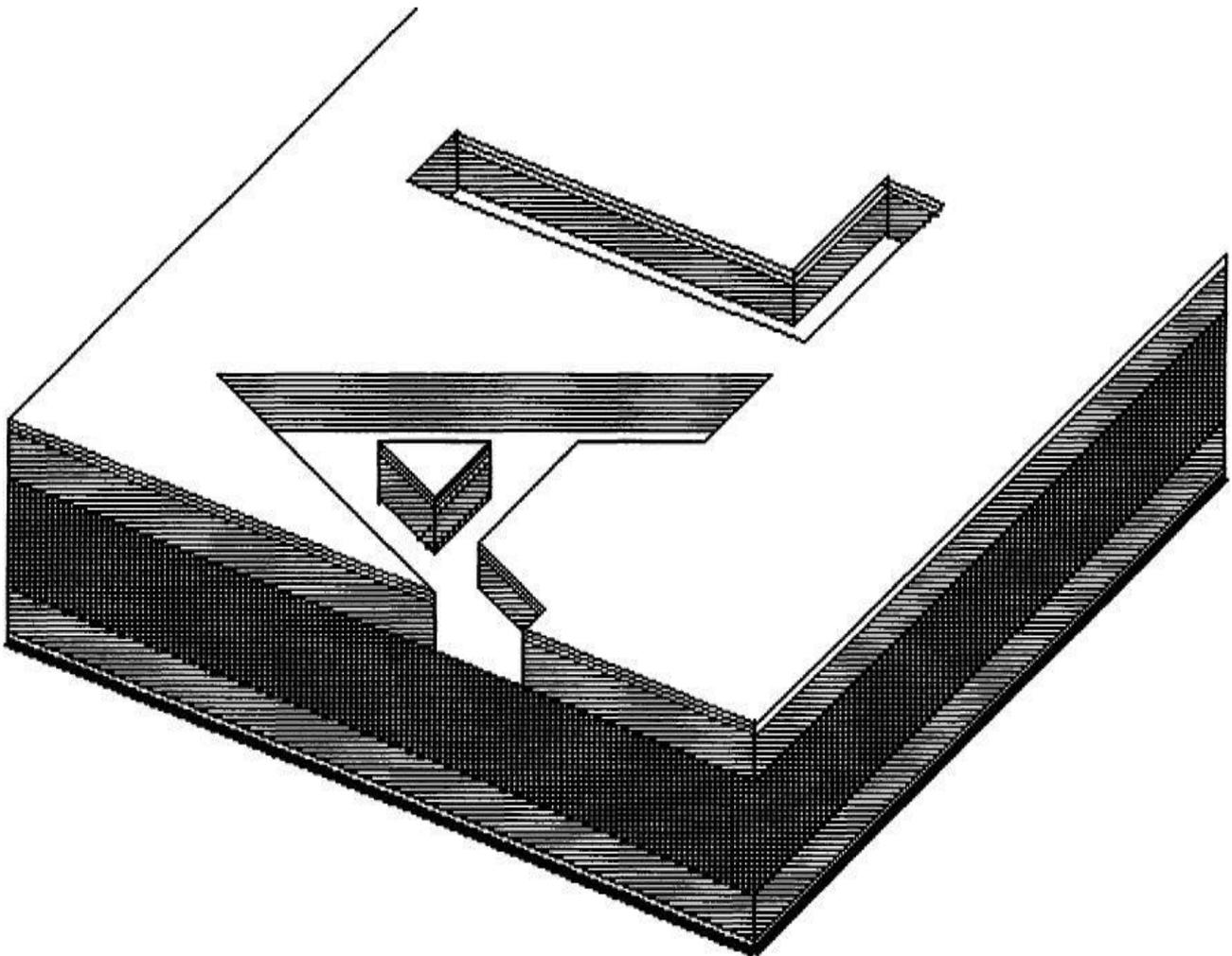


Original Bungard

Alucorex-Clichee

Instructions for Use



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Preface

Due to the process of waltzing the aluminium in the factory has ALUCOREX (like all aluminum plates) a preference page. This is marked with chalk lines.

The B-side is also usable and photocoated, but the gloss of the aluminum may have small irregularities.

Features

If you think about the best way to get your self made and extremely durable pad printing cliches, remember this name: ALUCOREX. It is a new material with sophisticated features:

Printing rates comparable to steel cliches

Easy processing

Double side usage

Low price

No dangerous waste of chemicals

ALUCOREX is made of a special aluminium alloy. The plates are "anodized". This means that by a galvanic process the plates are coated with a strong and durable layer of aluminium oxide. In a second step, we apply a high quality, positive working photoresist, which is then covered with an adhesive blue protective foil on one side.

The anodized surface has a thickness of 20 µm and has a green colour.

For direct imaging purposes (front plates), black, blue and red coloured plates, black also with a dim (mat) surface, are also available in different thicknesses.

