Colors
The wide color range of ceramic inks contains pre-mixed and digitally mixed colors.

Permanent color brilliance of the facade

Black and white colors are „Side One“ suitable, e.g. as colors that prevent slipping.

Subsequent processing
Processing into insulating and safety glass possible
sedak printing know-how

Ceramic-ink digital printing or full-coverage roller-coater technique

**Durability**
Sub-micron glass frits and natural pigments are bonded to the glass during the tempering process giving ceramic inks an unmatched resistance to scratching, UV radiation and the weather.

**Sustainable Architecture**
The ceramic inks are non-toxic in its liquid and printed form making the glass fully recyclable.
roller coater
printing options
roller coater

Capabilities

Full-coverage and single-color printing

Very homogeneous ink application

Opaque quality possible

Application e.g. with:
- roofs or canopies (sun protection)
- counter prints
## roller-coater printing (Cefla Large)

<table>
<thead>
<tr>
<th></th>
<th>Max. Size</th>
<th>Thickness Glass</th>
<th>Thickness Coating</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>max. size</strong></td>
<td>3300mm x 20000mm</td>
<td></td>
<td></td>
<td>ceramic ink, heavy-metal free, metallic available</td>
</tr>
<tr>
<td><strong>thicknss glass</strong></td>
<td>6mm - 19mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>thicknss coating</strong></td>
<td></td>
<td></td>
<td>Approx. 60µ wet coating thickness</td>
<td></td>
</tr>
<tr>
<td><strong>colors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Roller-coater printing (Cefla Small)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>max. width</td>
<td>12000mm</td>
</tr>
<tr>
<td></td>
<td>472in</td>
</tr>
<tr>
<td>thickness glass</td>
<td>6mm - 19mm</td>
</tr>
<tr>
<td></td>
<td>1/4in - 3/4in</td>
</tr>
<tr>
<td>rollers</td>
<td>engraved roller</td>
</tr>
<tr>
<td>colors</td>
<td>ceramic ink, heavy-metal free, metallic possible</td>
</tr>
</tbody>
</table>

### Edge-Coater

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>max. width</td>
<td>600mm</td>
</tr>
<tr>
<td></td>
<td>23in</td>
</tr>
<tr>
<td>thickness coating</td>
<td>80µ - 120µ (wet coating thickness)</td>
</tr>
</tbody>
</table>
digital printing
printing options
ceramic-ink digital printing

Capabilities

Prints based on six basic colors
Resolution up to 1024dpi
Color transitions possible
Thin lines, concentric circles, dots at different levels of intensity and opaqueness
Complex, multi-color grid designs
Frameless prints
ceramic-ink digital printing

Advantages / strengths of digital printing

Variable thickness of color application

Transparent, opaque as well as multi-layer printing

Higher saturation due to counter print

Flexibility thanks to digital technology

Design easily and cost-efficiently reproducible (≠ screen printing)
digital printing

Possible applications

Decorative:
- Interior design
- Photorealistic designs

Functional:
- Sight protection
- Sun protection
- Printing of serial numbers and barcodes
- Black and white colors are „Side One“ suitable, e.g. for slip prevention on steps.
# Digital Printing

## Facts & Figures

### Ceramic-ink Digital Printing

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Size</td>
<td>3300mm x 1800mm (130in x 709in)</td>
</tr>
<tr>
<td>Max. Thickness</td>
<td>6 – 19mm (1/4in - 3/4in)</td>
</tr>
<tr>
<td>Max. Weight</td>
<td>2822kg (6221lbs)</td>
</tr>
<tr>
<td>Type of Color</td>
<td>Ceramic ink, heavy-metal free</td>
</tr>
<tr>
<td>Coating</td>
<td>6µm – 80µm</td>
</tr>
<tr>
<td>Precision</td>
<td>± 20µm/m</td>
</tr>
</tbody>
</table>
digital printing
Facts & figures

**Ceramic-ink digital printing**

<table>
<thead>
<tr>
<th><strong>tolerances printing size</strong></th>
<th>± 2mm (8mm - 9000mm); ± 4mm (9000mm - 18000mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>colors</strong></td>
<td>6 basic colors: RAL 9005, RAL 9010, RAL 3009, RAL 6001, RAL 5005, RAL 1016 digital mixtures</td>
</tr>
<tr>
<td><strong>application area</strong></td>
<td>interior/exterior</td>
</tr>
<tr>
<td><strong>picture formats</strong></td>
<td>PDF, PS, EPS, AI, TIFF, BMP, JPEG, DXF</td>
</tr>
<tr>
<td><strong>printing resolution</strong></td>
<td>max. 1024 dpi</td>
</tr>
</tbody>
</table>
digital printing
possible applications
double vision

Sun protection from inside – sight protection from outside

Two print layers lying exactly on one another for in diverse colors or gradients

Basic pattern freely designable

Different appearance:
e.g. dark dots on the inside for a hardly noticeable sun and glare protection; light-color dots on the outside for sight protection inwards.

sedak capabilities:
– Precise positioning before each of the two printing runs
– Double-vision technology in different patterns and colors
House of European History, Brussels

Glass expansion of a historic building

facade with individual design of fine lines
decorative application

Digital print as etching imitation
decorative application

Imitation printing: cost-efficient and weight reducing
decorative application

Writing for a creative facade design
functional application

Dot grid for sight protection

dots with diameter ≥ 2 mm, distance between the dots: 1.2mm
industrial facade

Reducing solar radiation
medical sector

decorative: photo-realistic printing for an ICU

sedak ceramic-ink printing

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