



Australian Government

MSS403051 Mistake proof an operational process

Release: 1

MSS403051 Mistake proof an operational process

Modification History

Release 1. Supersedes and is equivalent to MSS403051A Mistake proof an operational process

Application

This unit of competency applies to an individual who needs to analyse a process that a team is responsible for and determine methods of mistake proofing it (e.g. ensuring it only produces product within an acceptable range or error-free transport and storage). The person will typically be a technical expert, team leader or be in a role where they have sufficient technical understanding of processes in their own work and that of others to be able to mistake proof the production process in their area. After improvement activities have been undertaken these improvements need to be sustained.

This unit requires the application of skills associated with information gathering and analysis. Initiative, enterprise and problem solving are also required to identify mistakes and determine strategies for eliminating them. This unit also requires communication and teamwork skills to ensure mistake proofing strategies are implemented and self-management and learning skills to continually reflect on and integrate feedback about the effectiveness of strategies.

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

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

- | | | | |
|---|------------------------|-----|---|
| 1 | Analyse process | 1.1 | Identify sources of variability/non-conformance in the process. |
| | | 1.2 | Identify critical control points in process. |

- 1.3 Analyse causes of variability/non-conformance.
- 2 **Develop preventative techniques/systems**
 - 2.1 Liaise with team members and other people to develop mistake proof options for performing operation.
 - 2.2 Test and validate mistake proofing options.
- 3 **Implement permanent fix**
 - 3.1 Liaise with relevant people to have systems/procedures changed to implement solution.
 - 3.2 Liaise with relevant people to implement the solution.
 - 3.3 Liaise with relevant people to ensure self and others in the team or work area have 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/assessment reflects change.
 - 4.6 Audit change at agreed period/cycle.
 - 4.7 Take action on any observed deviation.
- 5 **Seek improvements**
 - 5.1 Observe changes.
 - 5.2 Analyse process again, if required, to ensure improvements are sustained.

Foundation Skills

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

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different 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.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Mistake proofing (baka-yoke or poka-yoke) includes one or more of:

- eliminating the possibility of an error occurring
- reducing the occurrence of errors and/or to minimise their impact
- eliminating the possibility of the error via changes to the process
- preventing the error from occurring via physical or virtual barriers
- reducing likelihood of the error by encouraging correct action (e.g. through warning systems)
- mitigating the impact of the error if it does occur.

Prioritising options for mistake proofing includes one or more of:

- success rate in eliminating errors
- feasibility
- skills required by employees
- cost
- capacity to reduce waste.

Procedures (written, verbal, visual, computer based, etc.) include one or any combination of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403051A Mistake proof an operational process

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>