Following are a few materials, devices and software you will need to create the tactile IPA symbol cards on swell paper.

- 1. Materials: swell paper and magnetic adhesive sheets
- 2. Devices: copier or inkjet printer (cannot use laser printer), and tactile image enhancer
- 3. Software: Microsoft Word (imaged icon of Word)



, and the Duxbury Braille



Translator (imaged icon of DBT)

4. Font: Doulos SIL (<u>https://software.sil.org/doulos/</u>)

Doulos SIL is a Unicode-based font that is widely used in linguistics. In addition to its popularity in linguistics, we particularly chose the Doulos SIL font since it makes use of state-of-the-art font technologies to provide complete support for the International Phonetic Alphabet. If you don't have the Doulos SIL font in your MS Word symbol set, please download the font from the SIL website at <a href="https://software.sil.org/doulos/">https://software.sil.org/doulos/</a>.

Steps in General to Create an Image with a Tactile Image Enhancer:

- 1. Create an image in Microsoft Word.
- 2. Print or copy directly with an office copier.
- 3. Alternatively, print the image directly onto swell paper with an inkjet printer.
- 4. Insert the swell paper through a tactile image enhancer.
- 5. The raised line image is completed after fully exiting.

## Swell Touch Paper by American Thermoform

Swell Touch Paper (often referred to as swell paper, capsule paper, microcapsule paper, flexi paper) is utilized for tactile image enhancer machines manufactured by Zychem, PIAF, and Reprotronics. The tactile image enhancer is a heat processor that will make the swell paper 'swell' along specified dark lines and images. The blind can touch the raised line image on swell paper to understand the image.

You can purchase swell paper online at American Thermoform.

For more information about swell paper, please check out the American Thermoform website at <a href="http://www.americanthermoform.com/product/swell-touch-paper/">http://www.americanthermoform.com/product/swell-touch-paper/</a>

The swell paper we purchased for this project is as follows:

Paper Size: 11x17" (cut into half, 8.5x11")

Price: \$228.99 in 2019 (each box contains 100 sheets)

Image of swell paper by American Thermoform



Magnetic Adhesive Sheet by Magicfly

Size: 8"x 10", Pack of 30 sheets

Price: \$29.99 in 2019

https://www.amazon.com/Magnet-Adhesive-Magicfly-Flexible-Sheet/dp/B07JH7GW4B?th=1

Image of magnetic adhesive sheets



## Copier

We use the copier Canon imageRUNNER ADVANCE 4245 model.

Please note that a laser printer won't work for swell paper. Due to the nature of the laser printer design, it will heat up the swell paper, make the swell paper swell, and jam the laser printer.

If you use a copier to print the image on the swell paper, please be advised that you print only one page at a time and leave at least a 10-second pause between each printing. Nonstop printing will cause the copier to build up heat and make the swell paper swell, which will jam the copier.

You can also use an inkjet printer to directly print the image on the swell paper. However, the quality of the print using an inkjet printer won't be as good as with a copier. It also takes a longer time to print with an inkjet printer. We highly recommend using a copier to print an image on the swell paper.

Tactile Image Enhancer

The tactile image enhancer we used is manufactured by Repro-Tronics.

Image of tactile image enhancer



Steps to Use Tactile Image Enhancer:

- 1. Turn the power on.
- 2. Adjust the control to the desired level.
- 3. Place the document face up on the feed table and slide it forward into the rollers.
- 4. Allow the document to exit fully before inserting the next sheet.
- 5. The swell paper can be run through the enhancer multiple times to produce a better result.
- 6. Turn off the power when finished.