Top 5 Safety Precautions for Screen Printing

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I first began screen printing as a teenager, and in those early days, safety was not always a top priority in the shops in which I worked. As a result, I have had numerous injuries stemming from chemicals, electricity and machines. It’s truly a miracle that I have come through it all in one piece, although I’m sure there are others who may not have been so fortunate.

Following are five main categories I consider of high importance when trying to prevent injuries in your shop:

1. **Cleanliness and Orderliness** — I cannot stress enough how important cleanliness and orderliness is to the screen printing process. Besides it impacting your overall bottom line (by keeping individual ink colors from being contaminated, for example), it also may prevent injuries.

   Be sure to have designated places for all your inks, equipments and tools to be stored. Spend less time locating missing tools or equipment and avoid tripping over misplaced buckets and cuts stemming from misplaced razor blades or knives.

2. **Chemical Safety Precautions** — Many chemicals are used in and around the screen printing process. Many of these chemicals are solvents used to clean screens, spills and equipment, while others are mixed into the ink to increase or lessen its viscosity. Since chemicals can be inhaled or absorbed through the skin, use any solvents in well-vented areas only, and wear gloves where necessary.

   I have burned my skin using Zylene/MEK solutions — and even using UV inks — so it is a good idea to use preventative measures that protect your eyes, skin and nose (to prevent inhalation) when handling chemicals. Read the labels of any chemicals to determine which safety precautions you should take. A product’s material safety data sheet (MSDS) also lists first aid measures and more safety instructions.

   Here’s an extreme example: A can of spray adhesive accidentally ended up inside a dryer at a shop in which I worked. The dryer’s temperature heated the can and its highly pressurized contents, resulting in an explosion and setting the dryer on fire. Luckily, no one got hurt, but the dryer was damaged and production had to be stopped for a time.

3. **Equipment Safety Training** — If a shop has any electronic equipment, be it a flash-cure unit, dryer or automatic printing machine, each staff member should be trained on how to safely use it. Be sure that the machines also have the necessary safety guards or covers in place so that the engine parts are not exposed.

   I speak from experience here, as I have gotten my foot stuck in the chain drive of a dryer that didn’t have a cover over the engine part. I also have had my hand smashed by an automatic machine.

4. **Electrical Safety Precautions** — When dealing with electricity, take extra precautions — such as installing a lock-out box over electrical controls — so that if repairs are needed, a mechanic can shut off electricity, lock the box and prevent someone else from turning it on while repairs are in progress. If this safety precaution is not possible, let everyone in the plant know when repairs are in progress so that no one turns on the electricity. Whenever possible, schedule repairs after hours when your shop’s work crew has left.

   I have been shocked several times while fixing a plug or wiring on lights when someone — not knowing I was working on repairs — turned on the electricity.
5. Stay Alert — Many accidents happen in the workplace due to lack of alertness or common sense. To help combat tiredness or drowsiness, take breaks and stay hydrated. Moving or walking around also will help energize the mind and body.

Keep distractions to a minimum when working in a fast-paced environment, especially around automated equipment. Whether the distraction comes in the form of music, cell phones, computers or interaction with other co-workers, minimize distractions to focus on the tasks at hand.

Use common sense in avoiding accidents and injuries. While this is easily said, I know I’ve done some stupid things. For example, I once asked a co-worker to throw a can of spray to me while I was standing on the other side of an automatic machine. I’m usually a good catcher, but this time I failed to catch the can and it struck my forehead instead. I still have the scar to show for it.

While this list is not exhaustive in preventing or avoiding accidents or injuries, I hope that some of these safety tips will help minimize some safety pitfalls at your shop.

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