



The importance of  
compliance,  
cleanliness and safety  
in printshops

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# 01



## INTRODUCTION

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Perhaps more than any other, the printing industry cannot afford any drags on its productivity. Being late by even a day may cause disastrous consequences, since printed products must often be delivered to rigid schedules. This unwavering devotion to speed and accuracy makes the printing industry very efficient, but also susceptible to overlooking its numerous health and safety hazards.

Representing more than one-fifth of all accidents in the UK printing industry, the potential for slips and trips in printing firms is widespread, especially in production areas. Accidents are usually caused by leaking machinery and spillages of inks and solvents. By cleaning-up leaks and spills immediately using cloths and wipes, the potential for slips can be significantly minimised.

# 02



## HAZARDOUS WASTE

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Furthermore, the printing industry generates a significant amount of hazardous waste, and few industries are more closely monitored with regards to how this is managed. Cutting corners with the disposal of chemicals and any type of cleaning cloth used to mop them up can have a disastrous effect on a printer's reputation.

In 2017, for instance, the UK's Environment Agency reported that the River Yeo had turned purple downstream of a trading estate in Yeovil. Concerned members of the public reported discolouration up to 4km downstream of the industrial estate.

Environment Agency staff traced the source of the pollution to a local company manufacturing cardboard boxes and operating its own printing

works. Officers saw waste ink being hosed into a drain. They also found inappropriately stored containers of waste ink and spill kits already full of soiled absorbents. Dye testing confirmed the waste ink had flowed through the site's surface water system and directly into the River Yeo via a surface water outfall.

An employee was later found to have poured up to 50 buckets of waste ink down a drain over a two-to-three-day period. He stated he'd done so on the instruction of management because there was no room left in the waste ink storage containers.

It is vital then that an efficient solution for cleaning leaks, spills and print machinery is found, and that the resulting waste is disposed of in compliance with environmental regulation.



# 03



## CLEANING MACHINERY

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In lithography, numerous press components, such as the ink distribution rollers, the printing plates, the blankets, the impression cylinders on sheetfed presses, and the press roller cleaning fixtures/trays, must be cleaned regularly.

Depending upon the press size and configuration, there may be 18 ink rollers, some metal, and some covered with elastomer. To clean these rollers, press operators commonly stand above the roller train dispensing a cleaner

from a squeeze bottle across the length of the top roller. Pressure is applied to the rollers with a squeegee and an ink tray is placed at the bottom of the roller train to catch the solvent/ink combination after it passes through the train. The collected sludge of ink and cleaning solvent can then be poured into a barrel for recycling or disposal, while the tray needs cleaning with additional wipes and solvents.

Blankets are cleaned when they are new and mounted on the press, after





# 03



## CLEANING MACHINERY

every press stop, at the end of each job, whenever the press operator thinks that print quality has deteriorated, and normally after every web splice in web offset. For a lengthy run or during a press makeready, the blankets might need to be washed several times.

Blankets can be washed by hand or with automatic blanket washers. Even with automated systems, however, there will be times when the build-up of debris on the blanket is so great that hand washing will still be necessary.

A press operator cleans a blanket with two wipes. One wipe is soaked with the solvent and is used to remove the build-up on the blanket. The second wipe is dry and is used to wipe the solvent dry on the blanket. In this way, there is minimum contact time between the blanket and the solvent. Excessive exposure to solvent can cause a change in the properties of the blanket (dimensional, chemical, and release), and this can result in poor print quality and damage to the press components.



# 04

## ISSUES WITH SOLVENTS

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The use of these solvents can also harm the health of workers. They can affect the brain in the same way drinking alcohol does. Overexposure for a short time causes headache, nausea, dizziness, clumsiness, drowsiness and other effects like those of being drunk.

Further, a detailed study of the printing industry undertaken by the UK's Health and Safety Executive (HSE) has found that about 40% of printing workers are likely to have suffered from a skin complaint at some stage and over 10% are likely to have a current problem. People working in the printing area and involved in cleaning printing machinery showed the greatest tendency towards skin problems, but the evidence suggests that some problems can exist in all areas of printing.

