

Overview

Die Stamping is a specialist printing process that produces high quality printed images characterised by ink raised on the surface of the substrate.

This standard covers the competence required for the 'make-ready' of die stamping machines.

This standard requires the machine operator to undertake all the steps required to make a die stamping machine ready for production, to run the machine to produce commercially acceptable work, and to assist in identifying and correcting faults with the equipment.

To achieve consistent quality print in die stamping, the machine operator must use ink of the correct viscosity to transfer a sharp image from the 'die' to the substrate when the correct amount of printing pressure is applied. The printed image must be 'in register' on the substrate and the register must be consistent from one sheet to the next. The machine operator must be able to show the ability to consistently set up a die stamping machine to achieve these requirements.

During production, it is important that consistency from sheet to sheet is maintained.

The machine operator will need to demonstrate the ability to carry out make-ready operations for a variety of different jobs to a commercially acceptable standard within an acceptable timescale.

Performance criteria

You must be able to:

Set up die stamping machinery

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults
6. set paper transport to run, so job stock is fed and forwarded without misses or doubles following standard operating procedures
7. check transport operates at the required running speeds
8. check sheets are delivered squarely and form an even pile
9. fit and position dies to meet specifications
10. set ink feeds so image is inked and surplus ink is removed from dies following standard operating procedures
11. establish colour strength and image register on substrates
12. set printing pressure to check proper image transfer**

Run die stamping machinery

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13. run the die stamping machinery following standard operating procedures
14. check quality standards are met, including ink strength, image register and drying
15. report any shortfalls in production or problems in maintaining image quality
16. remove waste following standard operating procedures
17. stack work following standard operating procedures
18. forward work to the next stage of the process without damage.
19. assist in fault finding and correction following standard operating procedures
20. identify faults following standard operating procedures
21. identify and correct mechanical faults which it is your job to rectify
 1. report faults which are not your job to correct or are not corrected by the action you take

Set and operate die stamping printing machines

2. give constructive help to colleagues who are correcting faults on your machine
3. check machinery is safe to operate, once faults are corrected

Knowledge and understanding

You need to know and understand:

The law as it affects printing

1. copyright and ownership of images

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Health and safety

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2. legal duties for health and safety in the workplace as defined by the relevant health and safety legislation

3. your duties and responsibilities for health and safety as defined by any specific legislation covering your job role

4. workplace health and safety procedures

5. what personal protective equipment should be used in your job

*6. how to stop a machine in the event of an emergency**

Communication

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7. how to communicate with colleagues

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The operation of equipment

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8. the principles of die stamping

9. the different types of dies used in die stamping

*10. the safe operation of drying equipment used in die stamping**

The causes and treatment of common faults

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11. raw material faults

*12. machine faults**

Environmental

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13. the legal requirements for the classification, storage, carriage and disposal of waste

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Materials

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14. the types and characteristics of paper, board and other commonly used substrates

15. the types and characteristics of inks used in die stamping

*16. maintaining the quality of materials during storage and handling**

Cleaning, lubrication and maintenance

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17. roles and responsibilities for cleaning, lubrication and maintenance

18. machine faults and how they can be rectified

19. which components wear or become degraded over time

20. what is meant by the phrase 'safe system of work' and how it applies to cleaning, lubrication and maintenance activities

21. the choice and use of suitable cleaning agents and lubricants

*22. parts of the machine you are allowed to clean, lubricate and maintain**

Proofing

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23. the principal types of proof and their role in the printing process

GQAMP260



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