

# MSM30216 Certificate III in Surface Preparation and Coating Application

Release: 4

# MSM30216 Certificate III in Surface Preparation and Coating Application

### **Modification History**

Release 4. Modification - MSMWJ units added to Group D electives.

Release 3. Two low use units removed from elective bank as determined at December 2020 AISC meeting in response to Skills Ministers' objectives. Equivalent.

Release 2. Correction of typographical error in Group A Electives and inclusion missing text for Group E - Balance of units. Imported units updated to current versions. Equivalent.

Release 1. Supersedes and is equivalent to MSA30309 Certificate III in Surface Preparation and Coating Application. Units updated.

# **Qualification Description**

The MSM30216 Certificate III in Surface Preparation and Coating Application provides the trade-level competencies required to perform the wide range of surface preparation and protective coating application operations that occur across a range of heavy industry, ships and infrastructure.

The surfaces being prepared are typically metal (usually ferrous) and may be structural or have other mechanical requirements. The protective coatings may be liquid or solid. The applied coating may, or may not be the final coat and its purpose is protective, not decorative.

People with this qualification would be expected to work under routine supervision only, preparing surfaces and/or applying protective coatings in accordance with a provided technical specification. They would be expected to recognise situations where the intended approach was not appropriate/not working and take appropriate action to ensure the final result is satisfactory.

People with this qualification may be expected to undertake some combination of:

- abrasively blast clean surfaces to Australian Standard requirements and in accordance with the specification
- prepare surfaces for coating as required by the specification
- apply liquid protective surface coatings
- apply solid polymer surface coatings (this is usually a specialised area).

They may work in a manufacturer's factory or they may work as contractors on the site of the plant/ship/infrastructure.

This work may be undertaken:

- in a factory environment
- in an onsite, outdoors environment
- inside a vessel or other confined space
- outside a vessel or structure

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- at heights
- some combination of these.

# **Entry Requirements**

There are no entry requirements for this qualification.

# **Packaging Rules**

To be awarded the MSM30216 Certificate III in Surface Preparation and Coating Application competency must be achieved in **thirty-one** (31) units of competency:

- **eleven (11)** core units of competency
- twenty (20) elective units of competency, as specified below:
  - a minimum of three (3) units from Group A
  - a minimum of two (2) units from Group B
  - a minimum of three (3) units from Group C
  - a minimum of three (3) units from Group D
    - the balance of units, to a maximum of **nine** (9), may be selected in any combination from the remaining units in Groups A, B, C or D.

**Note**: A total of **five** (5) elective units of competency may be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified below. These comprise:

- a maximum of one surface preparation unit (Group A)
- a maximum of one coating application unit (Group B)
- a maximum of three other relevant elective units.

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

#### Core units

Unit code	Unit title
MEM12023A	Perform engineering measurements
MEM12024A	Perform computations
MEM14004A	Plan to undertake a routine task
MEM14005A	Plan a complete activity

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MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures
MEM16006A	Organise and communicate information
MEM16007A	Work with others in a manufacturing, engineering or related environment
MEM16008A	Interact with computing technology
MSMENV272	Participate in environmentally sustainable work practices
MSMWHS200	Work safely

#### **ELECTIVE UNITS**

### Group A - Surface Preparation

Unit code	Unit title	Prerequisites
MEM08002C	Pre-treat work for subsequent surface coating	MEM13003B
MEM08007B	Control surface finish production and finished product quality	
MEM08011B	Prepare surfaces using solvents and/or mechanical means	MEM13003B MEM18001C MEM18002B
MEM08012B	Prepare surfaces by abrasive blasting (basic)	MEM08016B MEM13003B
MEM08013B	Prepare surfaces by abrasive blasting (advanced)	MEM08012B MEM08016B MEM13003B
MEM08016B	Control blast coating by-products, materials and emissions	MEM13003B
PMBPROD248	Prepare surfaces for coating	

One (1) relevant technical surface preparation unit may be selected from this Training Package, other endorsed Training Packages and accredited courses where it is packaged in a

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Certificate III.

