



Aldabri 106 (Pty) Ltd t/a

Institute for Quality

Education, Training and Development

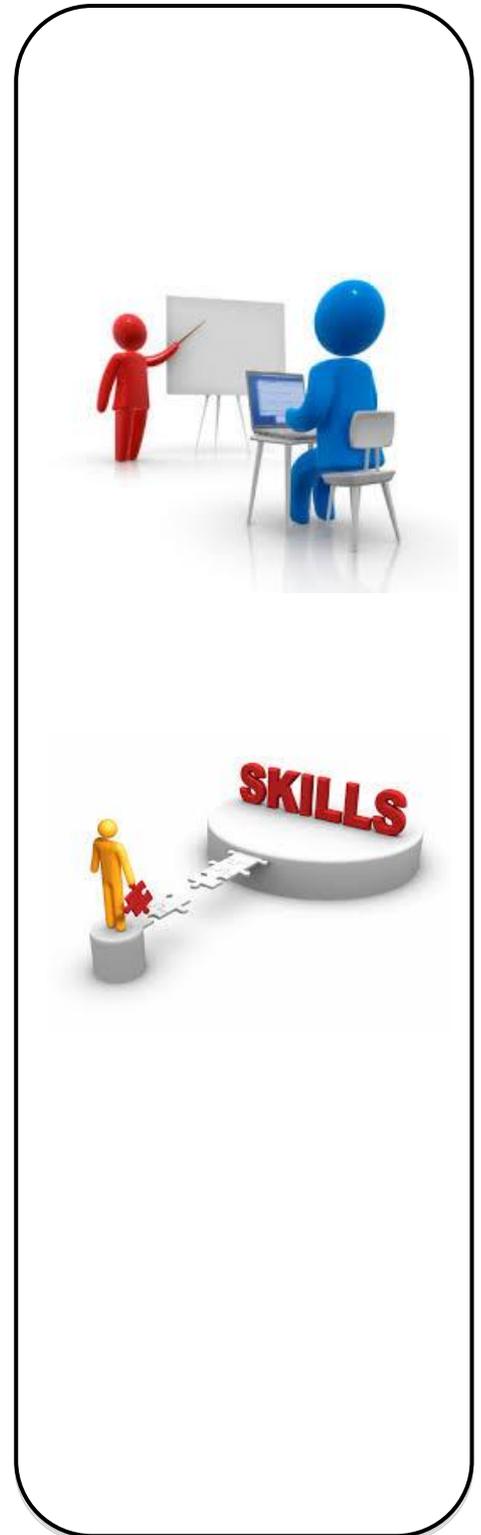
ETDP - 0164

Learning for Life

National Certificate: Maintenance of high speed production processes

NQF Level 5

Course Information





Qualification:	National Certificate: Maintenance of high speed production processes
SAQA ID:	48730
Credits:	160
NQF Level:	5

Qualified maintenance personnel (artisans) in the past had few options in pursuing formal qualifications in their field. They had a choice between becoming technicians or following a general management route.

The purpose of this qualification is to describe the skills and knowledge required in what is becoming a new discipline: the science and technology of maintenance in the context of sophisticated, high-speed production lines.

The increased sophistication is reflected in:

- √ greater automation
- √ integrated lines that combine a range of processing, product handling and packaging operations
- √ combinations of mechanical, electrical and electronic components
- √ integration of measurement, control and communication devices
- √ an in-depth understanding of the production or manufacturing processes and their impact on the maintenance processes.

A failure in any part of the system can have severe implications in terms of reduced output, damage to product, wastage and possible injury. Consequences of such failure can include negative impacts on the health of workers and consumers and on the profitability and reputation of the company.

The process of managing failure has implications for the maintenance of equipment and requires new sets of skills and knowledge, representing a shift away from hand skills to the skills required to analyse data in records and make recommendations, plan and implement specific maintenance programmes and install new or updated equipment.



This and related qualifications will act as a framework for providers, assessors and learners to plan, implement and measure the outcomes of suitable learning programmes, or the recognition of prior learning, in this new discipline.

The specific purpose of the qualification represents the skills, knowledge and understanding required by competent practitioners to:

1. Initiate, implement and oversee engineering and maintenance practices and improvements that:

- √ ensure high-speed production lines operate continuously at optimum efficiency
- √ introduce new technology, equipment and PRODUCT lines
- √ co-ordinate activities of maintenance staff and contractors

2. Solve problems and provide technical support to the maintenance personnel.

This qualification can be obtained in the context of a variety of manufacturing and packaging operations for fast-moving consumer goods.

This qualification is conceptualised as forming an integrated part of the National Diploma in Maintenance of High-speed Production Processes (Fast-moving Consumer Goods): NQF Level 5.

However, it is also complete in itself and fulfils all the requirements for a National Certificate.

There is an increased sophistication in the machinery and equipment used for high-speed production processes. The management of failure in such an environment presents opportunities for qualified artisans to pursue a **CAREER** in maintenance beyond NQF level 4 or artisan level.

This qualification represents the beginning of a **CAREER** in the science and technology of maintenance as a discipline. It is a qualification in its own right but it is also designed so that the credits and the exit level outcomes form a part of the National Diploma in Maintenance of High-speed Production Processes (Fast-moving Consumer Goods): NQF Level 5.



Experience Required

- √ No management experience required.
- √ Learners will be required to secure a workplace for the work integrated module.

Learning assumed to be in place

- √ The credits and the related unit standards assume that the learner is either formally qualified or has extensive experience in the installation, repair and maintenance of electrical, mechanical and electronic components and control systems and some experience with instrumentation. If a learner does not have such experience or qualifications, the learning time will be increased.

Delivery Modality

- √ This qualification is offered through online lessons i.e. a blended approach where lessons are recorded and learner progresses from lesson one to end of each module.
- √ The lessons are presented by industry experts who use practical examples to explain the concepts of the course.
- √ Assessments will be written face to face.

Assessment

- √ Learners will be required to write an integrated summative assessment, for each module.
- √ Learners will be expected to compile a portfolio of evidence, which comprise all learning activities, assignments and projects.
- √ A logbook must be completed during the work-integrated learning.

RPL

IQ has a well-designed toolkit to RPL persons against this qualification.

This qualification may be achieved in part or completely through the recognition of prior learning, which includes formal, informal and non-formal learning and work experience. The learner should be thoroughly briefed on the mechanism to be used and support and guidance should be provided. Care should be taken that the mechanism used provides the learner with an opportunity to demonstrate



competence and is not so onerous as to prevent learners from taking up the RPL option towards gaining a qualification.

Course outline

	ID	UNIT STANDARD TITLE	NQF LEVEL	CREDITS
Core	13224	Monitor the application of safety, health and environmental protection procedures	Level 4	4
Core	9895	Coordinate predictive and preventive maintenance	Level 5	12
Core	9904	Coordinate work group to produce product	Level 5	8
Core	114718	Implement a new maintenance programme	Level 5	34
Core	114721	Install and commission a high-speed production line	Level 5	32
Core	114717	Optimise maintenance activities and practices for high-speed production lines	Level 5	18
Fundamental	8647	apply workplace communication skills	Level 5	10
Fundamental	12669	Implement new projects in a rubber manufacturing and assembly process	Level 5	30
Elective	13835	Contribute to project initiation, scope definition and scope change control	Level 4	9
Elective	10144	Identify, suggest and implement corrective actions to improve quality	Level 4	6
Elective	10134	participate in the estimation and preparation of cost budgets for an element of work and monitor and control actual cost against budget	Level 4	6
Elective	13114	Install, test and maintain a complex computer integrated manufacturing system	Level 5	20