



Australian Government

Department of Education, Employment and Workplace Relations

AUMFQM3003 Apply visual factory principles and practices to an automotive manufacturing environment

Release: 1

AUMFQM3003 Apply visual factory principles and practices to an automotive manufacturing environment

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the application of the skills and knowledge required to employ visual factory principles and practices to an automotive manufacturing environment. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	This unit applies to the automotive and related component manufacturing environment and involves application of skills and knowledge at a specialist level. These skills and knowledge are to be used within the scope of the person's job and authority.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains Employability Skills.
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Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<p>1. Plan application of visual factory principles and practices</p>	<p>1.1. Applicable <i>legislative, OHS, and organisational</i> requirements relevant to the use of <i>applying visual factory principles and practices</i> are verified and complied with throughout the work activity 1.2. <i>Instructions</i>, plans and/or workplace check sheets are read and interpreted to identify processes and materials to complete work tasks 1.3. Principal safety concerns in the work area are identified 1.4. Principal business processes in the work area, including <i>Kaizen, KanBan and Lean Manufacturing</i> systems are identified</p>
<p>2. Apply Five S principles in identifying opportunities for labelling and signage</p>	<p>2.1. <i>Five S</i> activities in the work place are identified 2.2. Understandings and responsibilities associated with Five S in the work group are confirmed 2.3. Five S audits in the work place are applied</p>
<p>3. Monitor labelling and signage associated with Visual Factory</p>	<p>3.1. Existing labelling and signage methods are monitored and inadequacies reported 3.2. New labelling and signage proposed as required 3.3. Suitability of labelling and signage confirmed</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills

- speak clearly and directly
- apply teamwork to a range of situations
- solve problems particularly in teams paying attention to performance indicators to reflect changed circumstances
- show initiative in adapting to changing work conditions or contexts particularly when working across a variety of work areas
- access, interpret and apply information on relevant organisation policies, procedures and instructions
- manage time when planning, preparing and organising work priorities
- take responsibility for organising own work priorities.

Required knowledge

- relevant Occupational Health and Safety and Environmental legislation, regulations, standards and codes of practice and organisation policies and procedures needed to carry out work in a manner which ensures the safety of people, equipment and the environment.
- organisational supply/replenishment systems and processes for materials, equipment and tools
- quality systems and performance measures
- established communication channels and protocols
- problem identification and resolution
- procedures for the recording, reporting and maintenance of workplace records and information.

Evidence Guide

EVIDENCE GUIDE	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • compliance with relevant legislation, regulations, standards, codes of practice and established safe practices and organisation policies and procedures for applying Visual Factory principles and practices • working and communicating effectively and positively with others involved in the work • applying, within authority, the requirements of the job or work role in relation to: <ul style="list-style-type: none"> • use of signage and labelling in the workplace • feedback is provided to the work group on the effectiveness of the activity • achieving work quality goals • completing work area housekeeping requirements • modify activities to cater for variations in organisation context and environment.
Context of and specific resources for assessment	<ul style="list-style-type: none"> • assessment of the competency should take place in a safe working environment in a passenger motor vehicle manufacturing plant or simulated environment using tools/equipment/machinery required for the production process without undue disruption to the production process • assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints.
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • assessment must take place in accordance with the endorsed <i>Assessment Guidelines for the Automotive Industry</i> • assessment methods must confirm consistency and accuracy of performance (over time and in a range of organisation relevant contexts) together with application of underpinning knowledge • assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application • assessment may be applied under project related conditions

EVIDENCE GUIDE	
	(real or simulated) and require evidence of process <ul style="list-style-type: none">• assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, organisation and job role is recommended, for example:

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

<p><i>Legislative requirements</i> may include:</p>	<ul style="list-style-type: none"> • applicable legislation from all levels of government that affect organisational operations. Requirements may include award and enterprise agreements, industrial relations, employee relations, Australian Standards, confidentiality and privacy, the environment, equal opportunity, anti-discrimination, relevant industry codes of practice and duty of care.
<p><i>OHS requirements</i> may include:</p>	<ul style="list-style-type: none"> • Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures. Requirements may include the use of personal protective equipment and clothing, rescue services, fire fighting organization and equipment, first aid equipment, hazard and risk control and elimination, systems covering of hazardous materials and substances and manual handling including lifting and carrying.
<p><i>Organisational requirements</i> may include:</p>	<ul style="list-style-type: none"> • legal • organisational and site guidelines • policies and procedures relating to own role and responsibility • quality assurance • procedural manuals • quality and continuous improvement processes and standards • OHS • emergency and evacuation • ethical standards • recording and reporting • access and equity principles and practices • equipment use • maintenance and storage • environmental management (waste disposal, recycling and re-use guidelines).
<p><i>Applying visual factory principles and practices</i> may include:</p>	<ul style="list-style-type: none"> • improving productivity, safety, quality, on-time delivery, profits and employee moral by implementing "visual controls". • making working areas more user friendly by answering questions, identifying equipment, materials and locations, describing actions and procedures, and providing safety warnings and precaution information.

RANGE STATEMENT	
	<ul style="list-style-type: none"> • helping employees avoid wasting time by giving them the information they need, where and when they need it • posting information about the job to be done, the work area (environment), the equipment and materials to be used, safety and job performance • safety signs, signage on electrical equipment, on valves and equipment, piping, process control, tank and vessels, and comprehensive sign systems listing/simplifying more complex processes.
Instructions may include:	<ul style="list-style-type: none"> • workplace procedures relating to the use and operation of tools and equipment • production planning figures • workplace instructions, including job sheets, plans, specifications, drawings and designs • workplace procedures relating to reporting and communications • manufacturers' instructions for the use of equipment and materials.
Kaizen may include:	<ul style="list-style-type: none"> • a system of continuous improvement, usually incrementally and it assumes that every system/procedure/tool can be improved upon.
KanBan may include:	<ul style="list-style-type: none"> • a signalling inventory management system involving 'pull' demand for stock with the supply system responding to a demand for stores., also known as a Just-In-Time (JIT) system.
Lean manufacturing may include:	<ul style="list-style-type: none"> • a management philosophy focusing on the reduction of the seven wastes of: <ul style="list-style-type: none"> • over-production • waiting time • transportation • processing inventory • motion • scrap in manufactured products.
Five S may include:	<ul style="list-style-type: none"> • a program focussing on having visual order, organisation, cleanliness and standardisation. The results that are expected are improved profitability, efficiency, service and safety. The factors of the Five S are: <ul style="list-style-type: none"> • sort: is the sorting or 'clean up' of the work area, keeping only what is necessary in terms of materials, tools, equipment and supplies and those that are not frequently used being moved to a separate, common storage area and items not used being discarded. Sorting is the first step in

RANGE STATEMENT

	<p>keeping the work area tidy</p> <ul style="list-style-type: none"> • systematise: is to 'organise'. Arrange and identify everything in a work area for the most efficient and effective retrieval and return to its proper place. Commonly used tools should be readily available. Storage areas, cabinets and shelves should be properly labelled. Clean and paint floors to make it easier to spot dirt, waste materials and dropped parts and tools. Outlined areas on the floor to identify work areas, movement lanes, storage areas, finished product areas, etc. Shadows of tool boards, making it easier to quickly see where each tool belongs. • sweep: is regular cleaning and is associated with inspecting while cleaning the machines, tools, equipment and supplies you work with. • standardisation: is the 'simplification' of work practices. This involves the use of labels and signs, posters and banners to make people aware of, and remind them about the standards. • self-discipline: is to encourage and reinforce self discipline through having a formal system of monitoring the results of the Five S program.
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Unit Sector(s)

Unit sector	Quality - Manufacture
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Competency field

Competency field	Manufacturing - Passenger Motor Vehicle
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Co-requisite units

Not applicable.