#### **Group B - Coating Application**

Unit code	Unit title	Prerequisites
MEM08014B	Apply protective coatings (basic)	MEM13003B
MEM08015B	Apply protective coatings (advanced)	MEM08014B MEM13003B
PMBPROD241	Lay up rubber lining or lag pulleys	
PMBPROD242	Bond polymers to surfaces	
PMBPROD265	Operate portable vulcanising equipment	
PMBPROD323	Produce powder coated products	
PMBPROD375	Vulcanise products using an autoclave	

One (1) relevant technical protective coating application unit may be selected from this Training Package, other endorsed Training Packages and accredited courses where it is packaged in a Certificate III.

#### **Group C - Other elective units**

Unit code	Unit title	Prerequisites
MEM11001C	Erect/dismantle scaffolding and equipment	MEM18001C
MEM11002C	Erect/dismantle complex scaffolding and equipment	MEM11001C MEM18001C
MEM11003B	Coordinate erection/dismantling of complex scaffolding/equipment	MEM11001C MEM11002C MEM18001C
MEM11004B	Undertake dogging	MEM18001C
MEM11010B	Operate mobile load shifting equipment	
MEM11011B	Undertake manual handling	

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MEM11021B	Perform advanced operation of load shifting equipment	MEM11010B
MEM11022B	Operate fixed/moveable load shifting equipment	
MEM13001B	Perform emergency first aid	
MEM13003B	Work safely with industrial chemicals and materials	
MSMWHS216	Operate breathing apparatus	
MSMWHS217	Gas test atmospheres	
MSMPER200	Work in accordance with an issued permit	
MSMPER202	Observe permit work	
MSMPER205	Enter confined space	MSMPER200
MSMPER300	Issue work permits	MSMWHS201
MSMWHS201	Conduct hazard analysis	

# **Group D - Other elective units**

Unit code	Unit title	Prerequisites
MEM07001B	Perform operational maintenance of machines/equipment	MEM18001C
MEM11012B	Purchase materials	
MEM11016B	Order materials	
MEM12001B	Use comparison and basic measuring devices	
MEM15003B	Use improvement processes in team activities	MEM16007A
MEM15004B	Perform inspection	
MEM15005B	Select and control inspection process and procedures	MEM15004B
MEM16002C	Conduct formal interviews and negotiations	

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MEM16005A	Operate as a team member to conduct manufacturing, engineering or related activities	
MEM16011A	Communicate with individuals and small groups	MEM16006A
MEM16013A	Operate in a self-directed team	MEM16007A
MEM17001B	Assist in the development and delivery of training in the workplace	
MEM17003A	Assist in the provision of on the job training	
MEM18001C	Use hand tools	
MEM18002B	Use power tools/hand held operations	
MSMOPS301	Treat corrosion	
MSMOPS363	Organise on-site work	
MSMSUP100	Apply workplace context to own job	
MSMSUP303	Identify equipment faults	
MSMSUP390	Use structured problem solving tools	
MSMWJ202	Use high pressure water jetting equipment	
MSMWJ304	Operate a high pressure water jetting system	
MSMWJ305	Operate a drain cleaning system	
MSMWJ306	Operate a vacuum loading system	
MSMWJ307	Operate a hydro excavation system	
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#### Group E - Balance of units

The balance of units, to a maximum of nine (9), may be chosen from any combination of:

- units from Groups A, B, C and D above, not already selected
- up to three (3) relevant units can be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are available for inclusion at Certificate III.

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# **Qualification Mapping Information**

Release 3. Two low use units removed from elective bank as determined at December 2020 AISC meeting in response to Skills Ministers' objectives. Equivalent.

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Release 1. Supersedes and is equivalent to MSA30309 Certificate III in Surface Preparation and Coating Application.

#### Links

Companion Volume implementation guides are found in VETNet - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027</a>

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