

National Occupational Standards

Sector: PRE-PRESS PROCESSES

Occupation: Machine Operator

MQF Level: 2

Units:

- PREMO 201: Improvement of individual performance at work.
- PREMO 202: Maintain equipment in working order.
- PREMO 203: Possess good knowledge on printing materials, press and post-press processes
- PRE 204: Operate pre-press machines.

PREMO201: Improvement of individual performance at work

In order to compete successfully, printing companies need to be constantly vigilant on their quality as well as to keep up to date with technology and best practice. One of the ways in which organisations improve is by helping their people to acquire new skills and knowledge either individually or as part of a team

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Communicate with work colleagues for self-improvement.
2. Work and communicate effectively with customers for their satisfaction.
3. Share responsibility with superiors to review and prepare personal development plans.

Required Knowledge

Level 2 pre-press operator must know and state:

1. Communication procedures and principles of personal development planning and training.
2. Workplace policy & practice:
 - a. Workplace objectives, priorities, standards & procedures;
 - b. The range of work carried out in the workplace;
 - c. The working practices existing in the workplace;
 - d. The key job roles within the printing and graphic industry and their main purposes.
3. The identification and assessment of printing options.
4. The main features of quality assurance and quality control in relation to the job.
5. The different types of resources, including labour, materials and machinery.
6. The importance of making use of resources in an efficient manner.

Required Skills

Level 2 Pre-press operator is able to follow instructions to:

1. Review the current situation through advice from colleagues and managers at work or from customers.
2. Improve service to customers by ensuring that the service given met the superiors' and customers' need and expectations.
3. Improve productivity and the quality of work.

PREMO 202: MAINTAIN EQUIPMENT IN WORKING ORDER.

The candidate must show that all of the statements in each element have been covered and must be the result of real work activities in actual production situations.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Carry out safe working practices using appropriate equipment.
2. Perform preventive maintenance and cleaning of equipment.
3. Identify which consumables and components need replacements.
4. Dispose of waste materials and cleaning agents in a safe manner.

Required Knowledge

Level 2 Pre-press operator must know and state:

1. The risks of handling machinery, cleaning materials, lubricants and replacing components.
2. Own responsibilities for cleaning machines - what is permitted and what is not.
3. The company's requirements and industry guidelines for the safe handling and use of hazardous substances.
4. The production schedule and how this affects cleaning operations.
5. The importance to use cleaning methods that are safe, avoid harming the environment and meet manufacturers' requirements.
6. The company's procedures for the safe disposal of waste.
7. Responsibilities for replacing consumables - what is permitted and what is not.
8. The maintenance plan for the machine
9. Responsibilities for replacing components - what is allowed and what is not.
10. The procedures for removing, replacing and realigning components safely.
11. Reporting procedures of unexpected wear, damage or machine faults.

Required Skills

Level 2 Pre-press operator is able to follow instructions to:

1. Clean own equipment by using the appropriate cleaning materials, equipments and methods that are safe, avoid harm to the environment and which follow the manufacturer's instructions.
2. Replace consumables during scheduled maintenance as well as during normal operations:
3. At the end of cleaning and lubricating, check that the machine is safe to operate.
4. Accurately update records of machine maintenance.
5. Routinely examine machinery for defective components or excessive wear.
6. Accurately identify machine components that need replacing and report accordingly.
7. Accurately identify and report machine faults accordingly.
8. Assist if necessary in restoring the machine back to safe operating condition after replacing components.
9. Keep accurate records of the components removed and replaced

PREMO 203: Possess good knowledge on printing materials; press and post-press processes

The candidate must show that all of the statements in each element have been covered and must be the result of real work activities in actual production situations.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Understand the different type of modern communication technologies.
2. Distinguish between different types of print media and the differences in paper.
3. Comply with the processing line from pre-press to post-press on the company

Required Knowledge

Level 2 pre-press operator must know and state:

1. The technologies available to convey information.
2. The ability of the printing industry to use different media to convey data or information.
3. The different printing substrates available.
4. Paper specifications.
5. The production processes available within the company and the sequence of work from pre-press to post-press

Required Skills

Level 2 pre-press operator is able to follow instructions to:

1. Understand the different forms of communication technologies (print, electronic and multi-media)
2. Distinguish between the different types of print media used.
3. Distinguish between the range of printing substrates available for printing.
4. Use the appropriate paper according to the paper substance, calliper, size and grain direction.
5. Comply with the processing line from pre-press to post-press in the company and identify the various processes used in the company.
6. Understand the behaviour of screen ruling according to the substrates being printed in relation to dot gain and trapping problems.

PREMO 204: Operates Pre-Press Machines

The candidate must show that all of the statements in each element have been covered and must be the result of real work activities in actual production situations.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Be able to handle, use and store the printing plates correctly.
2. Assist in the operation of a pre-press machine effectively.
3. Identify machinery faults and act accordingly.

Required Knowledge

Level 2 pre-press operator must know and state:

1. Details and requirements of the printing jobs.
2. Where to retrieve the correct plates for the job.
3. The printing machines used in the company and the related plate sizes.
4. The function of image and non-image areas.
5. The risks associated with working on computers and plate setting machinery.
6. The safe operation of pre-press machinery and emergency shutdown procedures.
7. The procedure to send, receive and retrieve data files.
8. The principles of artwork design and requirements for the printing and post-press processes.
9. Software, artwork and pre-press terminology.
10. The company's quality standards to ensure good work.
11. The company's reporting procedures and sources of advice.

Required Skills

Level 2 pre-press operator is able to follow instructions to:

1. Check the job specifications and identify the plates and materials to be used for the job.
2. Locate and retrieve the correct plates for the job according to the company's procedure.
3. Handle the plates carefully so that damage does not occur to the carriers or to the surfaces.
4. Report problems promptly either relating to machine faults or material supply.
5. Check the absence of risks and take all the precautions necessary to prevent injury.
6. Ensure that the equipment is safe and ready for production and stop the machine in an emergency situation.
7. Use a computer and the appropriate software to send, receive or retrieve data files from customers.
8. Assess received artwork files to see if there are any major mistakes including missing or corrupt images, fonts etc.

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9. Send or print the approved output file to the destination device to create separations.
10. Check that all the elements of the job appear on the correct separations and rectify any mistakes.
11. Output the approved file via the image or plate-setter.
12. Examine output to check if it matches with job specifications or accepted proof for the job.
13. Identify the persons who are able to advise on the job requirements and report back according to company's procedures.
14. Identify or assist to correctly identify processing and mechanical faults.
15. Promptly report faults and give constructive help to colleagues who are correcting faults.
16. Assist to check that the machine is safe to operate once faults are corrected.