Set and operate slitting and re-reeling equipment (adhesive label production)



Overview

This standard is for print finishers who are setting up and operating slitting and re-reeling equipment.

They will be expected to control the equipment whilst running production jobs.

This standard consists of three elements:

Element 408.1 Set up slitting and re-reeling equipment

Element 408.2 Operate slitting and re-reeling equipment

Element 408.3 Maintain slitting and re-reeling equipment in clean, safe and useable condition

This is what the standard covers

- 1 Identifying the job requirements
- 2 Checking that the slitting and re-reeling equipment is working properly
- 3 Checking that safety devices are working properly
- 4 Operating the slitting and re-reeling equipment 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

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Performance criteria

Set up slitting and re-reeling equipment

You must be able to:

- P1 check that you have the job specification
- P2 identify the materials you must use for the job
- P3 check that safety devices are working properly
- P4 set up the slitting and re-reeling equipment under supervision, so that:
 - P4.1 slitting is clean without any burrs
 - P4.2 or waste is removed from final reels
 - P4.3 reels are produced of the correct length or meterage reels are square to the core
- P5 produce a sample from the machine and get it passed by your supervisor
- P6 assist your supervisor to make adjustments if necessary to enable the standards to be met
- P7 report promptly to your supervisor, if the standards cannot be met
- P8 check that your work area is safe and ready for production

Operate slitting and re-reeling equipment

- P9 operate the machinery:
 - P9.1 at the required production speed
 - P9.2 safely and efficiently
- P10 regularly check that your company's quality standards are met
- P11 accurately identify faults in the product, which result in:
 - P11.1 reels of the wrong length
 - P11.2 reels out of square to the core
 - P11.3 inaccurate slitting
- P12 promptly and accurately report faults to your manager
- P13 make adjustments to settings if instructed to do so by your manager
- P14 check that the machine is safe to operate, once faults have been corrected
- P15 promptly report to your manager if the machine ceases to function properly
- P16 accurately record production and quality assurance details
- P17 follow the correct procedures for the removal of waste
- P18 stack finished work safely using your company's approved method

Maintain slitting and re-reeling equipment in a clean, safe and usable condition

- P19 have a 'safe system of work' before commencing any cleaning
- P20 obtain or prepare a schedule of cleaning, lubrication and maintenance for the machine
- P21 identify the recommended intervals for maintenance and lubrication

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- P22 ensure that the schedule is implemented and kept up to date, within the time allowed by your company for cleaning, lubrication and maintenance.
- P23 prevent any build up of debris in or around the machine by regularly removing it and cleaning the machine
- P24 regularly check that the machine is clean enough to prevent marking or damage to the product during normal operation
- P25 use cleaning methods which are safe, avoid harm to the environment and which follow the manufacturer's instructions
- P26 dispose of used cleaning agents and waste materials safely and in accordance with environment/waste disposal legislation
- P27 after cleaning, check that the machine is safe to operate
- P28 examine machinery for defective components or excessive wear at intervals required by your company
- P29 are able to remove and replace faulty or worn components that are your responsibility

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Knowledge and understanding

Maintain slitting and re-reeling equipment in a clean, safe and usable condition

Health and safety

You need to know and understand:

- K1 your duties and responsibilities for health and safety as defined by any specific legislation covering your job role
- K2 knowledge of regulations such as those covering:
 - K2.1 manual handling;
 - K2.2 noise at work;
 - K2.3 personal protective equipment;
- K3 workplace policies and procedures
 - K3.1 written health and safety policy statement;
 - K3.2 provision and use of workplace equipment regulations;
 - K3.3 training:
 - K3.4 prohibited equipment;
 - K3.5 young persons;
 - K3.6 written operating procedures for equipment use and processes, including safe systems of work

Working practices

You need to know and understand:

- K4 the way you actually do your job, more particularly the activities and techniques and the way that materials and equipment are used.
- K5 hazards and risks in your own job, their assessment and the action to take to deal with them
 - K5.1 including relevant regulations on the safe handling of equipment and materials, and the safe use of computer equipment;
 - K5.2 codes of practice issued by the health and safety executive or the printing industry advisory committee (PIAC);
 - K5.3 guarding of machinery;
 - K5.4 typical hazards and risks in the printing industry;
 - K5.5 risk assessment techniques
- K6 manufacturers' and suppliers' health and safety instructions / advice
 - K6.1 operating instructions for machinery;
 - K6.2 data sheets for substances harmful to health;
- K7 personal presentation
 - K7.1 personal hygiene
 - K7.2 clothing and accessories suitable to the particular workplace
 - K7.3 fitness for work, e.g. not under the influence of drugs, alcohol or medication
 - K7.4 smoking policies in the workplace
- K8 how to stop a machine in the event of an emergency

