PROPF354 (SQA Unit Code - H9L1 04)

Set up and control in-line block-feeding-forwarding-case binding machinery

Overview

This standard is for print finishers using in-line block-feeding-forwarding-case binding machinery. They will be expected to set up the equipment and control it whilst running production jobs.

This standard consists of two elements:

- Set up in-line block feeding-forwarding- case binding machinery
- Run in-line block feeding-forwarding- case binding machinery and monitor quality

This is what the standard covers:

1. identifying the job requirements
2. checking that the in-line block-feeding-forwarding-case binding machinery is working properly
3. checking that safety devices are working properly
4. running the block-feeding-forwarding-case binding machinery safely
5. adjusting settings, where necessary to maintain the required standard
6. checking that 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 in-line block-feeding-forwarding-case binding machinery

1. check that you have all the job details you need
2. check that you have enough materials of the right type
3. report to appropriate people straight away, if materials provided are not correct or sufficient
4. set up the line correctly, so that:
   4.1 book blocks are fed into forwarding units squarely and without damage
   4.2 forwarding processes match the specification
   4.3 finished blocks are fed into the case binder squarely, and without damage
   4.4 cases are fed squarely, evenly and without distortion
   4.5 adhesive is applied evenly to the book joints
   4.6 endpapers and book blocks are securely and cleanly attached to cases
   4.7 the size of squares are equal all round
   4.8 books are delivered without damage or distortion
5. check that samples produced by the machine match the required standard
6. make any necessary adjustments, to enable standards to be met
7. report to appropriate people straight away, if standards cannot be met
8. prepare your work area so that it is safe and ready for production

Run in-line block-feeding-forwarding-case binding machinery and monitor quality

9. run in-line block feeding-forwarding-binding machinery so that it is safe and efficient and at the required speed to produce the output
10. keep up sufficient supplies of materials so that runs continue as long as necessary
11. check at regular intervals that quality standards are met
12. identify the cause of production faults, which result in:
    12.1 outputs out of square with case head and tail bands incorrectly positioned on the spine
    12.2 lining off-centre to the spine
    12.3 shape of spines distorted
    12.4 over and under penetration of glue
    12.5 shoulders of joints poorly formed or book blocks
13. adjust machines, using approved methods and equipment, to correct mechanical faults which it is your job to remedy
14. use agreed procedures to report mechanical faults which it is not your job

to correct

15. check that machinery is safe to operate, once faults are corrected
16. record production and quality assurance details, checking that information is accurate
17. follow the correct procedures for the removal of waste
18. 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

Inline block-feeding-forwarding-case binding machinery

11. the purpose of case binding
12. the information and materials required to meet job specification
13. safety devices found on inline block-feeding-forwarding-case binding machinery, their purpose and how to check they are functional
14. how to set up and adjust inline block-feeding-forwarding-case binding machinery to meet job requirements
15. the causes of common faults and how to rectify them including outputs out of square with case head and tail bands incorrectly positioned on the spine, lining off-centre to the spine, shape of spines distorted, over and under

penetration of glue, shoulders of joints poorly formed or 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 the 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 operate the equipment to produce rounded back and square back books in a variety of sizes incorporating head and tail bands where required. They should also be able to handle printed and cloth cases.

Operators should be able to deal with all running problems within his/her responsibility. Operators are also responsible for ensuring that the machine is in a safe and clean condition for normal production operations.

PROPF354 (SQA Unit Code - H9L1 04)

Set up and control in-line block-feeding-forwarding-case 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	PROPF354
Relevant Occupations	Originators compositors and print preps; Printers; Printing machine minders and assistants; Printing Trades; Bookbinders and print finishers; Screen printers; Graphic designers
Suite	Post Press
Keywords	post press, post-press, print finishing, machinery, inline, block, feeding, forwarding, case, binding