

Unit ID: 1469

**Domain** METALLURGICAL PROCESSING - CORE  
**Title:** Apply a problem solving method to a situation as part of processing operations

**Level: 2**

**Credits: 2**

### Purpose

This unit standard is intended for those who wish to enter into employment in the metallurgical processing industry. People holding credit for this unit standard are able to: Define a problem; choose a method for solving an identified problem; and apply the problem solving method and evaluate the outcome.

### Special Notes

1. This unit standard is primarily intended for assessment in classroom-based programmes, but can be assessed in other contexts, such as workplaces.
2. 'IDEAL' problem solving method refers to the Bransford's IDEAL model:
  - 1) Identify the problem.
  - 2) Define the problem through thinking about it and sorting out the relevant information.
  - 3) Explore solutions through looking at alternatives, brainstorming, and checking out different points of view.
  - 4) Act on strategies.
  - 5) Look back and evaluate the effects of your capacity.

### Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website [www.nta.com.na](http://www.nta.com.na).

## Elements and Performance Criteria

### Element 1: Define a problem

#### Performance Criteria

- 1.1 The problem is defined in terms of its nature, parties involved, and the effects it may have.
- 1.2 The problem is described in terms of ownership, responsibility, its sphere of influence and authority.

## **Element 2: Choose a method for solving an identified problem**

### **Range**

Methods may include but are not limited to brainstorming; pros and cons; IDEAL; and research.

### **Performance Criteria**

- 2.1 Problem solving methods are described in terms of processes to be undertaken.
- 2.2 Problem solving method is selected and described in terms of its suitability for solving the identified problem.

## **Element 3: Apply the problem solving method and evaluate the outcome**

### **Performance Criteria**

- 3.1 The chosen method is applied to the identified problem.
- 3.2 Outcome of the problem is described in relation to the method used.
- 3.3 Conclusion to the problem is made by providing an action to be taken.

## **Registration Data**

<b>Subfield:</b>	Metallurgy
<b>Date first registered:</b>	28 September 2016
<b>Date this version registered:</b>	28 September 2016
<b>Anticipated review:</b>	2021
<b>Body responsible for review:</b>	Namibia Training Authority