



Australian Government

PMB20116 Certificate II in Polymer Processing

Release 1

PMB20116 Certificate II in Polymer Processing

Modification History

Release 1. Supersedes and is equivalent to PMB20107 Certificate II in Polymer Processing.

Qualification Description

The PMB20116 Certificate II in Polymer Processing is intended for competent operators who operate production equipment or undertake similar roles to directly produce products.

The operator will be able to operate production equipment within defined specifications and procedures and carry out a range of support functions. The operator will be able to apply technical and procedural knowledge to a defined range of situations and activities.

The operator will be able to solve predictable problems by applying known solutions and will report non-routine problems to appropriate personnel.

This qualification applies to the production of a wide range of polymer products and components ranging from consumer products to components to be included in other commercial, industrial or consumer products. Products may be made from a wide range of natural and synthetic polymers covering thermoplastics as well as thermosetting polymers. Production may be long runs of standard products, short runs or 'one offs' of specialised products.

For people who do not directly produce product but work in production support roles see MSM20116 Certificate II in Process Manufacturing.

For people who require a more generalist qualification covering the application of good manufacturing practice and lean principles see MSS20316 Certificate II 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 PMB20116 Certificate II in Polymer Processing competency must be achieved in **fourteen (14)** units of competency:

- **three (3)** core units of competency
- **eleven (11)** elective units of competency, as specified below
 - a minimum of **three (3)** from Group A
 - the remainder may be chosen from Groups A and B to bring the total number of electives to **eleven (11)**.

Up to **four (4)** elective units can be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses, as specified in Group B.

Note: Units with prerequisites are marked with an asterisk*. Prerequisite units must be counted in the total number of units required for achievement of the qualification. Refer to individual units for details.

Core units of competency

Unit code	Unit title	
MSMENV272	Participate in environmentally sustainable work practices	
MSMWHS200	Work safely	
MSMSUP210	Process and record information	
Elective units of competency		
Group A		
Unit code	Unit title	Prerequisites
FWPCOT2238	Cut materials with a hand-held chainsaw	
MSMOPS200	Operate equipment	
MSMOPS212	Use organisation computers or data systems	
MSMOPS244	Layout and cut materials	

PMBFIN201	Finish products and components	
PMBFIN202	Fit attachments to products	
PMBFIN203	Repair product imperfections	
PMBFIN205	Hand decorate products	
PMBPREP201	Prepare moulds for composites production	
PMBPREP205	Assemble materials and equipment for production	
PMBPREP206	Prepare materials to formulae	
PMBPROD206	Operate ancillary equipment	
PMBPROD207	Operate calender	
PMBPROD209	Operate cable winding equipment	
PMBPROD210	Operate injection moulding equipment	
PMBPROD211	Operate blow moulding equipment	
PMBPROD212	Operate thermoforming equipment	
PMBPROD213	Operate extruders	
PMBPROD216	Operate blown film equipment	
PMBPROD217	Operate printing equipment	
PMBPROD221	Operate rotational moulding equipment	
PMBPROD229	Operate polystyrene shape moulding equipment	
PMBPROD233	Operate film conversion equipment	
PMBPROD235	Use materials and process knowledge to complete work operations	
PMBPROD236	Operate hand held air/power equipment for production processes	
PMBPROD237	Splice cables	
PMBPROD238	Perform creel rack operations	
PMBPROD239	Build reinforced conveyor belts	

