# PROMP269 (SQA Unit Code – H9JH 04)

## Control narrow-web printing machinery

**Overview**

This standard is for printers with responsibility for running 'narrow-web' printing machinery. It includes lithographic, flexographic, digital and gravure printing machines.

For the purpose of this standard, a narrow web machine is one that prints on a reel-fed substrate that is 457mm or less in width, although in some instances the width may be slightly above this.

Narrow web printing machines have many possible configurations and features and are found particularly in the label, continuous stationery and packaging sectors. The printing processes employed may be lithography, gravure, flexography, digital, screen or a combination of these. Narrow web machines often have inline enhancing, converting, folding, sheeting and drying equipment fitted to them. A significant difference between a wide-web machine and a narrow-web machine is the number of people usually employed to set up and run the machine. Some narrow-web machines, such as label printers, may require only a single printer to make-ready and operate them.

The narrow-web printer must understand the setting and operation of all parts of the machine and be able to direct any colleagues during the make ready and operation of the machine. Problems that occur need to be solved either by the printer or by a colleague under the direction of the printer.

Practical ability must be demonstrated in managing the production of printed work to a commercially acceptable standard, with consistency maintained throughout the run. Narrow-web printers must be able to identify subsequent processing operations and relate them to the production of work from the printing machine.

It is also essential that the printer ensures the supply of materials to the press for jobs that are to be printed, and also ensures that all other consumables are readily available should they be required, such as replacement blankets, spray powders, inks, coatings, fount solutions and doctor blades.

Making sure that the machine is fit for use also requires that routine maintenance is undertaken and also that developing faults requiring specialist attention are acted upon before the press becomes inoperable or suffers damage.

A printer must be able to check and assess the quality of print under correct viewing conditions against an approved proof and make whatever adjustments are necessary to the printing machine to achieve and maintain the quality required. On most modern machines, integral colour control hardware and software is installed, allowing the printer to check continually that colour reproduction meet recognised standards and/or are maintained within tolerance of an approved 'pass sheet'.

As a minimum, the printer is required to understand colour standards and how such standards are maintained. If equipment for this purpose is in use in company, then the printer must be capable of operating and understanding it.

A machine manager must be able to check and assess the quality of print under correct viewing conditions against an approved proof and make whatever adjustments are necessary to the press to achieve and maintain the quality required.

On most modern machines, integral colour control hardware and software is installed, allowing the printer to check continually that colour reproduction meets recognised standards and/or is maintained within tolerance of an approved 'pass sheet'. As a minimum, the machine manager is required to understand colour standards and how such standards are maintained. If equipment for this purpose is in use in company, then the machine manager must be capable of operating and understanding it.

*Note: This standard is intended for printers who work on wide web machines and who may take responsibility for the whole machine at some time. It is accepted that in some companies such printers may only provide brief cover whilst the 'No. 1' printer is temporarily absent from the machine. Where such printers 'act up' only rarely or briefly, that should not prevent them from achieving the standard, providing they can demonstrate they have the competences set out in the standard.*

**Performance criteria**

**Make-ready narrow-web printing machinery**

You must be able to:

P1 check the machinery and your work area are safe and ready for production

P2 check all the details of the job and make sure you completely understand what is required

P3 check that enough materials of the right type for the job are available

P4 brief any colleagues on the job requirements and the tasks required for the make-ready

P5 make ready the printing machinery, making sure that the tasks are completed correctly and the work is undertaken using safe systems of work

P6 assist any colleagues where required and make sure that any problems are resolved effectively and efficiently

P7 control the 'run-up' of material, the establishing of good register and colour, and the satisfactory drying of ink and coatings

P8 make ready any inline folding, converting, enhancing or other equipment required for the job and check that the output from the unit(s) meet the job specification

P9 manage adjustments to the machine settings as necessary to achieve the required job specification and quality standards

P10 report promptly to your manager if circumstances beyond your control prevent you from producing a 'pass' sheet to the required standard

P11 if required by your company, obtain a 'pass' from the relevant person when the job is ready to run

**Control output and quality from narrow-web printing machinery**

You must be able to:

P12 ensure that you have approval to commence production

P13 run the printing machine at the optimum speed, ensuring the required standard is achieved

