Use only Approved Imaging Systems

RISO ScreenMaster is a unique thermal mesh for screen printing, constructed using a unique thermal film pre-coated to the screen for imaging by thermal process. Suitable models include:

✔ Print Lamp Models: NEHOC Screen Printing Kit, NEHOC Ceramic Kit or PRINT GOCCO models
✔ Thermal-Copiers: A4 and A3 Thermal-Copier, A3 Thermal ScreenMaker, VistaFax 1UF and 2UF models, 3M ThermoFax
✔ RISO ScreenFax models: SP-151, SP-180, SP-265, SP-275

Usage in other types of equipment may result in mesh under/over exposing, melting, jamming or seriously damaging your equipment.

✖ <u>DO NOT</u> attempt to process using a laminator, photocopier, sunlight or against U.V. lamp.

Use Carbon Based Artwork

▪ Your artwork **must** be carbon based. Laser print, photocopy (not colour digital) or hand drawn
▪ The quality of your artwork is critical to your print result min. 300dpi (avoid 72dpi images)
▪ Prepare your artwork by removing all moisture and excess carbon deposits.
Artwork types and preparation details available on NEHOC Information Sheet #1 - see website
www.nehoc.com.au/training/is/01

Imaging Instructions

1. Cut mesh to size by placing artwork inside the frame you will use, ensuring there is space around the artwork (10mm on either side and at least 20mm top and bottom) for ink run off plus space for squeegee set down and pick up.
2. Place artwork against film (smooth) side of mesh.
3. You are now ready to image the design - refer to your systems operation manual for full details or watch video demonstrations online - **www.nehoc.com.au/video**

Print Lamp Models

Lay artwork/ mesh combination onto the pad table of machine facing upwards. Mesh will be on top (film side down against artwork).
Rub base of Lamps on paper/ card to clean before inserting into the Lamp Housing.
Lower lid, place Lamp Housing (with lamps inserted) into lid and image.

Thermal-Copier Models

Artwork/ mesh combination must be placed into a Thermal Carrier before inserting into the machine or the combination may wrap around the roller and jam (this will void your warranty).
Lift cover of carrier and insert artwork/ mesh combination then lower cover. Set machine to required speed and insert carrier into machine to image design - supporting carrier as it exits machine.

For all other models including RISO ScreenFax, VistaFax 1UF & 2UF, 3M Copiers and MG-11 see NEHOC web site for imaging details **www.nehoc.com.au/training**

Cleaning Instructions

Place screen under cold running water, ink will start to dissolve after 10-15 seconds.
✔ Clean using <u>cold</u> tap or bucket water only
✔ Wipe only top (rough) side of mesh with fingers or soft cloth to remove ink
✖ Do not use hot water, hi-pressure water or any solvents/ chemicals when cleaning
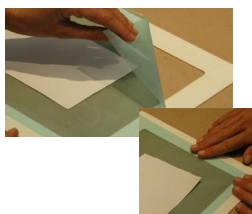
Storage Instructions

ScreenMaster will last many years in storage, where suitable conditions are provided:
✔ Store RISO ScreenMaster in a cool dry place out of direct sunlight (mesh is thermally active)
✔ ScreenMaster can be stored on the frame, or removed and stored by rolling with smooth side out
Do not store:
✖ In humid, wet or damp areas
✖ Near or beside heaters and/or sources or radiant heat (especially during winter)
✖ Inside cupboards, draws, boxes, etc. which come into contact with direct sunlight

Visit the website to watch a video demonstration of imaging ScreenMaster, download operation manuals or see the available applications in the Training section.
www.nehoc.com.au

Mounting ScreenMaster to a frame

① Remove the tape from your frame and place on a flat surface with the tape facing upwards
② Place mesh, rough side down, onto the frame working from the middle outwards
③ Attach the opposite side, working from the middle outwards to the edges
④ Rotate frame and attach remaining two sides, working from the middle of the frame outwards
⑤ Rub mesh down onto frame and trim excess mesh from around the outside of the frame
⑥ Place Screen Masking Tape (product code: T36) around the outside, covering both the edge of the mesh and overlapping onto the frame edge for extra adhesion (see Making Corrections below).

Removing wrinkles
If wrinkles are present simply lift the mesh off the frame and re-stretch, always starting from the middle and working outwards towards the edges. Wrinkles outside the design area will not affect the print.

Tension loss when printing
If the mesh loosens from the frame during printing replace double-sided tape or strengthen edges with Screen Masking Tape. Review printing technique as pressure may be too strong. If printing 'off contact' use only Metal Frames, as Plastic Frames will flex when using this printing style.
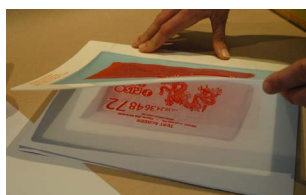
Screen Printing Technique

The following is a brief guide to printing, for full details and instructions, please see your machines operation guide, or watch the video demonstration online at **www.nehoc.com.au/video**

Hint for beginners

For beginners we recommend printing 20 times on scrap paper to get the feel of the squeegee, pressure required, lifting the frame and reapplying ink, etc.
✓ Always perform a test print onto paper first to reveal any pinholes or problems before printing starts
✓ Stir ink before and during use. Rotate ink by returning to the jar and stirring every 100 prints.
✓ Pull the squeegee towards you. Side to side motions will place uneven pressure on the squeegee
✗ Do not change the angle of the squeegee with your wrist whilst printing

Start by stirring the ink and dipping the palette knife into the pot - raise and apply the ink to the blade of the squeegee, or directly onto the screen above the design (onto squeegee will use less ink).

Avoid the 2 main problems that lead to smudges/ bleeding & faint/ light prints:
1. Keep the angle of the squeegee upright at approx. 70 degrees.
Print using the sharp edge of the squeegee blade. When the angle is too low you will flood the design with ink, bleeding through to your material below and reducing print quality.
2. Do not use excessive pressure when printing
The blade should not flex or bend - let the ink and squeegee do the printing not your hand.
Place the squeegee onto the screen at the top of the design and pull through towards you [keep your wrist & elbow still] with even pressure.
Lift the frame from the design in a hinge like motion, pictured right, using one hand on the edge of the frame and lifting from the other side.

You will receive a sharp, clear, professional result passing over the design lightly twice, rather than using one heavy pressured pass.

Making Corrections

If corrections are required, they are best performed immediately after your first test print as most problems will involve pinholes in the screen - pictured left - small specks of carbon in the artwork (many not visible to the eye) that have been imaged in the background of the design.

Use the first test print to locate any pinholes in the design, then holding the screen up to the light, repair by covering with RISO Correction Fluid (S-767) and allow Correction Fluid to dry.
✗ Do not place Correction Fluid over design area or the screen will block

For any pinholes or registration marks outside the design are use Screen Masking Tape (T36), leaving a 1cm. gap between the tape and outside of the design. Do not cover the design using the Tape or design will block. Attach tape to the film (smooth) side of the ScreenMaster Mesh.
✗ Do not place Screen Masking Tape over design area or the screen will block

When complete, perform another test print and compare the results.

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