PMBPROD240	Cut materials	
PMBPROD241	Lay up rubber lining or lag pulleys	
PMBPROD242	Bond polymers to surfaces	
PMBPROD245	Fabricate materials	
PMBPROD246	Hand mix materials	
PMBPROD247	Hand lay up composites	
PMBPROD248	Prepare surfaces for coating	
PMBPROD249	Apply liquid surface coatings	
PMBPROD251	Apply gel coat or other polymer surface finish	
PMBPROD252	Operate compounding equipment	
PMBPROD253	Operate an internal mill blender	
PMBPROD254	Operate an open mill blender	
PMBPROD255	Operate mixing equipment	
PMBPROD259	Operate granulating equipment	
PMBPROD261	Operate continuous vulcanising equipment	
PMBPROD262	Operate tyre curing equipment	
PMBPROD263	Operate retread curing equipment	
PMBPROD265	Operate portable vulcanising equipment	
PMBPROD266	Prepare tyre casings for retreading	
PMBPROD267	Operate steel cutting equipment	
PMBPROD268	Operate bead coiling equipment	
PMBPROD270	Operate injection blow moulding equipment	
PMBPROD280	Operate resin-glass depositor equipment	
PMBPROD281	Finish composite products	
PMBPROD282	Assemble mould	

PMBPROD283	Demould product	
PMBPROD284	Operate open flame moulding equipment	
PMBPROD285	Operate computer controlled equipment	
PMBPROD287	Weld plastics materials	
PMBPROD290	Operate filament winding equipment	
PMBPROD291	Operate resin infusion moulding equipment	
PMBPROD292	Operate pultrusion equipment	
PMBPROD293	Operate vacuum bagging equipment	
PMBPROD294	Operate resin transfer moulding equipment	
PMBPROD295	Operate composite sheeting equipment	
PMBPROD296	Operate centrifugal casting equipment	
PMBPROD297	Operate equipment using moulding compounds	
PMBPROD298	Operate equipment using pre-preg material	

A maximum of **two (2)** units of competency may be chosen from the units in Groups A and B of PMB30116 Certificate III in Polymer Processing (at least one of which must be from Group A).

Group B

Unit code	Unit title	Prerequisites
HLTAID003	Provide first aid	
LMTGN2008B	Coordinate work of team/section	
MEM13003B	Work safely with industrial chemicals	
MEM16006A	Organise and communicate information	
MEM16007A	Work with others in a manufacturing, engineering or related environment	
MEM16008A	Interact with computing technology	

MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
MSS402002	Sustain process improvements	
MSS402020	Apply quick changeover procedures	
MSS402021	Apply Just in Time procedures	
MSS402030	Apply cost factors to work practices	
MSS402040	Apply 5S procedures	
MSS402050	Monitor process capability	
MSS402051	Apply quality standards	
MSS402060	Use planning software systems in operations	
MSS402080	Undertake root cause analysis	
MSMWHS100	Follow WHS procedures	
MSMWHS110	Follow emergency response procedures	
MSMWHS205	Control minor incidents	
MSMWHS210	Undertake first response to non-fire incidents	
MSMWHS212	Undertake first response to fire incidents	
MSMWHS216	Operate breathing apparatus	
MSMWHS217	Gas test atmospheres	
MSMOPS100	Use equipment	
MSMOPS101	Make measurements	
MSMOPS102	Perform tasks to support production	
MSMPER200	Work in accordance with an issued permit	
MSMPER201	Monitor and control work permits	
MSMPER205	Enter confined space	*
MSMSUP100	Apply workplace context to own job	

MSMSUP101	Clean workplace or equipment	
MSMSUP102	Communicate in the workplace	
MSMSUP106	Work in a team	
MSMENV172	Identify and minimise environmental hazards	
MSMSUP200	Achieve work outcomes	
MSMSUP204	Pack products or materials	
MSMSUP205	Transfer loads	
MSMSUP230	Monitor process operations	
MSMSUP240	Undertake minor maintenance	
MSMSUP273	Handle goods	
MSMSUP280	Manage conflict at work	
MSMSUP291	Participate in continuous improvement	
MSMSUP292	Sample and test materials and product	
PMBHAN103	Shift materials safely by hand	
PMBHAN208	Store products	
PMBWASTE101	Collect waste for recycling or safe disposal	
RIIRIS201D	Conduct local risk control	
TLID2010	Operate a forklift	
Up to four (4) relevant units of competency may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available for inclusion at Certificates II or III.		

Qualification Mapping Information

Release 1. Supersedes and is equivalent to PMB20107 Certificate II in Polymer Processing.

Links

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