

PROMP277 (SQA Unit Code – H9JR 04)

Control ink drying equipment



Overview

This standard is for printers with responsibility for ink drying or ink curing equipment used on either sheet fed or web fed printing machinery.

The standard involves controlling common ink drying/curing equipment such as: Ultra Violet (UV), Infra Red (IR) and hot air.

Correct operation of ink drying equipment is critically important in printing processes that depend on ink 'curing' or assisted/accelerated drying.

Ink drying equipment is also associated with risk of fire, something that is a not an uncommon occurrence in printing machine drying units.

The printer has overall responsibility for the equipment, although, dependent on the machine, tasks are sometimes shared with colleagues.

The printer must understand the setting and operation of all parts of the equipment and be able to direct the crew during the make ready and operation of the equipment. Problems that occur need to be solved either by an individual or by the team under the direction of the printer.

This standard requires you to understand the operation and risks associated with drying equipment on printing machines, and to be able to control and operate the equipment safely and ensure that the equipment is working effectively.

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Performance criteria

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- You must be able to:
- P1 check the equipment and your work area are safe and ready for production
 - P2 check all the details of the job and make sure they are understood by you and the team
 - P3 check that enough materials of the right type for the job are available
 - P4 brief other members of the team on the tasks required for the make ready
 - P5 monitor the progress of the make ready, making sure that tasks are completed correctly and are undertaken using safe systems of work
 - P6 assist members of the team where required and make sure that any problems are resolved effectively and efficiently
 - P7 manage adjustments to the equipment as necessary to achieve the required job specification and quality standards
 - P8 monitor the drying equipment ensuring all elements are functioning

Maintain the quality of output from ink drying equipment

- You must be able to:
- P9 manage the team in a way that ensures good quality and productivity
 - P10 check regularly that the output meets the required quality
 - P11 identify and correct the cause of problems which affect the quality
 - P12 monitor the safe and efficient operation of drying equipment
 - P13 identify and correct drying equipment faults which it is your job to rectify
 - P14 follow the correct procedures for the removal of waste
 - P15 accurately record the production and quality assurance details

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Knowledge and understanding

You need to know and understand:

Health and safety

- K1 your legal duties for health and safety in the workplace as defined by the relevant health and safety legislation
- K2 your duties and responsibilities for health and safety as defined by any specific legislation covering your job role
- K3 workplace policies and procedures
- K4 working practices
- K5 hazards and risks in the workplace, their assessment and the action to take to deal with them
- K6 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
- K7 manufacturer's health and safety requirements relevant to your job
- K8 what personal protective equipment should be used in your job
- K9 how to stop a machine in the event of an emergency

Communication

You need to know and understand:

- K10 how to communicate with colleagues
- K11 how to communicate with customers
- K12 how to communicate with suppliers

Workplace policy and practice

You need to know and understand:

- K13 workplace objectives, priorities, standards and procedures
- K14 the range of work carried out in the workplace
- K15 the working practices existing in the workplace
- K16 the key job roles within the printing and graphic communications industry and their main purposes

Time and resources

You need to know and understand:

- K17 the different types of resource, including labour, materials, machinery

- K18 the relationship between resource usage and profitability
- K19 how to maximise productivity
- K20 the relationship between productivity and competitiveness

The operation of equipment

You need to know and understand:

- K21 the principles of ink curing and drying
- K22 the risks associated with ink drying units and how to avoid them
- K23 your company's safety procedures for operating ink drying equipment
- K24 common faults which can occur when operating ink drying equipment, what causes them and how to correct them

The causes and treatment of common faults

You need to know and understand:

- K25 raw material faults
- K26 processing faults
- K27 machine faults

Administrative procedures

You need to know and understand:

- K28 recording and reporting
- K29 product labelling

Management

You need to know and understand:

- K30 briefing techniques
- K31 business improvement techniques

Environmental

You need to know and understand:

- K32 the legal requirements for the classification, storage, carriage and disposal of waste
- K33 any specific environmental legislation that covers processes in your company

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K34 role of statutory authorities/agencies

K35 control of pollution

Quality assurance and control

You need to know
and understand:

K36 the main features of quality assurance and quality control systems

K37 techniques for controlling quality, including inspection, testing, sampling,
use of input and output controls

K38 equipment for controlling quality

Problem solving

You need to know
and understand:

K39 types of problems that may need to be solved

K40 sources of information

K41 techniques for solving complex problems

K42 techniques for assessing machine faults

Materials

You need to know
and understand:

K43 the types and characteristics of paper, board and other commonly used
substrates

K44 the types and characteristics of inks and coatings

K45 how to maintain the quality of materials during storage and handling

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