GOVERNMENT NOTICES

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

No. 1216 **21 December 2009**

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

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

Manufacturing and Assembly Processess

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 full Qualification and Unit Standards can be accessed via the SAQA web-site at **www.saqa.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 29 January 2010.*** All correspondence should be marked **Standards Setting – SGB for Manufacturing and Assembly Processess** and addressed to

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ACTING DIRECTOR: STANDARDS SETTING AND DEVELOPMENT

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:
National Certificate: Small Craft Construction

SAQA QUAL ID	*QUALIFICATION TITLE*		
77003	National Certificate: Small Craft Construction		
ORIGINATOR		*PROVIDER*	
SGB Manufacturing and Assembly Processes			
QUALIFICATION TYPE	*FIELD*	*SUBFIELD*	
National Certificate	6 - Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	*MINIMUM CREDITS*	*NQF LEVEL*	*QUAL CLASS*
Undefined	140	Level 2	Regular-Unit Stds Based

This qualification replaces:

Qual ID	Qualification Title	NQF Level	Min Credits	Replacement Status
50542	National Certificate: Small Craft Construction	Level 2	156	Will occur as soon as 77003 is registered

PURPOSE AND RATIONALE OF THE QUALIFICATION
Purpose:

The purpose of this qualification is to prepare qualifying learners for a career in boatbuilding, to provide an opportunity for people currently employed in the industry to achieve formal recognition for their accumulated knowledge and skills and to enable them to develop a structured career path, and to facilitate the economic growth and development of the South African boatbuilding industry.

Qualifying learners will have developed basic boatbuilding skills, knowledge and understanding, which include:

- Demonstrating an understanding of the boatbuilding environment, including a broad understanding of different boatbuilding techniques and their applicability to the different materials commonly used for boatbuilding.
- Demonstrating a practical understanding of workshop safety.
- Selecting and safely operating the appropriate basic hand and power tools commonly used in boatbuilding.
- Operating basic power machinery used in woodworking applications in boatbuilding.
- Demonstrating a basic understanding of composite materials with specific reference to boatbuilding applications.
- Demonstrating knowledge of basic laminating skills.

Boatbuilding, or small craft construction, can be differentiated from most other trades by the extremely wide range of core competencies that are required by the technically competent practitioner. A high level of skill and understanding are necessary in activities as diverse as joinery, metalwork, composites fabrication, and electrical, mechanical and plumbing installation for the professional boatbuilder.

The Core component covers competencies related to small craft construction practices, health, safety and environmental issues, tools and equipment, manufacturing processes and materials. The unit standards provide the knowledge, values and skills that all learners require in order to engage in small craft construction practices.

Rationale:

The National Certificate: Small Craft Construction NQF Level 2 is the first qualification in the learning pathway in the Small Craft Construction sector that culminate in the Further Education and Training Certificate: Small Craft Construction or the National Certificate: Small Craft Boat and Yatch Design Technology.

This qualification reflects the need and demand within the small craft construction sector for skilled employees. Successful learners will be able to manufacture world-class products, improve professionalism and enhance the general quality of service delivery in the industry, thereby contributing positively to investor confidence and the international competitiveness of the South African small craft construction sector.

RECOGNIZE PREVIOUS LEARNING?
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LEARNING ASSUMED IN PLACE
It is assumed that learners are already competent in:

- Communication and Mathematical Literacy at NQF Level 1 or equivalent.

Recognition of Prior Learning:

The structure of this unit standards-based qualification makes the Recognition of Prior Learning possible. This qualification may therefore 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 Recognition of Prior Learning option towards gaining a qualification.

If the learner is able to demonstrate competence in the knowledge, skills, values and attitudes implicit in this qualification the appropriate credits should be assigned to the learner. Recognition of Prior Learning will be done by means of Integrated Assessment as mentioned above.

This Recognition of Prior Learning may allow:

- Gaining of credits towards a unit standard.
- Obtaining of this Qualification in part or in whole.

Access to the Qualification:

Access is open for learners whose mobility on a boat will not be restricted due to any disabilities, as most training will take place on and in a small craft.

