

Set up and control multiple hopper feeders

Overview

This standard is for print finishers using multiple hopper feeder 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 multiple hopper feeders
- Run multiple hopper feeders and monitor quality

This is what the standard covers:

1. identifying the job requirements
2. checking that the multiple hopper feeders are working properly
3. checking that safety devices are working properly
4. running the multiple hopper feeders 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 up multiple hopper feeders**

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, when materials provided are not correct or sufficient
4. set up the hopper feeders so that:
 - 4.1 sections are brought together to give the correct page sequence and are fed squarely from hoppers to the transport chain
 - 4.2 separation ensures that sections are transported squarely, without damage
 - 4.3 the completed work is delivered without damage, distortion or marking
 - 4.4 any misfed or double-sheet detection devices function correctly
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 without delay, when standards cannot be met
8. prepare your work area so that it is safe and ready for production

Run multiple hopper feeders and monitor quality

9. run multiple hopper feeders so they are safe and efficient and at the required speed
10. keep up sufficient supplies of materials to so that runs continue as long as necessary
11. check at regular intervals that your company's quality standards are met
12. identify the causes of production faults, which result in sections:
 - 12.1 not gathered or inserted in the correct order
 - 12.2 failing to feed and separate
 - 12.3 feeding unevenly, tearing or marking
13. adjust machines, using approved method and equipment, to correct faults which it is your job to remedy
14. use agreed procedures to report faults which it is not your job to correct
15. check that machinery is safe to operate, once faults have been 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

Multiple hopper feeders

11. the purpose of multiple hopper feeders and when it is appropriate to use them
12. safety devices found on multiple hopper feeders, their purpose and how to check they are functional
13. how to set up and adjust multiple hopper feeders to meet job requirements
14. the causes of common faults and how to rectify them including sections not gathered or inserted in the correct order, failing to feed and separate, feeding unevenly, tearing or marking

The causes and treatment of common faults

15. 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

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

Problem solving

18. 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
19. 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
20. 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
21. 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

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

Scope/range

In addition to being able to produce commercially acceptable work, operators should be competent to operate multiple hoppers over a variety of work, sizes and coated and uncoated stock.

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.

PROPF341 (SQA Unit Code - H9L5 04)

Set up and control multiple hopper feeders



Developed by Proskills

Version Number 2

Date Approved October 2014

Indicative Review Date April 2019

Validity Current

Status Original

Originating Organisation Proskills

Original URN PROPF341

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, multiple, hopper, feeders
