



Australian Government

Department of Education, Employment and Workplace Relations

ICPSU486C Mistake proof a production process

Revision Number: 1

ICPSU486C Mistake proof a production process

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to focus on preventing errors/backsliding to a previous behaviour.
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Application of the Unit

Application of the unit	<p>This unit may be undertaken by any person although typically it would be held by a team leader.</p> <p>In a typical scenario a team leader, or a work team, needs to analyse the process they are responsible for and determine methods of ensuring it only produces product that meets the job's quality standards. This unit is from the Competitive Manufacturing Initiative group of competency standards.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

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

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

ELEMENT	PERFORMANCE CRITERIA
1. Analyse the process	1.1. Identify sources of variability/non-conformance in the process 1.2. Identify critical control points in the process 1.3. Analyse causes of variability/non-conformance
2. Develop preventive techniques/systems	2.1. Liaise with team members and other people to develop mistake proof method of performing operation 2.2. Test and validate <i>mistake proofing</i>
3. Implement permanent fix	3.1. Liaise with relevant people to have systems/ <i>procedures</i> changed to implement solution 3.2. Liaise with relevant people to implement the solution 3.3. Liaise with relevant people to ensure the workforce has an appropriate skills set 3.4. Follow through to ensure implementation occurs
4. Monitor implementation	4.1. Critically observe the implementation 4.2. Compare the results of the implementation against the expected outcomes 4.3. Modify solution to improve outcomes 4.4. Ensure procedures reflect change 4.5. Ensure training and assessment reflect change 4.6. Audit change at agreed period/cycle 4.7. Take action on any observed deviation
5. Seek improvements	5.1. Observe changes against enterprise expectations for production 5.2. Analyse process against enterprise expectations for production

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- communication of ideas and information by liaising with relevant people to have systems/procedures changed to implement solution
- collecting, analysing and organising information by liaising with team members and other people to develop mistake proof method of performing operation
- planning and organising activities by implementing a permanent fix
- teamwork when liaising with team members and other people to develop mistake proof method of performing operation
- mathematical ideas and techniques by implementing a permanent fix
- problem-solving skills by modifying solution to improve outcomes
- use of technology by seeking improvements

Required knowledge

- communication ability to discuss items with both operators and technical support personnel
- problem solving
- analysis
- teamwork
- design conceptualisation
- understanding of their process
- factors in the process which may cause variability
- methods of controlling the variability in the process
- mistake proofing methods relevant to the process/product

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, range statement and the Assessment Guidelines for the Training Package.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> the competent team leader will be able to analyse their process and implement systems to ensure the process is mistake proof and the operators work in a predictable way with little or no chance of mistake. Evidence of actions taken to mistake proof the process should be available one complex project on standardisation of a process or several simpler projects will be needed to gain sufficient evidence.
Context of and specific resources for assessment	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> assessment needs to occur in a workplace implementing competitive manufacturing or by using a suitable project access to an organisation using a competitive manufacturing approach.
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"> direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> ICPSU684C Determine and improve process capability.

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, if used in the performance criteria, is detailed below. 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) may also be included.

<p><i>Mistake proofing</i> may include:</p>	<ul style="list-style-type: none"> • sometimes known as baka-yoke/poka-yoke - a manufacturing technique of preventing mistakes by designing the manufacturing process, equipment, tools and components/subassemblies so that an operation literally cannot be performed incorrectly; an attempt to perform incorrectly, as well as being prevented, is usually met with a warning signal of some sort.
<p><i>Procedures</i> may include:</p>	<ul style="list-style-type: none"> • procedures includes all work instructions, standard operating procedures, formulas/recipes, batch sheets, temporary instructions and similar instructions provided for the smooth running of the plant. They may be written, oral, computer-based or in some other form • for the purposes of this Training Package, procedures also includes good operating practice as may be defined by industry codes of practice (eg Good Manufacturing Practice (GMP), Responsible Care) and government regulations.

Unit Sector(s)

<p>Unit sector</p>	
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Competency field

Competency field	Support
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Co-requisite units

Co-requisite units		