



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 printings 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/m<sup>2</sup>)
- 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
- Carton board packaging

### Industrial Screen Printing

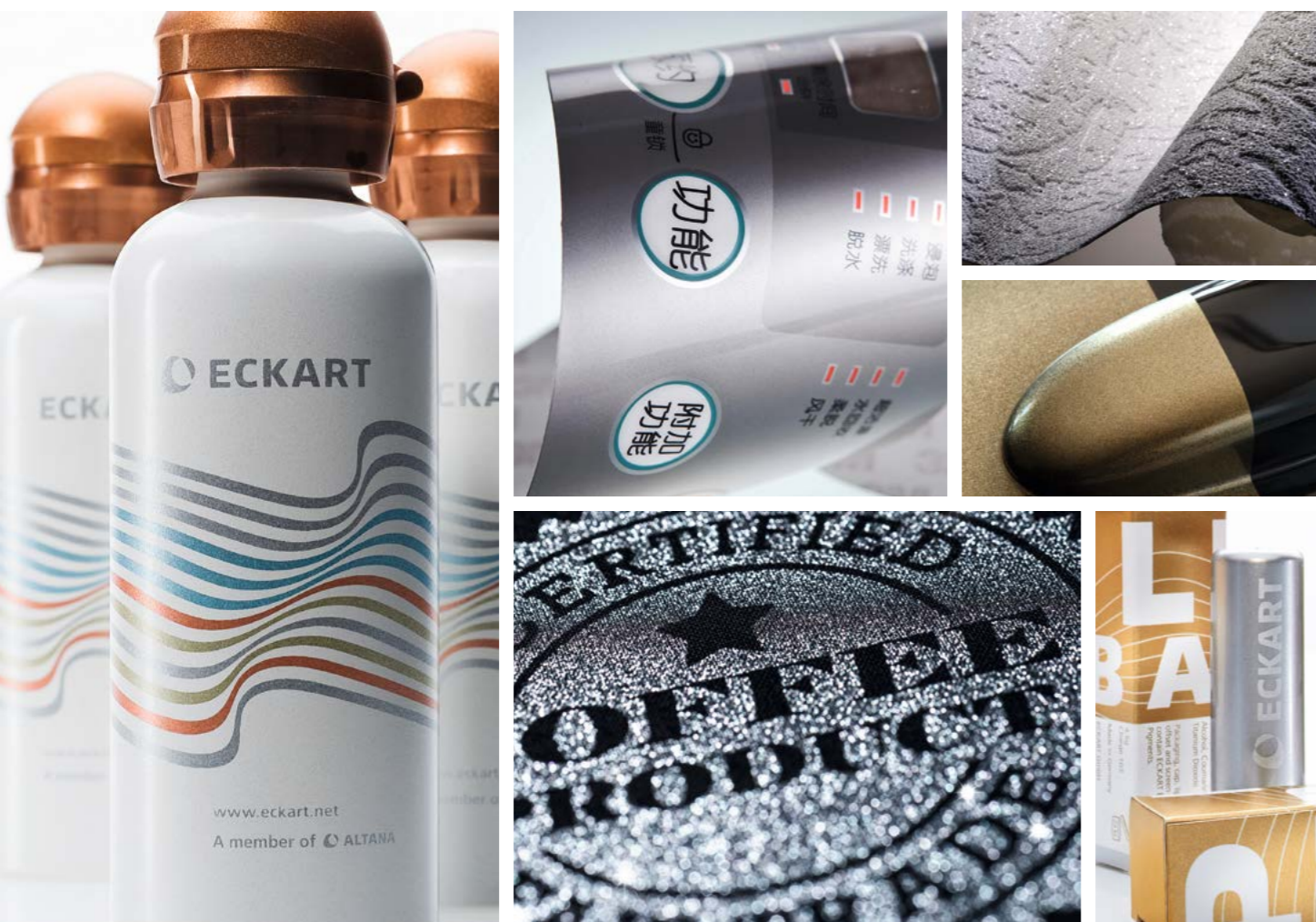
- In-Mould-Decoration IMD / In-Mould-Labeling
- 3D objects
- Glass / ceramic application
- Conductive

