



**Australian Government**

# **PMC30116 Certificate III in Manufactured Mineral Products**

**Release 1**

## **PMC30116 Certificate III in Manufactured Mineral Products**

### **Modification History**

Release 1. Supersedes and is equivalent to PMC30110 Certificate III in Manufactured Mineral Products.

## Qualification Description

The PMC30116 Certificate III in Manufactured Mineral Products covers the skills and knowledge required to perform a range of advanced operations within the manufactured mineral products industries.

The qualification is suitable to develop existing workers to perform an advanced operational role to directly produce product.

The operator will be able to work independently and to apply theoretical and technical knowledge and well developed skills to undertake advanced operations and exercise judgement in areas such as start-up and shutdown procedures and quality assurance.

The operator will be able to apply their knowledge to anticipate problems and to solve a range of routine and non-routine problems using product and process knowledge to develop solutions to problems which do not have a known solution or do not have a solution recorded in the procedures.

The operator will be able to solve a range of foreseen and unforeseen problems, using product and process knowledge to develop solutions to problems which do not have a known solution, or a solution recorded in the procedures.

The qualification provides the skills and knowledge relevant to the following sectors:

- cement
- precast concrete
- premixed concrete
- clay products
- ceramic products
- float (flat) glass
- glass containers
- refractories
- plaster (both fibrous plaster and plaster boards)
- fibre cement boards
- ground minerals
- abrasive grinding wheels and cutting discs.

For people who do not directly produce product but work in production support roles see MSM30116 Certificate III in Process Manufacturing.

For people who require a more generalist qualification covering the application of good manufacturing practice and lean principles see MSS30316 Certificate III in Competitive Systems and Practices.

The PMC30116 Certificate III in Manufactured Mineral Products contains units of competency that can be credited towards other manufacturing qualifications such as:

- PMC40116 Certificate IV in Manufactured Mineral Products
- MSM40116 Certificate IV in Process Manufacturing

- MSS40116 Certificate IV in Sustainable Operations
- MSS40316 Certificate IV in Competitive Systems and Practices.

There are no specific licenses that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements in some jurisdictions. Local regulations should be checked for details.

## **Entry Requirements**

There are no entry requirements for this qualification.

## Packaging Rules

To be awarded the PMC30116 Certificate III in Manufactured Mineral Products competency must be achieved in **twenty (20)** units of competency:

- **six (6)** core units of competency
- **fourteen (14)** elective units of competency from Groups A and B, chosen as specified below.
  - A minimum of **one (1)** unit must be selected from Group A
  - The balance of units, to a maximum of **thirteen (13)**, may be chosen from Groups A and B, with a maximum of **nine (9)** from Group B2.

Up to **six (6)** of the elective units of competency can be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups B1 and B2.

**Note:** Where prerequisite units apply, they must be counted in the total number of units required for achievement of the qualification.

### Core units of competency

Unit code	Unit title	
MSMENV272	Participate in environmentally sustainable work practices	
MSMWHS200	Work safely	
MSMSUP100	Apply workplace procedures	
MSMSUP101	Clean workplace or equipment	
MSMSUP102	Communicate in the workplace	
Select <b>one (1)</b> of the following units. Note that only MSAPMOPS101 <b>OR</b> PMAOPS101 may be included in this qualification, not both.		
Unit code	Unit title	Prerequisites
MSMOPS101	Make measurements	

PMAOPS101	Read dials and indicators	
<b>Elective units of competency</b>  <b>Group A - Specialist electives</b>		
Unit code	Unit title	Prerequisites
MSL974005	Perform physical tests	
PMAOPS305	Operate process control systems	
PMC553000	Set up and tune a process	
PMC553010	Process raw meal into product	PMC552010
PMC553020	Prepare moulds and dies	
PMC553021	Set up and tune glazing equipment	
PMC553040	Set up and optimise glass forming process	
PMC553041	Set up and optimise glass furnace process	
PMC553042	Set up and optimise secondary process	
PMC553050	Produce architectural precast concrete	
PMC553051	Produce structural precast concrete	
PMC553070	Design and construct moulds for fibrous plaster products	PMC552024
PMC553072	Model fibrous plaster products	
PMC553080	Set up and optimise finishing process	
<b>Group B - Other electives</b>  <b>Group B1</b>		
Unit code	Unit title	Prerequisites