For pad printing, the plates may be obtained in thicknesses 1.0 mm and in sizes from 80

x 80 mm up to 500 x 1000 mm. Stored in a cool, dry place, the material may be stocked for at least one year.

Due to our special pre-treatment of ALUCOREX only 3 steps are necessary to make your pad printing cliché - in only about 5 minutes!

1. Exposure

In the first step, your artwork is copied onto the photosensitive surface. The clear parts of your film correspond to the developed parts of the cliché, the opaque parts will give the gliding surface for the blade. You thus need a negative offset film for exposure.

2. Developing

Developing combines two steps in one. After having dissolved the exposed parts of the photoresist, the developer partially removes the aluminium oxide surface. To speed up this process, the plate is swept over with a sponge or a soft brush.

3. Finish

In the last step, the cliché is rinsed and dried and the remaining photoresist is removed from the green surface.

Preparation

To make your ALUCOREX cliché, you need the following:

A place with subdued daylight or yellow illumination

A negative offset film artwork

An UV exposure set (as known for nylon or steel clichés), preferably equipped with vacuum (like our HELLAS).

A developing tray

The special ALUCOREX developer

A sponge or a soft brush

Water for rinsing the plates

Protective gloves (Please read the provided security information)

To prepare the developer, dissolve the contents of 1 bag in 1 liter of water (approx. 20°C). Stir thoroughly.

You will also need water to rinse the plates and paper tissue to dry them.

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Dye Pattern (Raster)

Depending on the artwork and the pieces to print on, you may want to apply a dye pattern. This is of course possible, but other than for nylon cliches it is not duly necessary. Please pay attention to the following: The rating of lines per inch is equivalent to other cliche material. In regard of the positiv working photoresist it is important, though, to use a pattern of i.e. 40 lines, 30 % instead of 40 lines, 70 % as known from negative working cliches.

Exposure may be done with the dye pattern film placed onto the cliche and the artwork layed on top. In this case, care must be taken to ensure a good contact to the cliche (vacuum!). A test exposure might be necessary.

It is not possible to subsequently expose the cliche with both films.

Exposure

Remove the blue protective foil from the plate. Put your negative film artwork on tis side of the plate. Pay attention to provide a close contact between the film and the plate (Vacuum).

In the case that your artwork is smaller than the cliche, you must cover the exceeding parts of the plate. For this purpose you may use stripes of the protective foil.

The exposure time depends on the intensity of the UV source. For units equipped with superactinic tubes, the range of exposure time is from one to four minutes. Good layout film assumed, over-exposure is not critical.

The back side of the cliche is coated as well, but as this is the "coarse" and not the "good" side, there is no protective foil on it.

Developing

To obtain best results, you should use only our special developer for ALUCOREX.

The exposed side facing up, put the cliche into the tray filled with developer. After a few seconds, the exposed image will appear. You should then take the brush and slightly sweep the plate until all exposed parts appear in a metallic silver. Small gas bubbles will appear after about 3 to 4 minutes, indicating that developing is completed successfully.

After having finished the developing, you should rinse thoroughly with plenty of water. Use paper tissue or similar to dry it.

After a successful development the cliche ground has a brilliant aluminium colour and no gray or green coloured coating remaining. At this state the cliche has the nominal depth of 20 µm.

Finish

At the last step, please remove the remaining photoresist from the cliche using a solvent like acetone or spirit (alcohol). This is in order to prevent the photoresist colour to dirt the dye.

To even double or triple the printing rate, you may put the cliche into boiling water for about 10 minutes.

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Developer

The special developer is a white granulate shipped in small sealed bags. One bag must be entirely dissolved in 1 litre of water. You may store the fresh made developer solution in a tightly closed plastic or glass bottle. Kept in an open tray for some hours, the solution will become inactive.

Do not pour used developer back to fresh solution. Use only as much of fresh developer as instantly required. Used up developer makes it hard to do correct developing. Following these hints will help you saving costs and will give best results.

Safety

To avoid any risk of damage to your health, please pay attention to the following safety rules:

Avoid any contact of the chemicals to skin and eyes. Wear plastic gloves and goggles when handling the developer.

Immediately change any contaminated clothes and wash with plenty of water. Keep the chemicals out of the reach of children. When swallowed, drink plenty of water and immediately consult a physician.

Troubleshooting

Making your own ALUCOREX cliche is quick and easy. If you encounter any problem, though, please follow the hints given below.

- The image appears but will not clearly develop
 - Exposure time was too short
- Loss of fine lines
 - No good contact between artwork and plate
- Developing takes too long
 - Developer has expired, is too weak or too cold
 - Exposure time was too short
- Bright spots on the surface
 - Developing exceeded 5 to 6 minutes
 - Developer is too strong or not well stirred
 - Film is not opaque
- Insufficient colouring of the print
 - Cliche development was finished too early.
 - Adapt viscosity of the printing dye

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