

# AUTO-OPTIMIZE™ - INSTRUCTIONS

When using Amergraph **AdVantage™** Screen Exposure Equipment:

Place the Auto-Optimize™ Test Target on the center of the exposure glass face-up (*Right Reading*). Place an unexposed coated screen over the Test Target. Do a test exposure using program 0, (220 Units). Process the screen and evaluate the developed image. Find the Line # on the developed image that is the **BEST**<sup>1</sup>. Record the material and line # on the Auto-Optimize™ label. When exposing that material in production, use the Program Number (PGM #) that is the Line Number for the best image. (Scroll UP or Down with the arrow keys to select the Program).

When using other equipment:

Choose a test exposure time that is three to five times longer than what you think the correct exposure will be. (It is necessary that the test material be over exposed). Record the test exposure time and do a test exposure. Process the screen and evaluate the developed image. Find the line that is the **BEST**<sup>1</sup>. Multiply the test exposure time by the factor for the line number providing the best image. Use the result to expose the screen in production.

LINE #	MULT. FACTOR
0(10)	1.0
9	0.66
8	0.50
7	0.33
6	0.25
5	0.17
4	0.13
3	0.09
2	0.06
1	0.04

## 1. “BEST EXPOSURE”

A. Direct emulsions and capillary films that change color with exposure - Use the lowest line number that produces the full color change. Look at the blocks surrounding the diamond figures. If there is no change, go to the line or line above where the star fingers are closest together. It's usually better to over-expose than to under-expose. Over-exposure causes loss of resolution, under-exposure results in stencil breakdown. The circles can also be used to evaluate image resolution. The left circles are 10 mil line pairs, the middle are 5 mil line pairs and the right circles are 2 mil line pairs.

B. Indirect films cannot be fully exposed through the film or they will not adhere to screen when bonded. Use the line number where the first paler color is observed, indicating some thickness of the film has washed off. This means the film was not fully exposed through its thickness which is proper.

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