# RISK Manufacturing



# Common Health and Safety Hazards for Printers

The printing industry cannot afford any drags on productivity. Its customers require accuracy, quality and timeliness. Even a single typo or small delay can threaten the legitimacy and timeliness of your customers' printed products. Being late by even one day may cause disastrous consequences, since printed products often adhere to rigid printing schedules.

This unwavering devotion to speed and promptness makes the printing industry very efficient, but also particularly susceptible to overlooking its numerous health and safety hazards. The most common types of accidents in the printing industry are manual handling (27 per cent), slips and trips (22 per cent) and machinery (22 per cent), according to the Health and Safety Executive (HSE).

As an employer in the printing industry, you are responsible for preventing accidents and managing overall employee health and safety. Do not sacrifice health and safety for expediency—you can have both. Read through the following common health and safety hazards for printers and find out how you can protect your employees.

## Manual Handling

Manual handling activities such as lifting, carrying, pushing and pulling cause the majority of injuries in the printing industry. The law requires all employers to avoid manual handling when possible, assess and limit the risks from manual handling and provide training to avoid injuries.

Assess your business' manual handling risks with the HSE's MAC tool (manual handling assessment chart) found at <a href="http://www.hse.gov.uk/printing/manual/index.htm">www.hse.gov.uk/printing/manual/index.htm</a>.

The MAC tool helps you identify high-risk manual handling activities that threaten your employees. After identifying and assessing manual handling risks, work to reduce those risks. Do this by providing your employees with mechanical handling aids such as scissor lifts, pile turners, reel conveyor trolleys and sack trucks. You can find a more comprehensive list of mechanical handling aids at www.hse.gov.uk/printing.

The printing industry cannot afford any drags on productivity, but do not sacrifice health and safety for expediency—get both by assessing and limiting your business' risks.

You can also reduce manual handling risks by reorganising tasks to decrease the size and weight of everyday loads.

Finally, train employees on the ways manual handling causes injury, how to identify unsafe practices, appropriate handling techniques and the correct use of handling aids.

## Slips and Trips

Representing more than one-fifth of all accidents in the printing industry, the potential for slips and trips in printing firms is widespread, especially in production areas. Accidents are usually caused by poor housekeeping, poor maintenance and inclement weather. You can limit slip and trip hazards in your workplace by doing the following:

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- Keep walkways well marked and clear of pallets and other obstructions.
- Identify specific places for pallet loading and unloading.
- Provide suitable bins for disposing strapping, wrapping and paper.
- Designate storage areas for equipment such as trolleys and lift trucks.
- Avoid trailing cables, and provide cable covers for temporary arrangements.
- Repair potholes in floor surfaces.
- Prevent oil leaks by maintaining equipment.
- Clean up spills immediately.

#### Machinery

Most printing machinery accidents occur during an unsafe intervention with an operating press. Common causes of accidents include being drawn into inrunning nips of rollers, contact with dangerous moving parts and entanglement with rotating parts. Take the steps listed below to prevent machinery accidents:

- Choose the right machine for the job.
- Train employees on the proper use of machine safeguards.
- Maintain machine guards.
- Establish a lockoff/isolation programme for shutting down machines and equipment for cleaning, repairing or emergencies.
- Prohibit employees from wearing loose clothing, jewellery or untied long hair when operating machines.
- Have machines routinely inspected by a qualified technician.

# Fires and Explosions

Printing firms are often chock-full of flammable materials which create significant fire and explosion risks. Specific risks in printing include paper fires in infrared dryers and UV curing units, explosions in dryers due to high levels of blanket wash solvent vapour, and fire and explosion due to flammable inks.

The Dangerous Substances and Explosive Atmospheres Regulations 2002 stipulates that you must assess the fire and explosion risks from any dangerous substances used or produced in your workplace. Consider the hazardous properties of each substance, how your employees use that substance and the likelihood of creating and igniting an explosive atmosphere.

Lessen the risk of fire and its ability to spread with the following tips:

- Segregate printing, storage and other areas.
- Ensure the mixing of solvent-based inks is carried out only in dedicated fire-resisting rooms.
- Install fire-detection and extinguishing systems.
- Provide dampers to isolate solvent recovery units in the event of a fire.

#### Chemicals

The printing industry relies on a host of harmful chemicals. The substances your business needs, such as inks, lacquers, adhesives and cleaning solvents, could cause ill health. Employees may breathe in damaging vapours and mists or absorb dangerous chemicals through their skin.

Due to the variety of chemicals they handle, many workers in the printing industry experience dermatitis, a general term that describes skin inflammation. They develop dermatitis on their hands, wrists, forearms and elbows. Prevent dermatitis by identifying the materials that cause it and encouraging employees to avoid them; providing gloves, cleansers, cream and training; and checking for early signs of dermatitis, such as dryness, itching and redness.



More generally, you can promote a safe workplace and abide by the Control of Substances Hazardous to Health Regulations (COSHH) by heeding this advice:

- Identify which harmful substances may be present in the workplace.
- Consider how workers might expose and consequently harm themselves.
- Assess the measures you currently have in place to prevent chemical hazards.
- Provide information and training.

You can find more printing-process-specific guidance in the HSE's COSHH Essentials for Printers series, located at www.hse.gov.uk/pubns/guidance/pseries.htm.

#### Noise

Noise, one of the most insidious health and safety hazards in the printing industry, can cause permanent hearing loss. Often, workers do not perceive that their hearing is being damaged until some hearing loss has already happened. Some effects of excessive noise exposure are more obvious, like tinnitus, which is a ringing or whooshing sound in the ears.

If you cannot eliminate noise, lower it as much as possible. Daily noise exposure must be 85 decibels at most, and preferably 80 decibels or less.

Noise can be an easy hazard to rein in—just follow these suggestions:

- Alter machines or processes to produce less noise.
- Enclose noisy machines with acoustic enclosures or hoods.
- Separate noisy machines and processes.
- Implement a system for plant maintenance which muffles noise.
- Provide refuges for employees to escape exposure.
- Offer hearing protection that stifles sound to below 85 decibels.

# Never Stop Improving

While this list is not exhaustive, it is a good start to identifying and combating the hazards in your printing firm. Be sure to create a proper risk assessment for your specific business and implement controls to safeguard your employees. Regularly review your risk assessment to ensure it is still appropriate. Never stop improving. Rely on the insurance professionals at Robison & Co Ltd for more ways to overcome hazards in the printing industry.

