



Australian Government

Department of Education, Employment and Workplace Relations

PMC552046C Operate glass printing equipment

Revision Number: 1

PMC552046C Operate glass printing equipment

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the preparation and operation of glass printing equipment. It involves setting up printing equipment, cleaning and maintaining print screens, monitoring glass throughput and quality, undertaking routine checks and rectifying routine problems.
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Application of the Unit

Application of the unit	This unit of competency applies to operators who are responsible for preparing and operating glass printing equipment within the manufactured mineral products industry. This competency includes the operation of all ancillary equipment. This competency is typically performed by operators working either independently or as part of a work team. At all times they would be liaising with other members of the team.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare the printing equipment for production	1.1. Set up line in accordance with job specifications 1.2. Transfer glass to conveyor 1.3. Conduct pre-startup procedure and visual checks according to enterprise procedure checklist 1.4. Set up and configure printing equipment to ensure startup function complies with standard operating procedures 1.5. Load and separate glass in accordance with work instructions
2. Operate printing equipment	2.1. Identify customer requirements and set minimum parameters in accordance with batch sheets 2.2. Start up equipment in accordance with work instructions 2.3. Ensure glass printing equipment is operated in accordance with established enterprise procedures
3. Monitor and record printing equipment operation	3.1. Monitor equipment performance in accordance with work instructions and manufacturer's specifications 3.2. Monitor non-conforming product against customer specifications 3.3. Adjust and control equipment to ensure correct product quality in accordance with company requirements 3.4. Complete final inspection checks 3.5. Complete appropriate records and logs
4. Rectify routine problems	4.1. Identify the range of faults that can occur during the operation 4.2. Determine and rectify fault causes in accordance with procedures 4.3. Identify and rectify equipment failure causes in accordance with procedures 4.4. Ensure appropriate records and log books of equipment operations are maintained to meet procedures 4.5. Identify non-routine problems and report to designated person
5. Shut down equipment	5.1. Ensure line is clear of all product and left in a safe manner for shutdown 5.2. Shut down equipment in accordance with work instructions

ELEMENT	PERFORMANCE CRITERIA
	5.3. Complete appropriate records and logs 5.4. Shut down equipment in an emergency situation
6. Prepare equipment for maintenance	6.1. Isolate equipment in accordance with work instructions 6.2. Remove any broken glass safely 6.3. Make sure area is clear and safe for maintenance
7. Control hazards	7.1. Identify hazards from the job to be done 7.2. Identify other hazards in the work area 7.3. Assess the risks arising from those hazards 7.4. Implement measures to control those risks in line with procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- recognising process conditions which will lead to out of specification production
- implementing the enterprise's standard procedures and work instructions and relevant regulatory requirements within appropriate time constraints and in a manner relevant to the operation of the finishing equipment
- reading and numeracy to interpret workplace documents and technical information

Required knowledge

Required knowledge includes:

- composition and nature of the glass
- startup and shutdown processes
- importance of occupational health and safety (OHS) procedures in handling glass
- construction and limitations of the glass printing and edgework processing equipment
- out of specification situations
- distinguish between causes of faults such as:
 - raw materials
 - equipment
 - types of defects/faults
 - electrical/instrumental

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

The unit will be assessed in as holistic a manner as is practical and may be integrated with the assessment of other relevant units of competency.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that the printing equipment be understood and that the importance of critical material properties, settings and readings is known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate corrective action.

Consistent performance should be demonstrated. In particular look to see that:

- quality is monitored to minimise wastage
- products are produced within specifications and customer requirements
- startup and shutdown occur first time
- signals and alarms are responded to immediately
- process measurements are continually made or observed
- all OHS requirements are followed.

Competence must be demonstrated in the operation of all ancillary equipment to the level required for this unit of competency.

Context of and specific resources for assessment

Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations.

Assessment will occur over a range of situations which will include disruptions to normal, smooth operation.

Simulation or case studies/scenarios may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual plant and will include 'walk-throughs' of the relevant competency components. A bank of scenarios/case studies/what ifs and questions will be required to probe the reasoning behind observable actions.

EVIDENCE GUIDE	
Method of assessment	In all plants it may be appropriate to assess this unit concurrently with relevant teamwork and communication units. Individual enterprises may choose to add prerequisites or co-requisites relevant to their processes.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the language and literacy capacity of the candidate and the work being performed.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Procedures

All operations are performed in accordance with standard procedures and work instructions

Finishing equipment

This unit includes finishing equipment applicable to each of the specific areas of glass products manufacture:

- flat glass
- automotive glass

Equipment

Equipment may include:

- printing and edgework equipment
- computers
- measuring and recording equipment
- communication equipment
- hand tools
- safety clothing and equipment

Typical problems

Typical problems may include:

- process problems
- equipment problems
- quality problems

OHS

All operations are subject to stringent OHS requirements and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and OHS requirements, the OHS requirements take precedence

Unit Sector(s)

Unit sector

Operational/technical

Competency field

Competency field	
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Co-requisite units

Co-requisite units		