



Australian Government

Assessment Requirements for AUMAMA003 Prepare new product designs

Release: 1

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Modification History

Release	Comment
Release 1	Unit updated to reflect the new standards for Training Packages Replaces AUMAMA4003 Prepare new product designs

Performance Evidence

Before competency can be determined, individuals must have competently prepared a new product design on a minimum of three occasions.

Individuals must demonstrate they can:

- create initial design concepts
- modify initial design concepts to reflect feedback
- produce design drawings of components and sub-assemblies
- identify and evaluate the manufacturing method of the new product and perform trials
- modify the product design as necessary and conduct further tests
- document the design process of the new product.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- principles of design as they relate to product design
- methods of establishing new design requirements, including determining constraints of design concepts
- methods of creating design concepts, including producing design sketches
- methods of quantifying design concepts, including calculating dimensions
- selecting and justifying the selection of:
 - type of materials and material specifications
 - appropriate processes for a range of product and market applications
- calculating product cost estimates, process time and cost benefit of new product to organisation
- work health and safety (WHS) requirements and workplace procedures relating to preparing new product designs
- design procedures and prototyping activities relating to preparing new product designs
- material and product testing procedures

- design process documentation, records and reports relating to new product designs.

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 product designs that they have prepared.

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
- drawing equipment
- workplace procedures relating to the preparation of new product designs
- tools, equipment and machinery required for the production process of motor vehicles and components
- sources of information from which to determine customer needs, competitor products, workplace objectives, fashion trends, safety needs and relevant legislative requirements for new product design
- workplace documentation relating to preparing new product designs.

Links

Companion Volume implementation guides are found in VETNet -

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

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