## Screen Process Printing

Tools and Resources

Mr. Butler
Department of Technology
John Jay High School
Wappingers Central School District

# Why Study the Tools and Resources of Screen Printing?

- Familiarize yourself with the language used in industry
- Carefully handle materials in a safe manner
- ✓ Save time which saves MONEY \$\$\$

#### Screen Frames

- Come in a variety of sizes
- ✓ Made with Wood, Plastic, Aluminum

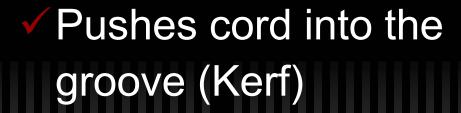


#### Kerf

- A groove in the screen frame where the Cord and Screen Fabric are held in place
- ✓ Typically cut at 9/64" wide



## **Cord Setter**





#### Screen Fabric

- Monofilament
  - ✓ Single woven thread, uniform weave
  - Smoother ink flow for a sharper print
  - Measured by the number of threads per inch
  - ✓ Fewer threads per inch, the larger the size of the openings
- Multifilament
  - Woven twisted strand thread
  - ✓ Less uniform in weave, but has more "tooth" for adhering stencils and heavier ink deposit
  - ✓ Ex. 8XX, 6XX, 16XX

# Screen Degreaser & Fabric Cleaning Brush

- Removes dirt and oil from the screen
- Spray and scrub screen and let it air dry
- DO NOT TOUCH screen after it's cleaned.



## Transparency Film



- Used to make your stencil design
- Transparency Film is printed by a B&W Laser Printer
- Used to expose your design on Stencil Film



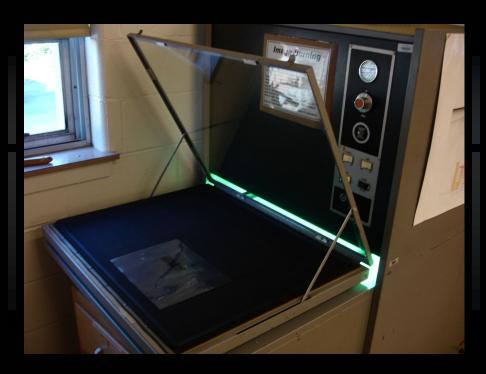
### Stencil/Film

- ✓ Ulano Developing Film
- Cut film to fit your design
- Expose film with transparency of you image



## **Exposure Cabinet**

- and the
  - Uses HighIntensity Bulbs
  - Burns image into stencil
  - Unexposed stencil is washed away



#### Rollers

- Rollers are used to adhere the stencil onto the screen
  - Rollers push the emulsion side of the stencil into the pores of the screen
- Multifilament screen fabric has a "tooth" which helps adhere stencil to fabric



#### **Blockout**



- ✓ Blockout is applied to the open non-print areas of the screen
- ✔ Blockout solution clogs the pores of the screen to prevent ink from passing through





## **Printing Base**

Holds textile

 (t-shirt) firmly in place for clean,
 easy, and straight printing



## Ultrasoft Ink



- Standard in industry
- Heat cured at high temperature



## Squeegee

- Flexible rubber material
- Different shapes for different materials

## **Textile**



✓ Fabric/material that is

printed on

50/50 cotton & polyester



## Heat Gun



- ✓ Used to cure ink
- ✓ HOT Caution



## Screen Cleanup



- ✓ Ink Remover
- ✓ Dissolves Plastisol Ink for easy cleaning



#### Stencil Remover



- Removes stencil film from screen
- Screen is scrubbed clean for proper storage



## **Any Questions**

- ✓ Refer to your Sceen Printing Documents
- Check Web Resources from yourScreen Printing Scavenger Hunt
- See Mr. Butler