

Make and maintain lithographic printing plates

Overview

This standard is for lithographic printers whose job includes making plates and storing plates for reuse.

Lithographic printing plates can be created by several methods, including computer to plate systems, imaged either on-press and off-press, through exposure in a light cabinet using film in contact with the plate, or through 'printing' plate material using a laser printer or other proprietary system.

This standard requires the printer to be able to produce lithographic plates by one method. Where a computer to plate system is employed, the requirement is for the printer to be able to run a previously imposed and ripped file to plate. There is no requirement for imposition or file handling to be included. Typically, printers will do this where a plate re-make is required when the pre-press technicians are not available.

For analogue plate making, the printer would select the correct film together with any masks, would place the film, mask and plate on 'pins' in an exposure frame, expose the plate to light for the correct time, and once the exposures for each film/mask combination was complete, the plate would be developed, either by hand or by machine.

Storage of lithographic printing plates for re-use involves cleaning ink from the plate using plate cleaner, washing any chemical residues from the plate surface, and, for metal plates, 'gumming' the plate and drying the gum. Once ready for storage, the plate has to be located and identified so it can be quickly located when required again.

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Performance criteria

You must be able to:

Create lithographic printing plates

1. identify plate material for platemaking to meet specifications
2. check imaging/exposure equipment and your work area are safe and ready for operation
3. check online processing equipment is ready for operation following standard operating procedures
4. load plates into imaging/exposure equipment following standard operating procedures
5. begin the imaging/exposure of plates, confirm UV or laser light cannot create a health and safety risk
6. develop plates following standard operating procedures
7. check plates have been processed and non-image areas 'desensitised' to meet specifications
8. check plates for exposure, completeness of images and free from physical damage or blemishes
9. complete any records required by your company **

Store lithographic printing plates for re-use

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10. identify plates for storage and check that they have not suffered any physical or image damage that would prevent the plate from being re-used in the future
11. report any plate wear or damage to the appropriate person(s) before storage
12. clean printing ink from plates, using a suitable press chemistry that will not cause damage to the surface or image of the plates
13. check any plate cleaner residues are washed from plates following standard operating procedures
14. apply protective coating required and 'buff down' to an even and dry finish
15. identify storage locations and any other plates being stored as part of a set following standard operating procedures
16. place plates in storage following standard operating procedures
17. complete labelling/identification requirements following standard operating procedures
18. report any problems to the appropriate person(s)

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Knowledge and understanding

You need to know and understand:

Health and safety

1. your duties and responsibilities for health and safety as defined by any specific legislation covering your job role
2. manufacturer's health and safety requirements relevant to your job
3. how to stop machines in the event of an emergency**

Communication

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4. *how to communicate with colleagues*

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Workplace policy and practice

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5. *workplace objectives, priorities, standards and procedures*

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The identification and assessment of printing options

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6. *the stages in the printing process from pre-press to printed product**

Time and resources

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7. *how to maximise productivity*

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The operation of equipment

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8. *the operation of offset lithographic platemaking equipment*

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Printing

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9. *the principles of offset lithographic printing and platemaking **

The causes and treatment of common faults

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10. *raw material faults*

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11. processing faults

*12. machine faults **

Administrative procedures

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13. recording and reporting

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Environmental

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14. any specific environmental legislation that covers processes in your company

*15. control of pollution**

Quality assurance and control

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16. techniques for controlling quality

17. equipment for controlling quality in offset lithographic platemaking

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Problem solving

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*18. sources of information **

Materials

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19. the types and characteristics of lithographic printing plates

20. how to maintain the quality of printing plates during storage and handling

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