QUALIFICATION RULES
The Qualification is made up of Fundamental, Core, and Elective unit standards and a minimum of 140 credits is required to complete the Qualification.

In this Qualification the credits are allocated as follows:

- Fundamental: 36 credits.
- Core: 94 credits.
- Electives: 10 credits (minimum).
- Total: 140 credits.

EXIT LEVEL OUTCOMES

Qualifying learners are able to:

1. Demonstrate an understanding of the boatbuilding environment, including a broad understanding of different boatbuilding techniques and their applicability to the different materials commonly used for boatbuilding.

2. Demonstrate a practical understanding of workshop safety.

3. Select and safely operate the appropriate basic hand and power tools commonly used in boatbuilding.

4. Operate basic power machinery used in woodworking applications in boatbuilding.

5. Demonstrate a basic understanding of composite materials with specific reference to boatbuilding applications.

6. Demonstrate knowledge of basic laminating skills.

Critical Cross-Field Outcomes:

The Critical Cross Field Outcomes are handled in detail in the individual unit standards.

ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

- Different types of small craft are identified and described using their specific distinguishing characteristics.
- The main parts of a boat are identified and described focusing on the basic functions in the boat.
- Different boatbuilding techniques are described and a description given of their applicability to the major boatbuilding materials.

Associated Assessment Criteria for Exit Level Outcome 2:

- The work area is kept in a safe and productive state through the application of appropriate safety standards.
- Personal protective equipment is used appropriately and correctly.

Associated Assessment Criteria for Exit Level Outcome 3:

- Tools are used correctly and in accordance with relevant safety requirements.
- Basic hand and power tools used in boatbuilding are identified and their specific uses described with specific reference to boatbuilding applications.

Associated Assessment Criteria for Exit Level Outcome 4:

- Basic power machinery used in boatbuilding is identified, and a description given of its primary function in the operation.

• Basic power machinery is set up, operated and maintained according to manufacturer's specifications and in accordance with health and safety regulations.
• Appropriate health and safety procedures are discussed and implemented in the operation of machinery.

Associated Assessment Criteria for Exit Level Outcome 5:

• Different types of reinforcement material are identified and described focussing on their main properties and uses.
• Different types of matrix material are identified and described focussing on their main properties and uses.
• Different types of core material are identified and described focussing on their main properties and uses.

Associated Assessment Criteria for Exit Level Outcome 6:

• Resins are correctly measured and mixed for specific operations.
• Reinforcements are selected, prepared and positioned correctly.
• Basic hand-laminating techniques are performed according to organisational procedures and job specifications.

Integrated Assessment:

• Assessment practices must be open, transparent, fair, valid, and reliable and ensure that no learner is disadvantaged in any way whatsoever, so that an integrated approach to assessment is incorporated into the qualification.
• Learning, teaching and assessment are inextricably interwoven. Whenever possible, the assessment of knowledge, skills, attitudes and values shown in the unit standards should be integrated.
• Assessment of Communication and Mathematical Literacy should be integrated as far as possible with other aspects and should use practical administration contexts wherever possible. A variety of methods must be used in assessment and tools and activities must be appropriate to the context in which the learner is working or will work. Where it is not possible to assess the learner in the workplace or on-the-job, simulations, case studies, role-plays and other similar techniques should be used to provide a context appropriate to the assessment.
• The term Integrated Assessment implies that theoretical and practical components should be assessed together. During integrated assessments, the assessor should make use of a range of formative and summative assessment tool methods and assess combinations of practical, applied, foundational and reflective competencies.
• Assessors must assess and give credit for the evidence of learning that has already been acquired through formal, informal and non-formal learning and work experience.
• Assessment should ensure that all specific outcomes, embedded knowledge and critical cross-field outcomes are evaluated in an integrated manner.

INTERNATIONAL COMPARABILITY

This qualification was compared with training offered in countries that are acknowledged leaders in the small boat-building industry and countries whose industry supplies small craft to others. These countries are:

• USA.
• Malaysia.
• Turkey.
• Australia.
• New Zealand.
• UK.