



Australian Government

AUMFTA002 Perform die coating

Release: 1

AUMFTA002 Perform die coating

Modification History

Release	Comment
Release 1	Unit updated to reflect the new standards for Training Packages Replaces AUMFTA3002 Conduct die coating

Application

This unit describes the performance outcomes required to coat dies for their later use in casting processes.

It applies to those in an automotive and related component manufacturing environment and involves the application of skills and knowledge at a specialist level.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Competency Field

Manufacturing - Passenger Vehicle

Unit Sector

Technical

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section
1. Plan and prepare	1.1 Job instructions and quality requirements are identified and confirmed with appropriate personnel 1.2 Tools and equipment required for the job are selected and checked for faults and correct operation 1.3 Materials required to complete the job are identified and prepared
2. Disassemble and inspect	2.1 Die is safely located in the coating area

Elements	Performance Criteria
dies	2.2 Die coating insulation materials are inspected for wear, and removed if required 2.3 Dies are inspected and analysed for defects, and identified defects are rectified according to workplace procedures 2.4 Dies are tested to ensure rectification has eliminated the fault, and adjustments are made if required
3. Coat and assemble dies	3.1 Die coating insulation material is selected and prepared according to workplace procedures 3.2 Die is cleaned in preparation for coating and heated according to workplace and equipment manufacturer recommendations and work health and safety (WHS) requirements 3.3 Die coating insulation material is applied to the die, and die is assembled and checked in preparation for pressing according to workplace and equipment manufacturer recommendations 3.4 Die is returned to production sequence
4. Complete work processes	4.1 Work area is cleaned, and materials disposed of or recycled according to workplace procedures 4.2 Tools and equipment are cleaned, checked, maintained and stored according to workplace procedures 4.3 Documentation is completed according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skills	Description
Reading skills to:	- interpret WHS requirements - interpret workplace procedures, job instructions and quality requirements - interpret manufacturer recommendations and specifications.
Writing skills to:	recode die coating intervals and work sheets.
Oral communication skills to:	confirm job instructions and quality requirements with appropriate personnel.
Numeracy skills to:	calculate surface area, required materials, and volume of die coating.

Problem-solving skills to:	determine required tools and equipment for the job and assess defects for solutions.
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Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Workplace procedures</i> must include:	- equipment use, maintenance and storage - recording and reporting - WHS requirements relating to die coating - workplace quality and continuous improvement programs.
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Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bd587669-08b3-4cd5-85f0-f9fa0c6304c1>

Assessment Requirements for AUMFTA002 Perform die coating

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Performance Evidence

Before competency can be determined, individuals must have competently coated dies on a minimum of five occasions.

Individuals must demonstrate they can:

- interpret workplace quality requirements
- clean, inspect, assemble and disassemble dies
- select and perform minor rectification to dies
- manually handle dies
- apply die coating according to work health and safety (WHS) requirements and workplace procedures.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- WHS requirements when applying die coating
- workplace procedures to apply coating to production dies
- die coating application methods and processes
- principles of die casting:
 - purpose of dies
 - methods of producing die castings
 - die coat functions
- procedures to inspect die castings
- methods of die disassembling and re-assembling
- defects in production dies and their causes
- damage that can be caused to castings through inappropriate handling and storage
- minor rectification methods of die faults:
 - methods of testing die re-work
 - die coat selection, cleaning and heating methods
- equipment used in die coating.

Assessment Conditions

Assessors must satisfy SNR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the dies that they have coated, e.g. work sheets.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive manufacturing workplace or simulated workplace
- tools, equipment, material and machinery required to coat dies
- a range of dies relevant to motor vehicle or component manufacturing
- materials to test die coating
- workplace procedures relating to applying coating to production dies
- work sheets and job specifications relating to applying coating to production dies.

Links

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