



Australian Government

PMC552005C Process greenware/green products

Revision Number: 1

PMC552005C Process greenware/green products

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the drying, preparation and other processing of greenware or green products. It involves preparing equipment, loading products, monitoring drying, resolving routine problems and ensuring finished product is to specification.
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Application of the Unit

Application of the unit	This unit of competency applies to operators who are responsible for conducting activities relevant to the preparation and processing of greenware or green products. It does NOT cover the firing of products in a kiln or similar firing equipment. It does cover warmed or heated curing areas. This unit of competency is typically performed by operators working either independently or as part of a team.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

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 equipment	1.1. Determine the requirements from the production program 1.2. Identify and set up the racks, shelves or trolleys 1.3. Ensure the equipment is safe for use
2. Control hazards	2.1. Identify hazards from the job to be done 2.2. Identify other hazards in the work area 2.3. Assess the risks arising from those hazards 2.4. Implement measures to control those risks in line with procedures
3. Load products for drying/curing	3.1. Stack or set products to specification 3.2. Ensure correct stacking pattern is used 3.3. Allow adequate space around each item 3.4. Use available space effectively
4. Dry/cure products	4.1. Monitor drying equipment and test products to determine correct conditions 4.2. Adjust temperature and humidity to maintain correct conditions 4.3. Remove product from the area and store appropriately
5. Finish green products	5.1. Finish products to specifications 5.2. Ensure condition of product is acceptable 5.3. Store products in appropriate area 5.4. Repair product and/or report product faults to the designated person.
6. Rectify routine problems	6.1. Identify the range of faults that can occur during the operation 6.2. Determine and rectify fault causes in accordance with procedures 6.3. Identify and rectify equipment failure causes to procedures 6.4. Make sure appropriate records and log books of equipment operations are maintained to meet procedures 6.5. Identify non-routine problems and report to designated person

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Required skills include:

- reading from the production schedule
- stacking greenware to allow efficient drying and curing
- recognising conditions which will lead to out of specification product
- implementing the enterprise's procedures within time constraints and in a manner relevant to the correct use of the equipment
- conveying information relevant to the operation clearly and effectively
- maintaining appropriate levels of quality assurance
- reading and numeracy to interpret workplace documents and technical information

Required knowledge

Required knowledge includes:

- surface finish requirements and terms
- nature and purpose of the drying/curing stage
- importance of correct moisture content
- importance of correct temperature and air circulation
- consequences of poor stacking
- underlying causes of faults such as precipitated by:
 - dryer/curing kiln
 - air flow/temperature
 - materials

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	Competence must be demonstrated in the ability to recognise situations requiring action and then in implementing appropriate corrective action. Consistent performance should be demonstrated. In particular look to see that: • greenware is ready for next stage of the process • drying achieves the specified moisture content • curing achieves the specified strength • drying/curing area loaded to requirements • temperature and humidity are within limits • product waste levels are low.
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 competency unit (e.g. those parts referring to safety of equipment). 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 will be required as will a bank of questions which will be used to probe the reasoning behind the observable actions.
Method of assessment	Individual enterprises may choose to add prerequisites and co-requisites relevant to their processes.
Guidance information for assessment	Assessment processes and techniques must be appropriate to the work being performed and must take into consideration the language and literacy capacity of

EVIDENCE GUIDE

the candidate.

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
Greenware and green products	Greenware and green products may include: • clay and ceramics products prior to firing • fibre reinforced cement products prior to autoclaving • concrete products such as masonry curing
Equipment	Equipment may include: • hand tools • templates • drying area, cabinets, tunnel, curing kiln • transfer cars, kiln cars, trolleys, shelving or racks • temperature measuring equipment • moisture measuring equipment (e.g. infra-red moisture meter)
Finishing	Finishing includes operations, such as: • brushing • dressing • fettling • finishing • sanding • sponging • stacking • edge trimming
Typical problems	Typical problems may include: • inspecting and finishing to ensure surfaces are to specification • ensuring moisture content is within requirements

RANGE STATEMENT	
	• ensuring product strength has been obtained • temperature and humidity control • distribution of product in drying/curing area
Occupational health and safety (OHS)	The identification and control of hazards and the application of OHS is to be in accordance with current, applicable legislation and regulations, and company procedures. All work is carried out at all times in accordance with these requirements

Unit Sector(s)

Unit sector	Operational/technical
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		