MEM09002B	Interpret technical drawing	
MSMWHS300	Facilitate the implementation of OHS for a work group	MSMWHS200
MSMPER300	Issue work permits	MSMWHS201
MSMSUP300	Identify and implement opportunities to maximise production efficiencies	MSMSUP200
MSMSUP303	Identify equipment faults	
MSMSUP310	Contribute to development of plant documentation	
MSMSUP330	Develop and adjust a production schedule	
MSMSUP382	Provide coaching/mentoring in the workplace	
MSMSUP390	Use structured problem solving tools	
MSL973001	Perform basic tests	
PMC563081	Carry out stock control	
TAEASS301	Contribute to assessment	
TAEDEL301	Provide work skill instruction	
Up to <b>two (2)</b> relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses where those units are available at Certificate III or IV.		
<b>Group B2</b>		
<b>Unit code</b>	<b>Unit title</b>	<b>Prerequisites</b>
RIIRIS201D	Conduct local risk control	
MSS402030	Apply cost factors to work practices	
MSS402031	Interpret product costs in terms of customer requirements	
MSS402040	Apply 5S procedures	
MSS402050	Monitor process capability	

MSS402051	Apply quality standards	
MSS402060	Use planning software systems in operations	
MSS402080	Undertake root cause analysis	
MSS402081	Contribute to the application of a proactive maintenance strategy	
MSMWHS110	Follow emergency response procedures	
MSMOPS100	Use equipment	
MSMOPS200	Operate equipment	
MSMOPS212	Use enterprise computers or data systems	
MSMPER200	Work in accordance with an issued permit	
MSMPER201	Monitor and control work permits	
MSMPER202	Observe permit work	
MSMPER205	Enter confined space	
MSMSUP106	Work in a team	
MSMSUP200	Achieve work outcomes	
MSMSUP210	Process and record information	
MSMSUP230	Monitor process operations	
MSMSUP240	Undertake minor maintenance	
MSMSUP280	Manage conflict at work	
MSMSUP292	Sample and test materials and product	
MSL952001	Collect routine site samples	
PMAOPS105	Select and prepare materials	
PMAOPS216	Operate local control system	
PMBHAN103	Shift materials safely by hand	
PMC552002	Operate equipment to blend/mix materials	



PMC552003	Operate grinding equipment	
PMC552004	Prepare for production	
PMC552005	Process greenware/green products	
PMC552006	Operate an autoclave	
PMC552007	Heat accelerate the curing of precast concrete	
PMC552008	Operate crushing equipment	
PMC552010	Operate a calcining kiln	
PMC552020	Operate slip casting equipment	
PMC552021	Operate manual glazing equipment	
PMC552022	Prepare materials for clay and ceramic production	
PMC552023	Finish products after firing	
PMC552024	Hand mould products	
PMC552030	Operate a firing kiln	
PMC552031	Operate extrusion equipment	
PMC552032	Operate pressing equipment	
PMC552040	Operate glass melting process	
PMC552041	Operate process ovens	
PMC552042	Operate blown insulation equipment	
PMC552043	Operate float forming equipment	
PMC552044	Operate fibre forming equipment	
PMC552045	Operate container forming equipment	
PMC552046	Operate glass printing equipment	
PMC552047	Operate primary annealing equipment	
PMC552048	Operate glass finishing equipment	
PMC552049	Operate on-line stacking and assembly equipment	

PMC552050	Schedule, cut and bend reinforcement	
PMC552051	Finish green concrete products	
PMC552052	Cast moulded concrete products	
PMC552053	Finish cured concrete products	
PMC552054	Spin concrete pipes	
PMC552055	Conduct benching operations	
PMC552056	Assemble, fabricate and place reinforcement	
PMC552057	Finish casting operation	
PMC552058	Demould concrete products	
PMC552060	Batch mix concrete	
PMC552061	Deliver concrete to site	
PMC552065	Prepare asphalt	
PMC552070	Operate forming equipment	
PMC552072	Produce fibrous plasterboard	
PMC552090	Use and maintain tools and equipment for refractory operations	
PMC552091	Prepare for, install and repair refractory brickwork/blockwork	
PMC552092	Prepare for and install mouldable refractory materials	
PMC552093	Prepare for and cast refractory materials	
PMC552094	Prepare for and apply shotcrete for installation	
PMC561072	Store materials for production	
PMC561080	Organise self	
PMC562070	Move materials	
PMC562071	Operate bulk materials handling equipment	

PMC562081	Deliver customer service	
PMC562083	Allocate and complete team tasks	
TLIC3003	Drive medium rigid vehicle	
TLIC3004	Drive heavy rigid vehicle	
TLID2010	Operate a forklift	

**Note:** Only **one** of TLIC3003 **or** TLIC3004A may be included in this qualification, not both.

Up to **four (4)** relevant units may be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are packaged in Certificates II, III or IV.

## Qualification Mapping Information

Release 1. Supersedes and is equivalent to PMC30110 Certificate III in Manufactured Mineral Products.

## Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>