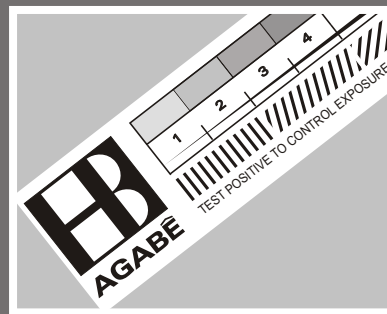


AGABÊ®

TEST POSITIVE



TO
CONTROL
EXPOSURE
DEFINITION
AND RESOLUTION



PRODUCT:

AGABÊ Test Positive Scale to control exposure, definition and resolution.

CHARACTERISTIC:

The Test Positive has three components:

- Gradual gray scale, divided in 10 Steps, with different optical densities.
- Straight line scale with angles varying from 0° to 90°.
- Triangular scale, starting with a width of 1mm and gradually decreasing to 0 in both positive and negative, divided in 10 parts.

USES:

- To define the correct exposure time (at ideal hardening of the photographic layer).
- To control the exposure (assuring the repeatability of the stencils).
- To evaluate the definition (verifying how the stencil edges are affected by the threads of a fabric).
- To measure the resolution loss (loss of details caused by light diffraction on the fabric or on the photographic layer).

Due to its small size and simple one step use, the AGABÊ test can be easily performed in every stencil as a quality control tool, assuring perfect repeatability.



INSTRUCTIONS

AGABÊ

INSTRUCTIONS:

How to determine the correct exposure time:

The exposure time is evaluated by looking at the gray scale steps remaining on the fabric after wash out.

Coat the emulsion and dry it in the usual way. Place the AGABE Test Positive Scale on the stencil. The gray scale side should not be placed in contact with the screen printing emulsion. Expose the screen for an estimated time. Wash out the stencil and analyze the number of gray steps remaining on the stencil.

For white meshes the exposure time is correct when steps 1, 2, 3, 4 and 5 remain on the fabric.

The stencil is under exposed (insufficient exposure) if less than 4 steps remain. This situation can reduce the stencil's resistance during printing. If more than 6 steps remain on the fabric, the stencil is over exposed (excessive exposure). This can cause resolution and definition losses.

Note 1: When it is necessary to render fine details, the exposure time can be adjusted to leave only 4 steps on the fabric. If there are no details to be printed, the exposure time can be adjusted to leave 6 steps on the fabric. This will increase the stencil's resistance.

Note 2: For yellow meshes, add 2 steps for each of these limits.

TABLE 1: EXPOSURE LIMITS

PRINTING IMAGE	WHITE MESH	YELLOW MESH
Finer printing	4 Steps	6 Steps
Normal printing (recommended range)	5 Steps	7 Steps
Coarse printing	6 Steps	8 Steps
Stencil under exposed	Less than 4 Steps	Less than 6 Steps
Stencil over exposed	More than 6 Steps	More than 8 Steps

- **How to adjust the exposure time:**

If the number of anchored steps is out of the specified limits (incorrect exposure time), use the correction factors of table 2. To increase the number of steps that remain on the fabric after wash out multiply the exposure time by the correction factor. To reduce the steps divide the exposure time by the correction factor.

TABLE 2: CORRECTION FACTOR

CORRECTION FACTOR	1 Step	2 Steps	3 Steps
TO INCREASE	Time x 1,41	Time x 2,0	Time x 2,82
TO REDUCE	Time ÷ 1,41	Time ÷ 2,0	Time ÷ 2,82

- **How to evaluate the definition:**

Observe the straight scale with a magnifier of at least 30 times and evaluate the the image quality (independence of the emulsion edge from the fabric threads).

Note 3: The printing quality is also influenced by the surface roughness of the stencil on the printing side. Therefore use emulsions that guarantee perfect edge definition and low Rz value.

- **How to measure the resolution loss:**

The resolution loss is measured by the triangular scale. Each mark on the scale represents 0,1 mm of resolution. Observe the triangle's vertex (thin edge). The mark on the triangle edge equals to the smallest printable detail.

ADDITIONAL INFORMATION:

This information is based on our best current knowledge. This product is solely intended for industrial use. No warranties are made or implied. Agabê will not be held liable for claims related to any party's use or reliance on information or recommendations contained herein.