



Australian Government

Department of Education, Employment and Workplace Relations

FPITMM4202B Diagnose and calculate production costs

Release: 1

FPITMM4202B Diagnose and calculate production costs

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to estimate materials, labour and time requirements and establish costs for the provision of products, including all overheads

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

This unit replaces FPITMM4202A Diagnose and calculate production costs

Application of the Unit

Application of the unit

This unit involves the diagnosis and calculation of production costs in a forest products factory setting

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units

Employability Skills Information

Employability skills This unit contains employability skills

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.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Gather and diagnose information	1.1. Applicable Occupational Health and Safety (OHS), environmental, legislative and organisational requirements relevant to diagnosing and calculating production costs are identified and followed 1.2. Details of the particular product and competitor's products are obtained 1.3. Details of the proposed production operation are obtained and analysed 1.4. Labour unit cost projections are obtained and agreed 1.5. Logistic support contracts, supply agreements or equivalent are obtained and analysed 1.6. Details of proposed warehousing, physical distribution systems and related cost factors are obtained 1.7. Communication with others is established and maintained in line with OHS requirements
2. Estimate materials and labour	2.1. Types and quantities of material required for production are estimated and recorded 2.2. Time requirements for production activities and other lead times are estimated 2.3. Labour requirements for direct production and handling operations are estimated and recorded
3. Calculate costs and overheads	3.1. Components contributing to overhead costs are determined 3.2. Overhead costs to be attributed to work in line with commercial and organisational procedures are determined 3.3. Total materials and labour costs are calculated in line with organisational procedures 3.4. Total production cost is calculated, including overheads and mark-up percentages 3.5. Final cost to customer is calculated in conjunction with marketing and sales personnel 3.6. Cost calculation processes and problems are recorded and reported to appropriate personnel
4. Check and document details	4.1. Details of costs and charges are documented in line with organisational practice 4.2. Costs, calculations or other details are checked by other organisational personnel 4.3. Details are documented for future reference in line

ELEMENT**PERFORMANCE CRITERIA**

with organisational practice

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit

Required skills

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment, safely diagnose and calculate production costs
- Communication skills and interpersonal techniques sufficient to interact appropriately with colleagues and others in the workplace
- Literacy skills sufficient to accurately record and report workplace information, and maintain documentation
- Numeracy skills sufficient to estimate and calculate costs for materials, labour and overheads
- Problem solving skills sufficient to identify problems and equipment faults and demonstrate appropriate response procedures

Required knowledge

- Applicable Commonwealth, State or Territory legislation, regulations, standards and codes of practice relevant to the full range of processes for diagnosing and calculating production costs
- Environmental protection requirements, including the safe disposal of waste material, the safe use and storage of chemicals, minimising carbon emissions and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures relevant to diagnosing and calculating production costs
- Environmental risks and hazards
- Using energy effectively and efficiently
- Using material effectively and efficiently
- Material and labour costs
- Overhead costs
- Production and associated costs
- Construction methods and construction standards
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their safe use, operation and

REQUIRED SKILLS AND KNOWLEDGE

maintenance

- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

Evidence Guide

EVIDENCE GUIDE

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.

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and effectively diagnose and calculate production costs within organisational requirements

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements of this unit and include demonstration of:

- following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice relevant to diagnosing and calculating production costs
- following organisational policies and procedures relevant to diagnosing and calculating production costs
- effective communication and safe working practices
- diagnosing and calculating production costs in line with organisational requirements

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of

EVIDENCE GUIDE

workplace relevant contexts) together with application of required knowledge

- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

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.

OHS requirements:

are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures, and

RANGE STATEMENT

may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements
may include:

Legislative requirements:

are to be in line with applicable Commonwealth, State or Territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements
may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures
- ethical standards

RANGE STATEMENT

	• recording and reporting requirements • equipment use and maintenance and storage requirements • environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
Products may include:	• pallets • crates • trellises • trusses • stairs • doors • windows • frames • beams
Competitor's products:	are products that compete directly with those produced by the organisation
Labour costs may include:	• number of personnel to complete the job • amount of time to complete the job • overtime considerations • overheads • environmental protection requirements
Logistic support contracts are to include:	• external companies who provide products and services to assist in the production process • internal sections of the organisation that provide products and services to assist in the production process
Physical distribution systems	are the methods and systems for distributing materials and products to and from the production area and from there to the warehouse or storage area
Communication may include:	• verbal and non-verbal language • constructive feedback • active listening • questioning to clarify and confirm understanding • use of positive, confident and cooperative language • use of language and concepts appropriate to individual social and cultural differences

RANGE STATEMENT

Material may include:

- control of tone of voice and body language
- native timber species
- imported timber species
- dressed timber
- in-the-rough timber
- stress and non-stress graded timber
- preservative treated timber
- medium density fibreboard
- laminated veneer
- chipboard,
- fibreboard and other manufactured board products
- coated and/or treated timber products
- beams or laminated beams

Time requirements are to include: the amount of time required to complete a:

- product
- task
- project

Overhead costs may include:

- rental or lease costs
- utilities
- non-production resources
- depreciation of plant and equipment
- warehousing margins
- physical distribution unit costs
- insurance and other costs incurred by doing business
- superannuation
- sick leave entitlements
- leave loading
- other staff entitlements
- organisational overheads
- environmental protection requirements

Mark-up percentage: is the desired or intended profit margin over and above all costs

Records and reports may include:

- product type
- size
- inspection
- grading and labelling outcomes
- storage locations

RANGE STATEMENT

- quality outcomes
- hazards
- incidents or equipment malfunctions

and may be:

- manual
- using a computer-based system or other appropriate organisational communication system

Appropriate personnel may include:

- supervisors
- suppliers
- clients
- colleagues
- managers

Unit Sector(s)

Unit sector

No sector assigned

Co-requisite units

Co-requisite units

Competency field

Competency field

Timber Manufactured Products and Timber Merchandising