



**Australian Government**

# **MSS403032 Analyse manual handling processes**

**Release: 1**

# MSS403032 Analyse manual handling processes

## Modification History

Release 1. Supersedes and is equivalent to MSS403032A Analyse manual handling processes

## Application

This unit of competency covers the skills and knowledge required to analyse manual handling in terms of its efficiency and safety.

This unit applies to an individual who is required to examine the manual handling component of a job and improve it in terms of safety, effort required and efficiency. This may be conducted for a job performed by others or it may be for the person's own job.

This unit primarily requires the application of skills associated with problem solving, initiative and enterprise to identify safe and efficient manual handling, and planning and organising to ensure processes are implemented. This unit also requires communication with, and involvement of, others to ensure they understand the approach and to facilitate training.

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 | <b>Assess manual handling risks</b> | 1.1 | Identify manual handling hazards in work area.       |
|   |                                     | 1.2 | Assess risks arising from manual handling hazards.   |
| 2 | <b>Analyse physical</b>             | 2.1 | Determine basic manual handling requirements of job. |

|   |                                                            |     |                                                                                                                            |
|---|------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------|
|   | <b>effort requirements of job</b>                          | 2.2 | Analyse requirements in terms of components, such as lift, move, place and hold.                                           |
|   |                                                            | 2.3 | Analyse items to be handled in terms such as weight, size, shape or other hazards.                                         |
| 3 | <b>Determine time/effort components of physical effort</b> | 3.1 | Break required movement pattern down into movement components.                                                             |
|   |                                                            | 3.2 | Determine time and effort requirements for movements.                                                                      |
|   |                                                            | 3.3 | Develop alternative movement patterns.                                                                                     |
|   |                                                            | 3.4 | Determine time and effort requirements for alternative movements.                                                          |
|   |                                                            | 3.5 | Determine handling aids required to assist movement.                                                                       |
|   |                                                            | 3.6 | Determine preferred movement pattern.                                                                                      |
| 4 | <b>Analyse the ergonomics of physical effort</b>           | 4.1 | Analyse the ergonomics of the preferred movement pattern.                                                                  |
|   |                                                            | 4.2 | Develop substitute movements for any movement which is not ergonomically sound.                                            |
|   |                                                            | 4.3 | Determine handling aids required to improve ergonomics of required movements.                                              |
| 5 | <b>Optimise application of physical effort</b>             | 5.1 | Select movement patterns which are ergonomically sound and time and effort efficient.                                      |
|   |                                                            | 5.2 | Ensure all relevant people are trained to use these methods.                                                               |
|   |                                                            | 5.3 | Ensure procedures and practices reflect the optimum methods.                                                               |
|   |                                                            | 5.4 | Communicate with team members and involve them in development of alternatives to ensure awareness and facilitate learning. |

## 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.

- Procedures (written, verbal, visual, computer based, etc.) include one or more 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.

- Manual handling hazards include one or more of**
- loads that pose a risk of injury
  - ergonomically unsound movements
  - hazard requirements as defined by relevant work health and safety (WHS) Acts and regulations, industry standards and best practice.
- Ergonomically unsound movements include one or more of**
- awkward and repetitive movements
  - carrying, pushing, pulling or lifting of heavy loads
  - carrying or movement of hard, sharp, slippery or other difficult to grasp loads.
- Ergonomically sound movements include one or more of**
- keeping loads close to the body and near the person's centre of gravity
  - using diagonal foot positions for lifting
  - moving loads at waist height rather than directly from the floor.

## Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403032A Analyse manual handling processes

## Links

Companion Volume implementation guides are found in VETNet -

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

# Assessment Requirements for MSS403032 Analyse manual handling processes

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## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for at least (1) one job/process, to:

- analyse manual handling requirements and risks
- distinguish between ergonomically sound and unsound movement
- analyse manual handling movements and risks for an individual
- relate manual handling requirements to job efficiency.

## Knowledge Evidence

- Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:
- principles of ergonomics/safe movement
- principles of work analysis
- relevant work health and safety (WHS) Acts and regulations as they apply to manual handling
- principles of job and work method design as applied to efficient and safe movement
- aids that can assist with or substitute for manual handling.

## Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
  - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
  - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
  - must include analysing manual handling processes in own workplace
  - will typically include the use of appropriate manual handling guides, tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.

- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
  - relevant VET or other qualification/Statement of Attainment AND/OR
  - relevant workplace experience
- Currency can be demonstrated through:
  - performing the competency being assessed as part of current employment OR
  - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

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