



TECHNICAL

SCREEN PRINTING

BULLETIN

Proper Squeegee Care

Squeegee Maintenance

Getting the best results and productivity from your screen printing press is highly dependent upon using the proper squeegee material (and shape & durometer) for your particular application and by properly maintaining your squeegee material(s). During printing production it is important to continually monitor your production times and rotate your squeegees frequently. The time interval of rotation frequency is mostly dependent upon the type of inks and solvents that you are using for your application. If you follow the practice of rotating your squeegees on the press, you will achieve a more uniform print quality and in-turn you will increase the life of the squeegee materials. Your squeegees should always be wiped clean and dried after removal from the screen printing press and they need to be stored in a dark and dry environment – preferably at room temperature (60° to 70°F). The best place we've found to store your squeegee material is in a black steel double-door storage cabinet. During this storage time, your polyurethane squeegee blades should be allowed to "recover" from the "attack" of the inks and solvents and you should let them rest for at least 24 hours. During this time, the solvents will migrate back out of the squeegees and evaporate into the air. After this 24 hour rest period that squeegee blade can then be placed back into production, or if necessary re-sharpened and then back onto the press.

Storage

Polyurethane Squeegees should always be stored and laid flat (or loosely coiled blade side up) in a dry (50% Relative Humidity) environment at room temperature (60° to 70°F). Storage at temperatures below 60°F may actually show an increase in the materials durometer readings, however this slight increase has little or no influence on the physical properties or on the performance of the polyurethane squeegee. Under proper storage conditions the shelf life of the squeegee material is approximately one year. It is interesting to point out that industry wisdom shows that older squeegees often show increased printing performance.

Re-sharpening

For some printing applications it is necessary and acceptable to re-sharpen your squeegee blades printing edge. When re-sharpening your squeegee blades, they should always be advanced perpendicular to the grinding belt or grinding wheel in a very smooth and slow motion and you should use very little downward pressure. With higher quality polyurethanes they will prove to be more resistant to mechanical re-sharpening and therefore you should only remove a small amount of material on each pass and you should apply very little pressure. By sharpening these high quality squeegees "slow and steady" you'll get better results and great quality prints on the press. It is also worth noting that harder durometer squeegees are actually easier to re-sharpen than softer durometer squeegees. This is due to the tighter surface tension of harder materials vs. softer materials, as the softer material tends to pull away in less uniform (and greater) sizes.