



**Australian Government**

# **MSS403024 Work within a constrained process**

**Release: 1**

## MSS403024 Work within a constrained process

### Modification History

Release 1. Supersedes and is equivalent to MSS403024A Work within a constrained process

### Application

This unit of competency covers the skills and knowledge required to apply the theory of constraints to a process which has a constraint.

This unit applies to individuals who, as part of their work, are able to apply the theory of constraints to improve the operability of a constrained process (a process with at least one constraint) where it occurs in their team or work area or as part of their responsibilities. This unit identifies and works within the imposed constraint. This process may be colloquially known as ‘drum-buffer-rope’ approach. The unit will normally be applied as part of an organisation’s improvement strategy and in conjunction with other competitive systems and practices units.

The person will typically be a technician, team leader or other person who works with others in the bringing of change to an organisation as part of a formal team or otherwise. The unit includes liaison and communication with others, as required.

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.

- |  |   |
|--|---|
| <b>1 Identify the system constraint (bottleneck)</b> | <b>1.1</b> Identify desired output from process/system.         |
|  | <b>1.2</b> Determine throughput of process/system steps.        |
|  | <b>1.3</b> Identify capacity constrained resource (bottleneck). |

- |   |  |     |   |
|---|--|-----|---|
|   |  | 1.4 | Confirm maximum/optimum throughput for this capacity constrained resource.        |
| 2 | <b>Manage capacity constrained resource (drum)</b>               | 2.1 | Determine required time buffers for capacity constrained resource.                |
|   |  | 2.2 | Translate time buffer into physical buffers, as appropriate.                      |
|   |  | 2.3 | Establish required buffers.   |
|   |  | 2.4 | Examine capacity constrained resource to ensure optimum use of capacity.          |
| 3 | <b>Determine schedule based on capacity constrained resource</b> | 3.1 | Implement supply schedule appropriate for capacity constrained resource.          |
|   |  | 3.2 | Determine delivery schedule based on capacity of capacity constrained resource.   |
|   |  | 3.3 | Compare delivery schedule with externally required delivery rate and take action. |
| 4 | <b>Examine operation of system/process</b>                       | 4.1 | Determine throughput of process/system steps.                                     |
|   |  | 4.2 | Identify any additional/new capacity constrained resource.                        |
|   |  | 4.3 | Take action.  |

## 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.

## Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403024A Work within a constrained process

## Links

Companion Volume implementation guides are found in VETNet -

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