Screen Printing – Recommended Mesh Sizes for Metallic and Pearlescent Effects
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Screen printing is used in a wide range of applications, decorative and industrial. Besides the desired optical appearance, effect pigments for screen printing are faced with manifold requirements, such as mechanical, washing or temperature resistance. We look forward to advising you regarding the optimal use of our effect inks, pastes and pigments for your individual print application.

General Information

Film and Systems
- Film thickness app. 8 - 300 µm; (8 - 300 g/m²)
- Medium and high viscosity systems
- Ink system: UV curing, solvent, water based, PVC, ceramic

Suitable particle size distribution
- Almost off limits

Screen characteristics
- Cylindrical objects printable
- High brilliance
- Low cost for the preparation of the sleeve
- Efficient for smaller print runs
- Brilliance and optical effects depending on particle size

Applications and Markets

Decorative Screen Printing
- Labels / self adhesive labels
- Offset finishing
- Cartoon board packaging

Industrial Screen Printing
- In-Mould-Decoration IMD / In-Mould-Labelling
- 3D objects
- Glass / ceramic application
- Conductive

Textile Screen Printing
- Clothing
- Fabric panels

This overview shows our effect pigments that we usually recommend for screen printing applications:

<table>
<thead>
<tr>
<th>Product class</th>
<th>Product type</th>
<th>Pigment size</th>
<th>Recommended screen mesh</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>LUXAN Powders (pearlescent pigments based on borosilicate glass)</td>
<td>E</td>
<td>20-150 µm</td>
<td>36-90 L/cm; 92-90 L/inch</td>
<td>Coarse grade for glittering effects, also for rough substrates</td>
</tr>
<tr>
<td>C</td>
<td>10-40 µm</td>
<td>54-64 L/cm; 137-64 L/inch</td>
<td>Coarse pigments for sparkling effects, recommended for decorative applications</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>17-27 µm</td>
<td>77-48 L/cm; 195-48 L/inch</td>
<td>Smallest glassflakes for transparent shimmering effects on preferably even substrates</td>
<td></td>
</tr>
<tr>
<td>SYMEC Powders (pearlescent pigments based on synthetic mica)</td>
<td>E</td>
<td>25-150 µm</td>
<td>36-90 L/cm; 92-90 L/inch</td>
<td>Coarse grade for glittering effects, also for rough substrates</td>
</tr>
<tr>
<td>C</td>
<td>10-40 µm</td>
<td>54-64 L/cm; 137-64 L/inch</td>
<td>Coarse pigments for sparkling effects, recommended for decorative applications</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>1-15 µm</td>
<td>100-40 L/cm; 255-40 L/inch</td>
<td>Best compromise between effect and printability</td>
<td></td>
</tr>
<tr>
<td>ULTRASTAR SX-9200 silver</td>
<td>10 µm</td>
<td>100-40 L/cm; 255-40 L/inch</td>
<td>Mirror-like effect for reverse film applications, solvent based ink</td>
<td></td>
</tr>
<tr>
<td>PRISMASTAR SX-5321</td>
<td>10 µm</td>
<td>100-40 L/cm; 255-40 L/inch</td>
<td>Rainbow effect for reverse film applications, solvent based ink</td>
<td></td>
</tr>
<tr>
<td>Chromal X</td>
<td>10 µm</td>
<td>100-40 L/cm; 255-40 L/inch</td>
<td>High coverage silver effect, based on leafing pigments</td>
<td></td>
</tr>
</tbody>
</table>

Application examples: effect pigments in screen printing.
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