

# FDFSUG231A Undertake simple fabrication

Release: 1



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# **Modification History**

New Unit based on SUGSUSF2A Undertake simple fabrication.

# **Unit Descriptor**

This unit describes the outcomes required to carry out fabrication associated general jobbing work. A person who has achieved competence in *MEM05011C Assemble*, *fabricate components* or equivalent is recognised as competent in this sugar milling unit.

# **Application of the Unit**

Not applicable.

# **Licensing/Regulatory Information**

Not applicable.

# **Pre-Requisites**

There are no pre-requisite units for this competency standard.

# **Employability Skills Information**

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.

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# **Elements and Performance Criteria**

ELEMENT		PERFORMANCE CRITERIA
1	Prepare for assembly of parts	<ul><li>1.1 Fabrication requirements are identified</li><li>1.2 Appropriate fabrication method is selected</li><li>1.3 Required materials and equipment are identified and collected</li><li>1.4 Materials are prepared for fabrication</li></ul>
2	Assemble fabricated components	<ul><li>2.1 Components are correctly positioned</li><li>2.2 Component positioning is checked against specification</li><li>2.3 Components are fixed using appropriate fixing method</li><li>2.4 Assembly is checked to confirm conformance to specification</li></ul>

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# Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

## Required skills include:

### Ability to:

- identify fabrication requirements this may involve interpretation of technical drawings and sketches or be based on measurements
- select, fit and use personal protective clothing and/or equipment
- identify and obtain the required components, equipment and measuring instrumentation
- use appropriate equipment to position components ready for joining
- check accuracy of component position using measuring instruments as required
- prepare ends for joining
- · identify and correct unacceptable component assembly where appropriate
- · maintain work area to meet housekeeping standards

## Required knowledge includes:

#### **Knowledge of:**

- relevant state OHS legislation, standards and codes of practice relating to work responsibilities
- purpose and basic principles of fabrication including knowledge of methods used to assemble and fix components and basic understanding of the effects of distortion on fabricated components
- safe work procedures including awareness of health and safety hazards
- use of equipment to position components to meet assembly requirements
- use of instrumentation to achieve accurate measures
- methods used to prepare ends for joining
- appropriate joining method
- typical defects that can occur given the assembly and fabrication methods used
- options for correcting out-of-tolerance fabrication
- · housekeeping standards for the work area

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## **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.

Guidelines for the Training Package.			
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.		
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<ul> <li>Evidence of ability to:</li> <li>identify fabrication requirements</li> <li>select, fit and use personal protective clothing and/or equipment</li> <li>identify and obtain the required components, equipment and measuring instrumentation</li> <li>check accuracy of component position</li> <li>prepare ends for joining</li> <li>identify and correct unacceptable component assembly where appropriate</li> </ul>		
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to:  • Fabrication equipment • Relevant measuring instrumentation • Components to be fabricated • Drawings, sketches and specifications as required • Operating procedures and related advice on equipment/instrumentation operation • Personal protective clothing and equipment • Housekeeping standards and procedures		
Method of assessment	Other units of competency relevant to the work role should be assessed in conjunction with this unit.		
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.		

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# **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.

Policies and procedures	Work is carried out in accordance with company policies and procedures, licensing requirements, manufacturer's recommendations, legislative requirements, codes of practice and industrial awards and agreements.
Codes of practice	Codes of practice include the Sugar Milling Operations Industry Code of Practice.
Fabricated components	Components may include general fabricated components in plate, pipe and section or sheet to form 90° or 45° angles or angles formed using pre-constructed jigs.  Typical fixing/joining methods are by welding or screwing.
Materials for fabrication	Materials may include ferrous, non-ferrous and non-metallic substances.
Measuring instrumentation	Measuring instrumentation may include     squares     line levels     rulers     spirit levels.
Teamwork	Work may require the ability to work within a team environment.

# **Unit Sector(s)**

Sugar Milling

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