Technical data sheet
SCF Capillary

DESCRIPTION

SCF Series Capillary Film is designed for use with all solvent and UV based inks. It varies in colour depending on micron thickness and comes in eight different thicknesses.

FILM THICKNESSES	COLOUR
SCF 12	Light Blue
SCF 16	Mid Blue
SCF 18	Mid Blue
SCF 20	Red
SCF 25	Red
SCF 30	Red
SCF 40	Dark blue
SCF 50	Dark red

Available in standard roll size 104 x 100 and in custom sheets sizes on request.

BENEFITS

- Excellent resistance to UV and Solvent Inks
- 3 times faster than common dual cure and diazo capillary films
- Good resistance to humidity during printing and storage
- Shelf life over 3 years even with critical conditions
- After application, image can be engraved even after 2/3 weeks
- Wide exposure latitude
- Very good adhesion on polyester and stainless steel mesh
- Excellent definition and resolution

Film storage

Opened and unopened rolls or sheets of film should be stored at temperatures of between 10 - 25°C for maximum shelf life.

Handling the film

The film should be handled under low wattage tungsten or yellow fluorescent lighting. The film should be returned to the container after cutting off the required length. Do not kink the film as this could affect adhesion to the mesh. The film should be handled wearing light cotton or lint-free gloves to avoid contact with the emulsion surface. Do not allow the film surface to come in contact with water.

Mesh Preparation

Direct Prep 2 is strongly recommended in order to provide an even water break and to improve adhesion.
To obtain better results in terms of adhesion and resistance during printing, we recommend to use our HIBOND Plus mesh, that also doesn't require any mesh pre-treatment.

Recommended mesh count

Product	Mesh count (thr/cm)	Application
SCF 12	150-180	UV printing, very high resolution and edge definition
SCF 16	120-165	UV printing, very high resolution and edge definition
SCF 18	120-165	UV printing, very high resolution and edge definition
SCF 20	120-165	UV and solvent printing, high resolution and edge definition
SCF 25	100-140	UV and solvent printing, high resolution and edge definition
SCF 30	90-140	Fine graphics and medium halftones dots
SCF 40	71-100	General graphics printing
SCF 50	43-77	High deposit printing

Adhering to the mesh

Large and small screens: cut the film to size and place the film on a dry, flat surface. Roll the film, emulsion side out, around a plastic tube leaving approximately 2cm unrolled. Get wet the mesh with water and wipe the excess on it and from the perimeter of the frame to avoid water drops running into the adhered film. Contact the rolled film leading edge onto the top of the wet vertical screen and unroll the film down to screen, thus adhering it to the mesh. Remove excess moisture from both sides of the screen with a light weight window squeegee. Wipe excess water from the perimeter of the frame with an absorbent cloth then proceed to drying.
Small screens only: place the film, emulsion side up, on a raised pad and lay the dry degreased screen on top. Using a hand spray water bottle, spray water onto the mesh until the film is completely wet. Squeegee off the excess water from both sides of the screen. Wipe water from the perimeter of the frame, and then proceed to drying.

Drying the screen

The screen can be dried with cold or warm air, maximum 40°C. Thorough drying is essential for optimum results. When the support has been peeled off, continue drying for a few minutes to ensure the film is completely dry. Drying should be in either dark or yellow light conditions.

Exposure

As SCF Capillary Film is based on pure photopolymer emulsion, its exposure time is particularly short, generally 1/3 than common pre-sensitized films. SCF has the advantage to maintain wide exposure latitude. **Starting point exposures with metal halogen lamp at 130cm distance on coloured 120 mesh fabrics are listed below.** Exposures will vary with mesh count, colour, distance and lamp type.

Indicative exposure times:

FILM	POWER	Exp. Time (approx.)
SCF 12	5000 W	15 seconds
SCF 16-18-20	5000 W	20 seconds
SCF 25-30	5000 W	30 seconds
SCF 40	5000 W	35 seconds
SCF 50	5000 W	40 seconds

Develop

Spray both sides of screen with water to start washout. The majority of spray should be done from the printing side until image is completely defined. Finish washout by spraying inside of screen to remove any stencil residue.

Dry stencil

Place developed screen into a screen dryer. Make sure screen is fully dry before use.

Reclaiming

Removal of stencils is easy when using Remove ER product range. Allow the remover to do the majority of the work. Finish removal with high-pressure washer when stencil has started to run down screen. Do not allow the stencil remover to dry out the screen before high-pressure washout.

Screens storage

After applying the film to the screen and drying, the screens can be kept in the dark for up to a week before exposure, provided that reasonable temperature and humidity conditions are maintained. If storage of the screens is anticipated, it is recommended that the backing sheet is not removed until the screen is about to be exposed.

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