



Australian Government

MSMOPS244 Lay out and cut materials

Release: 1

MSMOPS244 Lay out and cut materials

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS244A Layout and cut materials

Application

This unit of competency covers the skills and knowledge required to cut materials to shape. It applies to materials used in plastics fabrication, rubber and other manufacturing industries.

This unit of competency applies to an operator who is involved in the fabrication of materials which first need to be cut into specified shapes. The operator will be required to lay out and cut materials to meet quality standards and workplace requirements and resolve routine problems according to procedures.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members.

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

Pre-requisite Unit

Nil

Competency Field

Operations

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

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

1	Check work requirements	1.1	Identify work requirements
		1.2	Check product, materials and equipment meet requirements for job
		1.3	Interpret plans, patterns, designs or specifications
		1.4	Recognise requirements which may not be in accordance with usual practice

- 1.5 Ask questions of appropriate person to confirm unusual practice
 - 1.6 Ensure housekeeping is to requirements
 - 1.7 Identify and control hazards
 - 1.8 Complete logs and records in accordance with procedures
- 2 Conduct pre-start checks as required
 - 2.1 Set up tools, jigs, fixtures and equipment ready for production
 - 2.2 Collect materials, patterns and consumables required
 - 2.3 Identify non-conformances and report as required
- 3 Lay out and cut materials to shape in accordance with procedures
 - 3.1 Develop 3-D or complex shapes into 2-D patterns
 - 3.2 Place material ready to be cut and apply pattern
 - 3.3 Allow for grain or other directionality in material to suit product
 - 3.4 Cut material to pattern, marking points for further processes
 - 3.5 Collect material which is able to be recycled or reused, separate and dispose of waste and scrap
- 4 Resolve routine problems
 - 4.1 Recognise problems that occur
 - 4.2 Resolve routine problems
 - 4.3 Take appropriate action on other problems
 - 4.4 Complete required records in accordance with procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills 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.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Work requirements

Work requirements will be determined from one or more of the following:

- job/shop orders
- plans/specifications
- procedures
- directions from authorised persons
- meetings (e.g. toolbox meeting)
- any similar instructions provided for the smooth running of the plant

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Hazards

Hazards include one or more of the following:

- equipment failures
- industrial (machinery, equipment and product)
- equipment or product mass
- fire
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- other hazards that might arise

Routine problems

Routine problems must be resolved by applying known solutions.

Routine problems are predictable and include one or more of:

- pattern incorrect
- marking errors
- wear and breakage
- loss of power or drives
- controller sequence, timer issues
- sequencing problems

Known solutions are drawn from one or more of:

- procedures
- training
- remembered experience

Non-routine problems must be reported according to according to relevant procedures

Tools and equipment

Tools and equipment include one or more of the following:

- guillotines
- power saws
- jig saws
- band saws
- thermal cutting devices
- hand tools
- relevant personal protective equipment (PPE)

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMOPS244A Layout and cut materials

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>