

Domain**Control and Instrumentation****Title:****Demonstrate knowledge of level
Measurement****Level: 2****Credits: 2****Purpose**

This unit standard specifies the competencies required to demonstrate knowledge of level Measurement. This unit standard is intended for those who work in instrumentation and control industry and related environment.

Special Notes

1. Entry information:

Prerequisite

- none

2. Assessment evidence may be collected from a real workplace or a simulated real workplace or an appropriate simulated realistic environment in which instrumentation operations are carried out.

3. The evidence required to demonstrate competency in this unit must be relevant to workplace operations.

4. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' specifications and/or company's guidelines and instructions.

4. Glossary of terms:

- '*Specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations, workplace specific requirements.

5. Regulations and legislation relevant to this unit standard include the following:

- Labour Act 2007, No. 11, 2007
- Regulations relating to the health & safety of employees at work under Schedule 1 (2) of the Labour Act No.11 of 2007
- And all subsequent amendments

6. Performance of all elements in this unit standard must comply with industry standards.

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 on www.nta.com.na

Elements and Performance Criteria

Element 1: Demonstrate knowledge of Level Measurement

Range

Level measurement devices include but not limited to Ultrasonic, Radar, Laser, Nuclear, and Buoyancy Weigh systems such as strain gauges and load cells,

Performance Criteria

- 1.1 Level measurement theory is explained in terms of operating principles of measurement and gauges, properties and effects of liquid pressure head.
- 1.2 Calculations related to level measurements are performed and level units used are converted by calculation and tables.
- 1.3 Personal and plant safety precautions are described in accordance with establishment procedures.
- 1.4 Characteristics of the various level measuring techniques described.
- 1.5 Advantages and disadvantages of the various level measuring techniques is described in terms of operating principles.
- 1.6 Measurement methods for liquid levels are described in accordance with standard practice.
- 1.7 Level measurement methods for solids and powder are described.
- 1.8 Alternative applications of level measurement devices are outlined in accordance with standard practice.
- 1.9 Calibration procedures are described with reference to calibration principles and manufacturer's instructions.
- 1.10 The methods of level measurement devices installation are described.
- 1.11 Weighing systems used for level measurement are described.

Registration Data

Subfield:	Electrical Engineering
Date first registered:	
Date this version registered:	
Anticipated review:	
Body responsible for review:	Namibia Training Authority