Solvent vapours from cleaners can irritate the eyes, nose, throat and lungs. Symptoms include stinging or burning of the eyes, burning or soreness of the nose and throat, hoarseness, coughing, chest tightness, and shortness of breath.

In addition, some solvents such as ethylbenzene, methylene chloride and propylene glycol t-butyl ether have been shown to cause cancer in animals.



# 05



## STORAGE AND LAUNDERING

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As such, all types of contaminated cloths and wipes must be stored in fire-resisting, closed containers and treated as hazardous waste. For fabric wipes, industrial laundry systems can

be employed to clean them, enabling them to be re-used. However, keeping this in-house is quite time consuming and can be very costly. Fortunately, there is an alternative.

# 06



## THE MEWA APPROACH

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### **MULTITEX ABSORBENT MATS**

MEWA Multitex absorbent mats offer a simple and efficient way to keep the printshop floor clean and free from hazardous fluids. The mats are designed so that fluid is transported immediately from their outsides to their absorbent, inner core, meaning that their surfaces

remain relatively dry. A Multitex mat can absorb up to three litres of fluids before needing to be replaced.

Multitex is also suitable for use in sensitive areas around machinery and equipment. Available in a 60 x 90cm towel format, the MEWA Multitex mat can be used as a standalone item, or as several mats placed side by side for larger areas.



## SUPER-ABSORBENT CLOTHS

Mewatex cloths, meanwhile, are particularly suitable for the cleaning of printers. The amount of ink that needs to be removed requires a super-absorbent cloth, but the wipe should leave as little lint behind as possible. Often, printshops are forced to choose between using huge amounts

of a lint-free cloth because its absorption quality is poor, or spend ages removing lint from the printer with a high-absorption wipe. Mewatex cloths are available in several configurations. Mewatex is super-absorbent; Mewatex Ultra very absorbent and leaves hardly any lint residue and Mewatex Plus strikes a balance between the two.





# 06

## THE MEWA APPROACH

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### RE-USABLE

Multitex absorbent mats and Mewatex cloths are available through the MEWA reusable service offering: soiled mats and wipes are exchanged for clean ones. The used items are taken away by MEWA and washed in an environmentally friendly, compliant way and returned, clean and ready for use again.

This service ensures that a printer will always have enough clean wipes and absorption mats available for use to help ensure cleanliness and health and safety.



# 06



## THE MEWA APPROACH

### STORAGE CONTAINERS FOR MAXIMUM SAFETY

As part of its service, MEWA provides the SaCon storage container for safe storage and transport of MEWA wipes. The SaCon is made of robust high density polyethylene and its lid creates a hermetic seal when closed to protect against fire risks.

The SaCon container is available in two

versions: SaCon and SaCon Antistatic, for use in explosion-protection areas. Both containers can be rolled and stacked for easy mobility and have BAM and ADR approval as hazardous goods packaging.

BAM is the German Federal Institute for Materials Research and Testing and DR is the Agreement concerning the International Carriage of Dangerous Goods by Road.



# 06

## THE MEWA APPROACH

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### TEST OUR PRODUCTS IN A TRIAL

MEWA is happy to set up a product trial of any of its products. You can also request a demonstration at your premises from one of its dedicated technicians so you can compare our solution to your current system.



#### Contact us

To find out more about how MEWA can help your business stay compliant, clean and safe, get in touch.

Telephone: 0121 752 5850

Or order via our website at [mewa.co.uk](http://mewa.co.uk)



## ABOUT MEWA TEXTILE MANAGEMENT

MEWA has been providing full-service textiles since 1908 and is considered a pioneer of textile sharing. Today, MEWA supplies professional and protective clothing, cleaning wipes, oil collection mats and doormats from 45 locations throughout Europe – including care, maintenance, warehousing and logistics. In addition, it also supplies occupational health and safety items.

5,700 employees serve more than 190,000 customers from industry, trade, crafts and gastronomy. In 2019, MEWA achieved a turnover of 734 million euros and is a leader in the textile management sector. The company has received many awards for its commitment to sustainability and responsible behaviour, as well as for its brand leadership and innovation.

