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**SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)**

In accordance with regulation 24(c) of the Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Printing and Packaging

registered by Organising Field 06, Manufacturing, Engineering and Technology, publishes the following qualification and unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the qualification and unit standards. The qualification and unit standards can be accessed via the SAQA web-site at www.saga.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the qualification and unit standards should reach SAQA at the address ***below and no later than 8 January 2007***. All correspondence should be marked **Standards Setting – SGB for Printing and Packaging** and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Printing and Manufacture of Packaging

SAQA QUAL ID	QUALIFICATION TITLE		
57900	National Certificate: Printing and Manufacture of Packaging		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Printing and Packaging	6		
QUAL TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD	
National Certificate	Manufacturing, Engineering and Design	Media and Design	
ABET BAND	CREDITS	QUAL LEVEL	SS
Undefined	126	2	Regular-Unit Stds

PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose:

This qualification will equip the individual with the skills, knowledge and values to participate effectively in workplace activities within the printing and packaging manufacturing industries. Learners achieving this qualification will be able to contribute to printing and packaging manufacturing processes by:

- > Monitoring the production process and the quality of production.
- > Understanding their role in the business, i.e. in production and related activities.
- > Understanding how they are affected by legislation, regulations, agreements and policies related to their particular work environment.

Qualifying learners will also be able to relate what they see and experience to scientific and technological principles and concepts. They will also understand how they should operate within the systems which govern their workplace. What learners achieve through this qualification will also serve as a basis for further learning where they will engage more directly in the production process.

The skills, knowledge and values demonstrated within this qualification will ensure that workers and new entrants will acquire relevant skills and knowledge required by a fast-changing sector essential for economic growth and transformation. This qualification will contribute to the social upliftment of employees and economic growth within the printing and packaging manufacturing environment by allowing learners who are active in the industry to gain recognition for the skills and knowledge they have acquired without having to go through a formal apprenticeship process. Small printing and packaging manufacturing enterprises would also be ideal vehicles for Black Economic Empowerment.

Rationale:

This qualification and the related qualifications in this series replace a number of qualifications for various trades and occupations in the printing and manufacture of packaging industries. These industries are currently also undergoing significant change. These changes include:

- > Changes in machine design.
- > A shift from film and other media to digital imaging, processing and printing.
- > A shift from hand skills to conceptual skills.
- > Greater global competition and higher standards required for products designed to be exported.
- > More exacting requirements from customers and consumers.

These changes require that these trades and occupations also need to incorporate new skills and knowledge to replace outdated skills and knowledge.

This and the associated qualifications in the learning pathway provide a developmental pathway for the full range of activities related to the occupation, from those of the operator of simple equipment for printing and the manufacture of packaging, to those of the tradesperson with several years' experience, with a higher level of technical knowledge and the ability to integrate new technology, materials and processes into existing operations. This is the first in a series of four qualifications in a learning pathway for high-volume printing and packaging manufacturing processes. The qualification series ends with the Certificate in Printing and Manufacture of

Packaging: NQF Level 5. Further career development after NQF Level 5 would be based on choices relating to the learner's aspirations:

- > Entrepreneurial activities (starting own business).
- > General or technical management.
- > Quality management.
- > Conceptual design of printing and packaging materials.
- > Advanced technology.

Printing and packaging products have to respond to a wide variety of exacting customer and consumer requirements. In addition, the industries have to respond to environmental issues and the on-going development of new products as a result of changing customer needs.

This qualification is applicable to learners in the following contexts.

Printing:

- > Letterpress.
- > Screen printing.
- > Flexography.
- > Gravure.
- > Lithography.
- > Continuous stationery.
- . Roll label.
- > Rotary offset.

Manufacture of packaging, with or without in-line printing processes:

- > Bag making.
- > Sack making.
- > Carton making.
- > Can and end making.
- > Laminating.
- > Coating.
- > Corrugated board manufacturing.
- > Tubing.
- > Wrapping.
- > Over printing.
- > Envelope making.
- > File manufacturing.

Typical learners would be new entrants to the industry. Once qualified, they would typically tend to the printing or packaging manufacturing process, and to perform tasks under the direction of a more skilled person. In some instances this role represents a full-time position in the organisation; in other instances this is simply a stage in occupational development.

This qualification series recognises skills, knowledge and values relevant to a workplace. It is designed for learners who engage actively in printing and packaging manufacturing processes. It is suitable for learners who:

- > Attend courses and then apply the knowledge gained to activities in the workplace (Portfolio to reflect formative assessment), OR.
- > Are already workers and have acquired the skills and knowledge without attending formal courses (RPL can be done through the summative assessment and portfolio of evidence), OR.

The outcomes of this qualification combine skills and knowledge in the technical, inter-personal and business spheres, enabling the learner to perform the operational aspects of the work, function within a team context and contribute to value-adding processes in the business.

The printing and packaging manufacturing industries are essential to the supply of a wide range of processed and manufactured products, from foodstuffs to pharmaceuticals, to the consumer. These industries are also vital to the country's export markets. Printing also provides society with reading matter in a wide variety of forms from leaflets and advertising to magazines, newspapers and books. This qualification also emphasises the learner's role in conserving resources and behaving responsibly towards the environment in general.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED TO BE IN PLACE

It is assumed that learners are already competent in Communication and Mathematical Literacy at NQF Level 1.

