

## EXPOSURE TIMES

### Basic preconditions:

**43-80/cm white**

polyester fabric (110-80/inch)

**Distance 100 cm**

Bulb to vacuum frame

**5 KW metal halogen lamp**

with iron-gallium bulb (photopolymer)  
at approx. 100 operating hours  
(corresp. to Akticop S 3500 MH lamp)

### 1 THICKFILM FOTECAP TECNO FILM-METHOD

per 100 micr. FILMthickness **1 minute**

TECNO Film transferred with  
FOTECOAT 1834 (WR) SOLO or  
FOTECOAT 1840 (SR) SOLO

### 2 THICKFILM FOTECOAT EMULSION CASTING-METHOD

per 100 micr. TOTAL stencil thickness  
**2 minutes**

with FOTECOAT 1834 (WR) SOLO  
or FOTECOAT 1840 (SR) SOLO

### 3 THICKFILM FOTECOAT EMULSION with DIRECT COATING

TOTAL stencil thickness (micr.) ÷ 3 =  
FOTECOAT 1835 (WR) SOLO **time in sec.**

per 100 micr. TOTAL stencil thickness  
FOTECOAT 1845+1846 (SR) SOLO **1 minute**

Standard values need corrections by the factors shown on the reverse side if the preconditions do not correspond with the above values.

A step-wedge exposure is necessary based on the above rules.

# CORRECTION FACTORS for the calculation of the exposure time

Should the parameters not correspond with the following standard values:  
43-80/cm (110-80/inch), white mesh, 5 KW metal halogen lamp at 1 m distance, the following  
correction factors have to be applied

## for FOTECO THICKFILM STENCILS

### MH Lamps

If no 5 KW lamp is available (corresponding to Acticop 3500S) the following correction factors are valid:

MH 1000W = 1KW: 5x longer than 5KW  
MH 2000W = 2KW: 2,5x longer than 5KW  
MH 3000W = 3KW: 1,7x longer than 5KW  
MH 4000W = 4KW: 1.25x longer than 5KW  
MH 7000W = 7KW: 0,7x shorter than 5KW

### Distance vacuum frame - light source

Should the distance not correspond to 100 cm, corrections should be made as follows:

Distance 60 cm = Factor 0.36  
Distance 80 cm = Factor 0.64  
Distance 90 cm = Factor 0.81  
Distance 110 cm = Factor 1.21  
Distance 120 cm = Factor 1.44  
Distance 130 cm = Factor 1.69  
Distance 150 cm = Factor 2.25  
Distance 180 cm = Factor 3.24  
Distance 200 cm = Factor 4.00

### Fabric

The following corrections are necessary if the fabric does not correspond

yellow instead of white:

steel instead of polyester white:

double exposure time

triple exposure time

polyester 32-100/cm (83/100 inch) white  
polyester 21-140/cm (54-140/inch) white  
polyester 15-200/cm (40-200/inch) white  
polyester 10-260/cm (25-260/inch) white  
polyester 8-300/cm (20-300/inch) white

instead of 43-80/cm white: 1,4 x longer  
instead of 43-80/cm white: 2,0 x longer  
instead of 43-80/cm white: 2,5 x longer  
instead of 43-80/cm white: 3,0 x longer  
instead of 43-80/cm white: 4,0 x longer

### HINT:

Equal exposure times are valid if finer meshes than 43-80/cm (110-80/inch) are used.

It is recommended not to use finer meshes than 54-64/cm (137-64/inch for thickfilm stencils).

