

## MCMT240A                      **Apply 5S procedures in a manufacturing environment**

**Unit descriptor**                      This unit covers the knowledge and skills needed for an employee to apply **5S** procedures (a structured approach to housekeeping) to their own job and work area.

**Competency field**                      MCM Tools

**Application of the competency**                      In a typical scenario, an organisation has decided to embark on a competitive manufacturing strategy and as part of this has adopted the philosophy of 5S as one of the tools to move down this path. The employee needs to apply 5S to their job and work area and maintain the housekeeping and other standards set by 5S.

### **ELEMENT    PERFORMANCE CRITERIA**

Elements describe the essential outcomes of a unit of competency.                      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.

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|---|---|
| 1 <b><i>Sort</i></b> needed from unneeded         | <ul style="list-style-type: none"> <li>1.1    Identify all <i>items</i> in the work area</li> <li>1.2    Distinguish between essential and non-essential items</li> <li>1.3    Place any non-essential item in a appropriate place, not in the work area</li> <li>1.4    Regularly check that only essential items are in the work area</li> </ul>            |
| 2 <b><i>Set</i></b> the workplace <i>in order</i> | <ul style="list-style-type: none"> <li>2.1    Identify the best location for each essential item</li> <li>2.2    Place each essential item in its assigned location</li> <li>2.3    After use immediately return each essential item to its assigned location</li> <li>2.4    Regularly check that each essential item is in its assigned location</li> </ul> |
| 3 <b><i>Shine</i></b> the work area               | <ul style="list-style-type: none"> <li>3.1    Keep the work area clean and tidy at all times</li> <li>3.2    Conduct regular housekeeping activities during shift</li> <li>3.3    Ensure the work area is neat, clean and tidy at both beginning and end of shift</li> </ul>  |
| 4 <b><i>Standardise</i></b> activities            | <ul style="list-style-type: none"> <li>4.1    Follow <i>procedures</i></li> <li>4.2    Follow checklists for activities where available</li> <li>4.3    Keep the work area to specified standard</li> </ul>   |

**ELEMENT****PERFORMANCE CRITERIA**

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|---|------------------------------|-----|--|
| 5 | <i>Sustain</i> the 5S system | 5.1 | Clean up after completion of job and before commencing next job or end of shift                        |
|   |                              | 5.2 | Identify situations where compliance to standards is unlikely and take actions specified in procedures |
|   |                              | 5.3 | Inspect work area regularly for compliance to specified standard                                       |
|   |                              | 5.4 | Recommend improvements to lift the level of compliance in the workplace                                |

**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.

***5S***

5S is a system of work organisation originally developed in Japan based around: A close translation of the five stages in the housekeeping approach is:

- Sort
- Set in order
- Shine
- Standardise
- Sustain

***Sort***

Sort involves keeping only what is absolutely necessary for the production process on the production floor. As a first step, clear the work area of all non-essential equipment and materials. Remove anything either not required to produce the product or adjust the machine during the process. This helps to get rid of a 'just in case' mentality.

***Items in work area***

Items in work area include tools, jigs/fixtures, materials/components, plant and equipment, manuals, personal items (such as bags, lunch boxes, posters), safety equipment and personal protective equipment, and any other item which happens to be in the work area.

***Set in order***

After removing unnecessary materials, the remaining materials must be those that are required immediately for either the machine or the job at hand. All of these materials/change/parts etc must have an assigned location on the production floor. Locations should be clearly marked and labelled to show what belongs where.

<b><i>Shine</i></b>	The work area should be kept clean at all times. Cleaning must be carried out to a regular daily schedule against allowed time and, on most occasions, at the end of a job.
<b><i>Standardise</i></b>	Once 5S is established, standardising activities help maintain the order and the housekeeping standards. Standardising may use procedures and checklists developed from a procedure.
<b><i>Sustain</i></b>	<p>Sustain means making sure that daily activities are completed every day regardless of circumstance. A job should always be cleaned up once finished regardless of the urgency of the next job. Informal inspections should be done often, at least weekly.</p> <p>Formal inspections of each area should be carried out at least monthly. Specific actions should be followed up. This will generate continuous improvement.</p>
<b><i>Procedures</i></b>	<p>Procedures include all work instructions, standard operating procedures, formulas/recipes, batch sheets, temporary instructions and similar instructions provided for the operation of the plant. They may be written, verbal, computer based or in some other form.</p> <p>For the purposes of CMI, 'procedures' also includes good operating practice as may be defined by industry codes of practice (e.g. Good Manufacturing Practice (GMP), Responsible Care) and government regulations.</p>

**NOTE:**

All actions are subject to occupational health and safety (OHS) requirements and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and OHS requirements, the OHS requirements take precedence.

## **EVIDENCE GUIDE**

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.

### **Overview of assessment requirements**

There should be evidence that the employee is routinely applying 5S principles in their routine work and that they are aware of why 5S is important.

### **Specific evidence requirements**

<b>What critical aspects of evidence is required to demonstrate competency in this unit?</b>	Evidence of routine practice of 5S as part of their job.
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<b>In what context should assessment occur?</b>	This unit needs to be assessed in a workplace practising, or beginning to implement, 5S.
<b>Are there any other units which could or should be assessed with this unit or which relate directly to this unit?</b>	<p>This unit could be assessed concurrently with a unit on continuous improvement, or in conjunction with a technical unit related to the process.</p> <p>This unit differs from <i>MCMT440A Lead 5S in a manufacturing environment</i> which applies to those who also need to help others apply 5S.</p>
<b>What method of assessment should apply?</b>	<p>Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the elements, performance criteria, skills and knowledge. A holistic approach should be taken to the assessment.</p> <p>Assessors should gather sufficient, fair, valid, reliable, authentic and current evidence from a range of sources. Sources of evidence may include direct observation, reports from supervisors, peers and colleagues, project work, samples, organisation records and questioning. Assessment should not require language, literacy or numeracy skills beyond those required for the unit.</p> <p>The assessee will have access to all techniques, procedures, information, resources and aids which would normally be available in the workplace.</p> <p>The method of assessment should be discussed and agreed with the assessee prior to the commencement of the assessment.</p>
<b>What evidence is required for demonstration of consistent performance?</b>	There needs to be evidence that this is a consistent part of their routine work life, and as such, evidence is needed over an extended period.
<b>What skills and knowledge are needed to achieve the performance criteria?</b>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• communication</li> <li>• planning</li> <li>• organising</li> <li>• prioritising</li> <li>• reading and interpretation</li> <li>• recording</li> <li>• problem solving.</li> </ul>

### **Knowledge**

- meaning and application of 5S to their job
- principles of efficient workplace organisation
- purposes of 5S
- procedures relevant to job
- methods of making/recommending improvements.

### **What are the specific resource requirements for this unit?**

Access to a plant implementing/practising 5S. No other specific resources re required.