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The causes and treatment of common faults

You need to know and understand:

- K9 This knowledge will be specific to the materials, processes and equipment used by individual businesses - technical units, where necessary, will detail the scope of knowledge of faults for the standard
 - K6.1 raw material faults
 - K6.2 processing faults
 - K6.3 machine faults

Quality assurance and control

You need to know and understand:

K10 techniques for controlling quality

- K10.1 inspection,
- K10.2 testing,
- K10.3 sampling,
- K10.4 use of input and output controls

Problem solving

You need to know and understand:

- K11 types of problems that may need to be solved
 - K11.1 machinery electrical, mechanical, electronic, settings, component wear and tear, consumables needing replacement
 - K11.2 materials defects, shortages, incompatibility
 - K11.3 systems,
 - K11.4 organisation
 - K11.5 lack of skills or knowledge
- K12 sources of information
 - K12.1 manufacturer's documentation / troubleshooting guides
 - K12.2 colleagues
 - K12.3 tutors / trainers / mentors
 - K12.4 reference material in house or external, e.g. internet
- K13 techniques for solving complex problems
 - K13.1 change one thing only at a time and assess effect of the change
 - K13.2 problem solving cycle
 - K13.3 root cause analysis brainstorming
 - K13.4 visual representations, e.g. fishbone / mindmap diagrams
- K14 techniques for assessing machine faults
 - K14.1 observation
 - K14.2 listening
 - K14.3 inspection of product
 - K14.4 reports from colleagues / log reports
 - K14.5 touch or smell (if safe to do so)
 - K14.6 testing e.g. electrical, mechanical, electronic

Materials

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You need to know and understand:

- K15 the types and characteristics of paper, board and other commonly used substrates
 - K12.1 includes the range of commonly used uncoated, coated, embossed papers and boards;
 - K12.2 grammage, thickness, opacity, brightness/whiteness, strength, dimensional stability, gloss
- K16 maintaining the quality of materials during storage and handling
 - K16.1 humidity and temperature;
 - K16.2 protection from physical damage
 - K16.3 labelling / identification

Cleaning, lubrication and maintenance

You need to know and understand:

- K17 the principal activities involved with machine cleaning, lubrication and maintenance roles and responsibilities for cleaning, lubrication and maintenance
 - K17.1 engineers
 - K17.2 manufacturer's agents
 - K17.3 machine operators

Machine assistants

You need to know and understand:

- K18 machine faults and how they can be rectified
 - K18.1 types of faults, e.g. electrical, mechanical, electronic
 - K18.2 skills needed to repair particular types of faults
- K19 the maintenance plans for machines which you operate
 - K19.1 manufacturer's specifications / recommended maintenance plans
 - K19.2 company plans / arrangements for maintenance
- K20 which components wear or become degraded over time
 - K20.1 filters
 - K20.2 bearings
 - K20.3 belts
 - K20.4 chains
 - K20.5 machine or process specific components
- K21 what is meant by the phrase 'safe system of work' and how it applies to cleaning, lubrication and maintenance activities
 - K21.1 codes of practice issued by HSE or PIAC
 - K21.2 documented procedures to be followed
 - K21.3 isolating equipment before commencing cleaning and maintenance
 - K21.4 replacement of all guards after cleaning and maintenance
- K22 the choice and use of suitable cleaning agents and lubricants
 - K22.1 manufacturer's specification / recommendations
 - K22.2 environmental considerations

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K22.3 toxicity / health issues
K22.4 disposal of contaminated cleaning materials
K23 what parts of the machine you are allowed to clean, lubricate and maintain
K24 preventive v. predictive maintenance

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Additional Information

Scope/range

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In addition to being able to produce commercially acceptable work, the operator should be competent to operate the equipment to slit and re-reel labels various sizes and lengths on a range of thicknesses and types of stock.

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

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