### Reinforcement on the squeegee side

If an additional coat on the squeegee side (after drying and before exposure) is applied, the calculated exposure time has to be increased by 50%.



more informations from FOTEC AG

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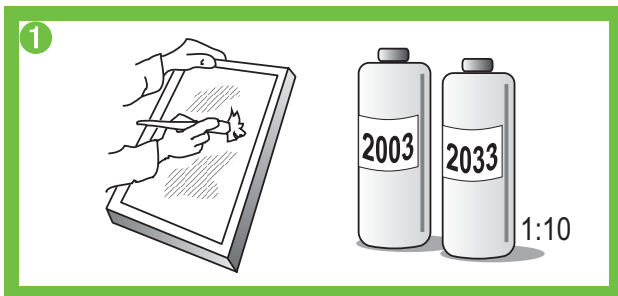
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e-mail: [info@fotec.ch](mailto:info@fotec.ch)

Internet: [www.fotec.ch](http://www.fotec.ch)



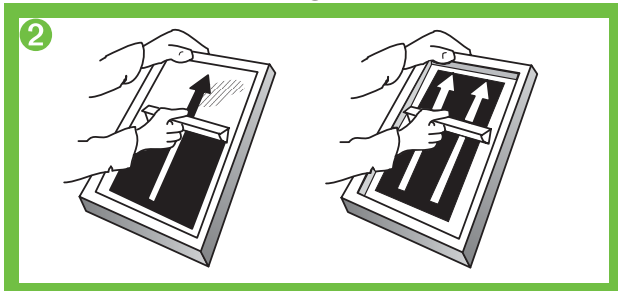
# 1 THICKFILM FOTECAP TECNO FILM METHOD



## PREPARE THE MESH

- Degrease thoroughly and let dry.

Work under yellow or subdued light conditions.

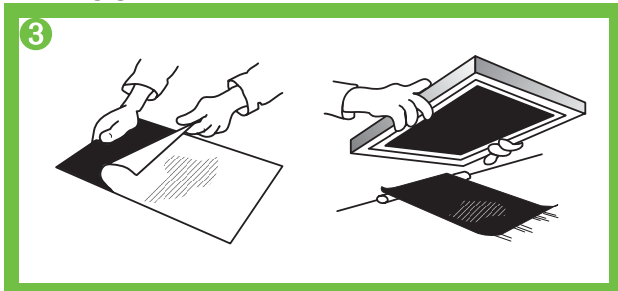


## PRECOAT

- Coat 1x print side, 2x squeegee side. **WET in WET.** Do **NOT** dry.

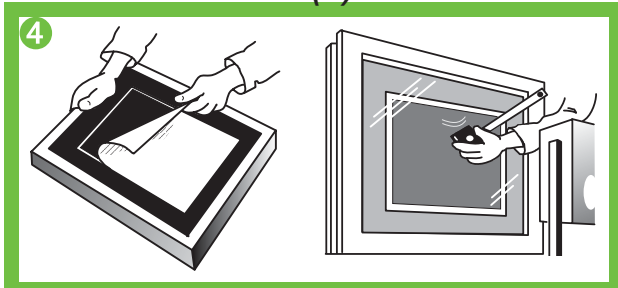
Use FOTECOAT 1834 SOLO for water based inks or 1840 SOLO for solvent based inks.

The coating should cover most of the mesh area.



## ADHERE THE FILM(S)

- Remove protective plastic sheet from film.
- Place film, emulsion side upwards, on a table or better on FOTECO s FILMAFFIX.
- Bring the wet screen in contact with the film edge.
- Pull the frame slowly and without pressure towards you.
- Dry at 25-35°C, squeegee side upwards.



## PEEL CARRIER, EXPOSE, WASH-OUT

- **IMPORTANT:** let the film cool down before peeling the carrier; dry again for a few minutes.
- Place right-reading positive in position.
- Expose.
- Wash-out at 25°C (immerse for a few minutes in luke warm water).
- Dry thoroughly.



## DECOATING AFTER PRINTING

- Clean stencil from ink.
  - Use decoating chemicals from squeegee side.
  - TECNO Film comes off in whole pieces.
- NOTE: check drain outlet.



## HOW TO LAMINATE

- You can laminate 2 or more TECNO sheets face to face. No adhering liquid is necessary.
- Remove protective plastic sheet from both films.
  - Place one film on the table and use a hard rubber roller to combine the sheets.
  - Peel carrier sheet and continue at step No. 3 or repeat for more sheets.