

Direct Toner Transfer Method for Etching

Using paper and toner for etching resists c. Sherri Haab Designs

Facts to know for success:

- The image must be printed with a laser printer. This type of printer uses carbon toner.
- The image must be printed with a high resolution; 300dpi is best
- Works best with bold graphic designs that have nice crisp thick black lines for better adhesion. For fine lines use UV resist film or another preferred method. Designs with very little toner have a hard time holding on with so much paper pulling back on them. Think of the toner as “glue”.
- The printer you use must use rich black carbon instead of fillers or hybrid mixes.
- Toners with less carbon are becoming more common as technology changes and printers become more efficient and inexpensive.
- This is from Wikipedia in regard to toner:

“Toner formulations vary from manufacturer to manufacturer and even from machine to machine. Typically formulation, granule size and [melting point](#) vary the most.”

Because of changing technology and so many variables from machine to machine, we constantly test and promote alternative methods for etching resists. Please see our list of resists and read about how to use them here:

www.sherrihaab.com/etch

- Some brands of printers are known not to work for this technique. For example Brother brand laser printers use technology that is different than HP for example.

- We use E3 Etch Paper for best results because it does not have fibers that interfere with the design after you rub it off after soaking in water. The paper is a high-grade smooth surface for laser printers only.
- The iron you use must be set hot enough to transfer to the metal but not so hot that it burns or melts the toner. This calls for a bit of experimentation to know what heat setting is best for the iron you are using. Most often it is between cotton and linen. The heat must be applied with pressure and uniformly to work properly.
- The metal must cool first before placing in water for paper removal.
- The paper must be carefully rolled off by working from the center out after soaking well, not peeled or ripped off.
- As with any art technique, it takes practice to get the hang of it. Sometimes it is just one factor that contributes to failure. Try different designs, a different printer or even a different iron if you have trouble.
- Even simple things like not sanding or cleaning your metal will not allow the toner to stick. Harder metals might need 320 grit sanding paper instead of 400 or 600.
- If your metal has a curve to it the toner is difficult to iron to the surface. Flatten the metal with a mallet to make sure it is flat.
- When all else fails remember that you can use other resists or toner methods, for example PnP blue film, which is sold as an electronic supply. Or a fairly new method is being experimented with using vinyl sticker paper. Toner is printed on both of these materials and heated. The film and vinyl are peeled off after heating. They both present challenges of their own. They are mentioned here because many artists are familiar with PnP in particular.