### Textile Screen Printing

- Clothing
- Fabric panels

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

Product class	Product type	Pigment size	Recommended screen mesh	Effect
LUXAN Powders (pearlescent pigments based on borosilicate glass)	E	35-150 µm	36-90 L/cm; 92-90 L/inch	Coarsest grade for glittering effects, also for rough substrates
	D	20-100 µm	36-90 L/cm; 92-90 L/inch	Coarse pigments for sparkling effects, recommended for decorative applications
	C	15-60 µm	54-64 L/cm; 137-64 L/inch	Medium sized pigments for a best compromise between effect and printability
	B	17-27 µm	77-48 L/cm; 195-48 L/inch	Smallest glassflakes for transparent shimmering effects on preferably even substrates
SYMIC Powders (pearlescent pigments based on synthetic mica)	E	20-150 µm	36-90 L/cm; 92-90 L/inch	Coarsest grade for glittering effects, also for rough substrates
	C	10-40 µm	54-64 L/cm; 137-64 L/inch	Coarse pigments for sparkling effects, recommended for decorative applications
	B	5-25 µm	90-48 L/cm; 230-48 L/inch	Medium sized pigments for a best compromise between effect and printability
	A	1-15 µm	100-40 L/cm; 255-40 L/inch	Smallest glassflakes for transparent shimmering effects on preferably even substrates
Bronze Powders	LT	42 µm	36-90 L/cm; 92-90 L/inch	Glittering effect; available in rich gold, rich pale gold and pale gold
	L 900	35 µm	36-90 L/cm; 92-90 L/inch	Sparkling effect; available in rich gold, rich pale gold and pale gold
	G 900	27 µm	48-70 L/cm; 123-70 L/inch	Best compromise between brilliance and coverage; available in rich gold, rich pale gold and pale gold
	E 900	17 µm	54-64 L/cm; 137-64 L/inch	Best compromise between brilliance and coverage; available in rich gold, rich pale gold and pale gold
	K 900	10 µm	100-40 L/cm; 255-40 L/inch	High coverage bronze effect; available in rich gold, rich pale gold and pale gold
Aluminum Powders	STANDART® Reflexal 212	54 µm	36-90 L/cm; 92-90 L/inch	Glittering effect, based on non-leafing pigments
	STANDART® Reflexal 214	34 µm	48-70 L/cm; 123-70 L/inch	Sparkling effect, based on non-leafing pigments
	Chromal I	39 µm	48-70 L/cm; 123-70 L/inch	Sparkling effect, based on leafing pigments
	Chromal II	18 µm	54-64 L/cm; 137-64 L/inch	Best compromise between brilliance and coverage, based on leafing pigments
	Chromal IV	15 µm	77-48 L/cm; 195-48 L/inch	Best compromise between brilliance and coverage, based on leafing pigments
	Chromal VIII	12 µm	77-48 L/cm; 195-48 L/inch	Silver effect, based on leafing pigments
	Chromal X	10 µm	100-40 L/cm; 255-40 L/inch	High coverage silver effect, based on leafing pigments
METALURE® Dispersions	A-41510 MB	10 µm	100-40 L/cm; 255-40 L/inch	Mirror-like effect for reverse film and surface applications
Printing Inks	PRIMASTAR SX-5324	50 µm	77-48 L/cm; 195-48 L/inch	Sparkling rainbow effect for reverse film applications, solvent based ink
	PRIMASTAR SX-5321	10 µm	100-40 L/cm; 255-40 L/inch	Rainbow effect for reverse film applications, solvent based ink
	ULTRASTAR SX-9200 silver	10 µm	100-40 L/cm; 255-40 L/inch	Mirror-like effect for reverse film applications, solvent based ink
	ULTRASTAR UV SP-8712 silver	10 µm	150-34 L/cm; 380-34 L/inch	Mirror-like effect for paper applications, UV drying ink



Application examples: effect pigments in screen printing.



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