Recognition of Prior Learning

This qualification may be obtained through a process of RPL. The learner should be thoroughly briefed prior to the assessment and support should be provided to assist the learner in the process of developing a portfolio. The guidelines for integrated assessment should be used to develop the RPL assessment process. As with integrated assessment, while this is primarily a workplace-based qualification, evidence from other areas of endeavour may be introduced if pertinent to any of the Exit Level Outcomes.

Access to the qualification

There is open access to this qualification. A workplace is, however, a prerequisite to obtaining the relevant work experience and evidence required for the assessment of the Exit Level Outcomes.

In most contexts colour perception is important and learners may be required to demonstrate the ability to distinguish colours, tones and shades. Some processes require the ability to lift, move and place objects of varying weight, the ability to use hand and power tools, or the ability to work in confined or elevated spaces.

QUALIFICATION RULES

The total number of credits for this qualification is 126.

> The total number of credits in the Fundamental component is 36.

> The total number of credits in the Core component is 78.

> The minimum number of Elective credits is 12.

> The elective credits should be chosen in accordance with the requirements of the selected context and the interests of the learner.

EXIT LEVEL OUTCOMES

1. Demonstrate an understanding of the production process and the quality requirements and recognise changes in the production process, which will affect safety, health, quality or efficiency and respond to them.

> Range: Production process includes routine maintenance; production process relates to any printing and mechanical conversion of materials, including subsequent printing and decorating to form packaging.

2. Demonstrate an understanding of the use of appropriate tools and equipment to make simple adjustments or changes to equipment and process and convey (move, lift) materials or products.

3. Work effectively with others, understand own role in the organisation and understand the purpose of the organisation in the economy of the country.

Critical Cross-Field Outcomes:

These are embedded in the unit standards which make up the qualification and are thus also reflected in the Exit Level Outcomes of the qualification.

The Critical Cross-Field Outcomes are supported by the Exit Level Outcomes as follows:

> Identifying and solving problems in which responses display that responsible decisions using critical thinking have been made (Exit Level Outcome's 1, 2, 3).

> Working effectively with others as a member of a team, group, organization and community (Exit Level Outcome 3).

> Organising and managing oneself and one's activities responsibly and effectively (Exit Level Outcome's 1, 2).

- > Collecting, analysing, organising and critically evaluating information (Exit Level Outcome's 1, 2, 3).
- > Communicating effectively using visual, mathematical and/or language skills (Exit Level Outcome's 3).
- > Using science and technology effectively and critically, showing responsibility toward the environment and health of others (Exit Level Outcome's 1, 2).
- > Demonstrating an understanding of the world as a set of related systems by recognising that problem contexts do not exist in isolation (Exit Level Outcome's 1, 2, 3).

ASSOCIATED ASSESSMENT CRITERIA

1.
 - > Production of scrap or faulty products is minimised in accordance with set standards.
 - > Responses in the production process are appropriate to the nature of the change.
 - > Changes and responses are reported in accordance with organisational requirements.
 - > Questions and issues related to the production process are responded to relevant to the outcomes of the process.
 - > Routine checks and maintenance tasks are performed according to requirements.

Range: Routine checks and maintenance includes quality, safety and environmental checks.
2.
 - > Adjustments or changes are made according to relevant standards or operating procedures.

Range: Tools and equipment adjustments or changes would always be limited to the learners' limits of authority.

 - > Downtime is minimised in accordance with set standards.
 - > Material or product produced conforms to set quality standards.
 - > Changes and adjustments are reported in accordance with organisational requirements.
 - > Quality, safety and environmental procedures are adhered to at all times.
 - > Materials and consumables are handled according to relevant standards or operating procedures.
 - > Tools and equipment are cared for; worn or damaged tools and equipment are reported or replaced in accordance with set standards and specifications.
3.
 - > Information or decisions are received and acted upon in accordance with organisational requirements.
 - > Questions and discussion issues related to learner's role and purpose to the organisation are responded to in accordance with organisational requirements.

Range: Questions and discussion issues includes understanding performance appraisals and their outcomes.

 - > The role of specifications in relation to customer and internal requirements are understood and described in accordance with set requirements.

Range: Understanding includes understanding implications of products not meeting customer requirements and of wastage in relation to costs.

Integrated Assessment

The integrated assessment should be based on a summative assessment guide. The guide will specify how the assessor will assess different aspects of the performance and will include:

- > Evaluating evidence in a portfolio of evidence, particularly projects which integrate various aspects of the qualification and which demonstrate the integration of all aspects of learning: fundamental and core; knowledge, skills and values; the development of the critical outcomes.
- > Observing and listening to the learner at work, both in primary activities as well as in other interactions, or in relevant simulations.
- > Asking questions and initiating short discussions to test understanding and to verify other evidence.
- > Looking at records and reports.
- > Formative and summative assessment of unit standards.

Assessment of competence for this qualification is based on experience acquired by the learner in the workplace, within the particular printing of packaging manufacturing context. The assessment process should cover the explicit tasks required for the qualification as well as the understanding of the concepts and principles that underpin the management process. The assessment process should also establish how the learning process has advanced the Critical Cross-field Outcomes.

The learner may choose in which language he/she wants to be assessed. This should be established as part of a process of preparing the learner for assessment and familiarising the learner with the approach being taken.

While this is primarily a workplace-based qualification, evidence from other areas of endeavour may be