P14 manage colleagues in a way that ensures good quality and productivity from the press

P15 regularly check that the output matches the 'pass' sheet, keeping time-stamped print samples as required

P16 identify and correct the cause of problems which affect the quality of the image or reduce the rate of output

P17 report promptly to your manager if circumstances beyond your control prevent

you from achieving the required quantity or quality of printed sheets

P18 run the required quantity of good product, keeping spoiled material to a minimum

P19 identify or remove any sub-standard print from the finished work

P20 follow the correct procedures for the removal of waste

P21 accurately record the production and quality assurance details required

P22 identify machine parts that may be in need of maintenance or replacement and make sure that those responsible for carrying out such work are kept informed of the requirements

P23 liaise with relevant colleagues concerning scheduled maintenance and repair of the machine

P24 manage the day to day cleaning and setting of the machine so that it is fit for use when required

## Knowledge and understanding

### The law as it affects printing

You need to know and understand:

K1 defamation
K2 copyright and ownership of images
K3 obscenity
K4 forgery
K5 data protection
K6 the printers imprint

### Health and safety

You need to know and understand:

K7 your legal duties for health and safety in the workplace as defined by the relevant health and safety legislation
K8 your duties and responsibilities for health and safety as defined by any specific legislation covering your job role
K9 workplace policies and procedures
K10 working practices
K11 hazards and risks in the workplace, their assessment and the action to take to deal with them
K12 hazards and risks in your own job, their assessment and the action to take to deal with them - including relevant regulations on the safe handling of equipment and materials.
K13 manufacturer's health and safety requirements relevant to your job
K14 what personal protective equipment should be used in your job
K15 how to stop a machine in the event of an emergency

### Security and storage

You need to know and understand:

K16 print with time-sensitive or restricted release dates
K17 high value products or print with a high risk of theft

### Communication

You need to know and understand:

K18 how to communicate with colleagues, customers and suppliers

### Workplace policy and practice

You need to know and understand:

K19 workplace objectives, priorities, standards and procedures
K20 the range of work carried out in the workplace
K21 the working practices existing in the workplace
K22 the key job roles within the printing and graphic communications industry and their main purposes

**The identification and assessment of printing options**

You need to know and understand:

K23 the stages in the printing process from pre-press to printed product

**Time and resources**

You need to know and understand:

K24 the different types of resource, including labour, materials, machinery
K25 the relationship between resource usage and profitability
K26 how to maximise productivity
K27 the relationship between productivity and competitiveness

**The operation of equipment**

You need to know and understand:

K28 the range of adjustments and settings on narrow web printing machines
K29 the operating practices and procedures for narrow web printing machines
K30 the use of colour control equipment, including densitometers and spectrophotometers

**Printing**

You need to know and understand:

K31 the principles of narrow web printing machinery and the printing processes used

**The causes and treatment of common faults**

You need to know and understand:

K32 raw material faults
K33 processing (printing) faults
K34 machine faults

**Administrative procedures**

You need to know and understand:

K35 recording and reporting
K36 product labelling

**Management**

You need to know and understand:

K37 briefing techniques
K38 business improvement techniques

**Environmental**

You need to know and understand:

K39 the legal requirements for the classification, storage, carriage and disposal of waste
K40 any specific environmental legislation that covers processes in your company
K41 role of statutory authorities/agencies
K42 control of pollution

**Quality assurance and control**

You need to know and understand:

K43 the main features of quality assurance and quality control systems
K44 techniques for controlling quality, including inspection, testing, sampling, use of input and output controls
K45 equipment for controlling quality in machine printing
K46 light standards for viewing and assessing colour print

**Problem solving**

You need to know and understand:

K47 types of problems that may need to be solved
K48 sources of information
K49 techniques for solving complex problems
K50 techniques for assessing machine faults

**Materials**

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| You need to know and understand: | K51 | the types and characteristics of paper, board and other commonly used substrates |
| | K52 | the types and characteristics of inks, coatings and coatings |
| | K53 | how to maintain the quality of materials during storage and handling |

**Proofing**

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| You need to know and understand: | K54 | the principal types of proof and their role in the printing process |

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