

Overview

This standard is for print finishers using adhesive binding equipment. They will be expected to set up the equipment and control it whilst running production jobs.

This standard consists of two elements:

- Set up adhesive binding machinery
- Run adhesive binding machinery and monitor quality

This is what the standard covers:

1. identifying the job requirements
2. checking that adhesive binding machinery is working properly
3. checking that safety devices are working properly
4. running the adhesive binding machine safely
5. adjusting settings, where necessary to maintain the required standard
6. checking that the work meets the required standard
7. identifying faults and taking action to deal with them
8. unloading and stacking the finished product.

Performance criteria

You must be able to:

Set up adhesive binding machinery

1. check that you have all the job details you need
2. check that you have enough adhesive of the right type
3. report to relevant people without delay, when adhesive provided is not correct or sufficient
4. prepare book-block spines so that they are ready to receive adhesive
5. set up adhesive binding machinery so that:
 - 5.1 covers are fed squarely
 - 5.2 score lines do not break the cover surface
 - 5.3 book blocks are transferred squarely within clamps
 - 5.4 spine preparation gives the correct glue penetration of the paper
 - 5.5 glue is applied evenly at the correct temperature
 - 5.6 books are delivered from the machine without damage or marking
6. check that samples produced by the machine match required standard
7. make any necessary adjustments, to enable the standards to be met
8. report to relevant people without delay, when standards cannot be met
9. prepare your work area so that it is safe and ready for production

Run adhesive binding machinery and monitor quality

10. run adhesive binding machinery so that it is safe and efficient and at the required speed
11. keep up sufficient supplies of materials so that runs continue as long as necessary
12. check at regular intervals that your company's quality standards are met
13. identify the causes of faults in production which result in:
 - 13.1 cracking of the surface along score lines
 - 13.2 print being out of square on the front cover and spine
 - 13.3 rounding of spines
 - 13.4 too much and too little glue penetration
 - 13.5 poor page-pull strength
 - 13.6 covers not registering correctly with book blocks
14. adjust machines, using approved methods and equipment, to correct faults which it is your job to remedy
15. use agreed procedures report faults which it is not your job to correct
16. check that machinery is safe to operate, once faults have been corrected
17. record the production and quality assurance details, ensuring information is accurate

-
18. follow the correct procedures for the removal of waste
 19. stack work using the approved method

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. regulations such as those covering manual handling, noise at work, personal protective equipment, safe handling of equipment and materials, and the safe use of computer equipment
3. workplace policies and written operating procedures relating to written health and safety policy statement, provision, use and processes of workplace equipment, training, prohibited equipment, young persons, safe systems of work

Working practices

4. the way you actually do your job, more particularly the activities and techniques and the way that materials and equipment are used
5. typical hazards and risks in the printing industry and those that relate to your own job
6. risk assessment techniques and the action to take to deal with them
7. codes of practice relevant to your role and where to obtain information on them
8. manufacturers' and suppliers' health and safety instructions and advice for operating machinery, guarding machinery and data sheets for substances harmful to health
9. the requirements for personal presentation including personal hygiene, suitable clothing and accessories, fitness for work, such as not under the influence of drugs, alcohol or medication, smoking policies in the workplace
10. how to stop a machine in the event of an emergency

Adhesive binding machinery

11. the purpose of adhesive binding
12. the information and materials required to meet job specification
13. safety devices found on adhesive binding machinery, their purpose and how to check they are functional
14. how to set up and adjust adhesive binding machinery to meet job requirements
15. the causes of common faults and how to rectify them including cracking of surface along score lines, unsquared print, rounding of spines, too much and too little glue penetration, poor page-pull strength, covers not

registering correctly with book blocks

The causes and treatment of common faults

16. the causes of faults with raw materials, processes and machinery used in your business and how to identify and treat them

Quality assurance and control

17. techniques for controlling quality including inspection, testing, sampling and use of input and output controls
18. the impact that faults, in the process you are involved with, have on later processes and the quality of the end product

Problem solving

19. types of problems that may need to be solved including machinery - electrical, mechanical, electronic, settings, component wear and tear, consumables needing replacement, materials - defects, shortages, incompatibility, systems, organisation and lack of skills or knowledge
20. sources of information for solving problems including manufacturer's documentation / troubleshooting guides, colleagues, tutors / trainers / mentors and reference material - in house or external, such as internet
21. techniques for solving complex problems including changing one thing only at a time and assessing effect of the change, using the problem solving cycle, root cause analysis, brainstorming and visual representations, such as fishbone / mindmap diagrams
22. techniques for assessing machine faults including observation, listening, inspection of product, reports from colleagues / log reports, touch or smell (if safe to do so) and testing - such as electrical, mechanical, electronic

Materials

23. the types of paper, board and other commonly used substrates including commonly used uncoated, coated, embossed papers and boards
24. the grammage, thickness, opacity, brightness/whiteness, strength, dimensional stability, gloss of paper, board and other commonly used substrates
25. how to maintain the quality of materials and protect them from damage, humidity and temperature during storage and handling
26. how to label and identify materials

Scope/range

In addition to being able to produce commercially acceptable work, operators should be competent to maintain supplies of sections, covers and adhesives for production of booklets/books, in a variety of sizes on coated and uncoated stock and also different weights of paper.

Operators should be able to deal with all running problems within their responsibility.

PROPF343 (SQA Unit Code - H9KL 04)

Set up and control adhesive binding machinery



Developed by Proskills

Version Number 2

Date Approved October 2014

Indicative Review Date April 2019

Validity Current

Status Original

Originating Organisation Proskills

Original URN PROPF343

Relevant Occupations Originators compositors and print preps; Printers; Printing machine minders and assistants; Printing Trades; Screen printers; Bookbinders and print finishers; Graphic designers

Suite Post Press

Keywords post press, post-press, print finishing, machinery, adhesive, binding
