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**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

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.saqqa.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 7 March 2008**. All correspondence should be marked **Standards Setting – Manufacturing and Assembly** and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:**National Certificate: Tyre Retreading (Hot or Precure)**

SAQA QUAL ID	QUALIFICATION TITLE		
60389	National Certificate: Tyre Retreading (Hot or Precure)		
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	120	Level 2	Regular-Unit Stds Based

This qualification does not replace any other qualification and is not replaced by another qualification.

PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose:

Individuals achieving this qualification will be able to carry out all aspects of the retreading process, within a particular retreading context, and to meet quality and quantity requirements.

Qualifying learners would have the skills, knowledge and values to:

- Inspect and select tyres suitable for retreading.
- Prepare the casing through removal of old rubber to achieve the required profile.
- Perform a range of repair techniques to restore the integrity of the casing.
- Apply new tread.
- Cure and perform final finishing and inspection of the retreaded tyre.

Qualifying learners will be able to contribute to the achievement of workplace objectives by maintaining quality standards and applying safe, efficient and productive work practices. They will have a basic understanding of the scientific and technological principles and concepts which underpin tyre retreading processes, and will be able to relate these to their own work activities. They will also understand how they should operate within the management, quality and safety systems which govern their workplace.

This qualification may be assessed in terms of either the Hot or the Precure retreading process and in the following tyre contexts:

- Passenger vehicles.
- Light or heavy commercial vehicles.
- Agricultural machines/equipment.
- Off-road machines/equipment (including but not limited to military applications, cranes, earthmoving equipment, mining equipment).

This qualification will contribute to social upliftment and development by allowing employees to gain recognition for their skills and knowledge through the recognition of prior learning. It also

provides a basis for further learning and career development, as described below under the heading 'Articulation possibilities'.

Rationale:

This qualification recognizes the skills, knowledge and values required by the tyre retreading industry. It covers the retreading of passenger, light and heavy commercial vehicle and agricultural and off-road machine tyres and includes both the hot and the precure retreading processes. Qualifying learners will be equipped with the full range of competencies required to work effectively in a retreading environment. At the same time the qualification is sufficiently flexible to accommodate the particular requirements of the various contexts within the retreading industry.

Within the work environment, tyre retreaders usually specialise in a type of tyre and in a particular aspect of the process. The broad base of skills, knowledge and values that this qualification provides will equip qualifying learners to work effectively within the retreading environment and will enable them to adapt to changes within their working environment. Qualifying learners would be competent to operate a range of machinery, to use a range of tools, materials and techniques and to apply a range of specialised handskills required to produce quality retreaded tyres.

The outcomes of this qualification combine practical and theoretical learning in the technical, inter-personal and business spheres, which will enable the qualifying learner to perform the operational aspects of the work, function within an organisational context and contribute to value-adding processes in the workplace.

Typical learners would be persons who are currently employed in a tyre retreading environment who have not received formal recognition for their skills and knowledge, and new entrants to the industry.

This qualification recognises skills, knowledge and values relevant to a workplace and requires workplace experience. It is suitable for learners who:

- Attend courses and then apply the knowledge gained to activities in the workplace (Portfolio to reflect formative assessment).
- 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).
- Participate in skills programmes and have the appropriate work experience.
- Are part of a learnership programme which integrates structured learning and work experience.
- Acquire their learning through any combination of the above.

Although this is a single qualification which specifically addresses the needs of the retreading industry, it also provides a sound basis for further learning and career path development, both within the retreading industry and in the broader tyre servicing and rubber manufacturing industries. Qualifying learners would be equipped for further career development in the retreading industry in such areas as training, management and stores. The understanding and skills related to tyres and tyre repair contained in the elective component would also provide a foundation for small business development in the tyre servicing field. Further technical development would be possible in the new tyre and industrial rubber manufacturing fields.

This qualification will benefit society and the economy as the skills and understanding gained by qualifying learners will improve work standards and productivity, and contribute to economic growth and the upliftment of employees within the tyre retreading environment. The emphasis in the qualification on product quality will enhance the safety and well-being of all road users. Qualifying learners will also develop an awareness of their role in conserving resources, in

behaving responsibly towards the environment in general, and in observing safety and legal requirements.

This qualification will help to achieve the objectives of the NQF as it will contribute to the full development of the learner and provide recognition for skills and knowledge achieved, thereby forming the basis for further advancement in the workplace. It will also allow access to additional learning and career paths within the broader rubber and tyre related industry.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED IN PLACE

The following competencies are assumed for a learner embarking on this qualification:

- Communication at NQF Level 1.
- 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.

QUALIFICATION RULES

The total number of credits for this qualification is 120.

The learner is required to achieve the unit standards listed in the compulsory Fundamental component (39 Credits).

The learner is required to achieve the unit standards listed in the compulsory Core component (68 Credits).

The learner is required to achieve a minimum of 13 Elective credits. The elective unit standards should be chosen in accordance with the requirements of the selected context and the interests of the learner.

The core unit standards which address the retreading process are generic in order to accommodate both the Hot and the Precure processes.

EXIT LEVEL OUTCOMES

1. Perform routine processes related to repairing and retreading worn and/or damaged tyres.
2. Recognise and respond to routine problems related to tyre repair and retreading processes.
3. Use and care for tools, accessories, equipment and materials.
4. Contribute to maintaining a safe and productive work environment.

Critical Cross-Field Outcomes:

Critical Cross-Field Outcomes have been addressed by the Exit Level Outcomes as follows:

While performing tyre retreading activities, qualifying learners can:

Identify and solve problems in which response displays that responsible decisions, using critical and creative thinking, have been made by:

- Identifying and taking appropriate action in response to routine problems related to tyre retreading processes, tool and material use, equipment operation and product quality.

Evident in all Exit Level Outcomes.

Work effectively with others as a member of a team, group, organisation or community by:

- Participating in co-operative work practices to achieve group objectives.

Evident in all Exit Level Outcomes.

Organise and manage oneself and one's activities responsibly and effectively by:

- Carrying out activities in a systematic manner, in accordance with procedures and safe work practices.

Evident in all Exit Level Outcomes.

Collect, analyse, organise and critically evaluate information by:

- Collecting and processing information related to the tyre retreading process and determining an appropriate response.

Evident in all Exit Level Outcomes.

Communicate effectively by using mathematical and/or language skills in the modes of oral and/or written presentations by:

- Recording and reporting information related to the tyre retreading process.
- Interpreting instructions and communicating information.

Evident in all Exit Level Outcomes.

Use science and technology effectively and critically, showing responsibility towards the environment and health of others by:

- Applying knowledge of underpinning principles to the use of tools and materials, operation of equipment and quality of the product.
- Working in accordance with health and safety regulations.

Evident in all Exit Level Outcomes.

Demonstrate an understanding of the world as a set of related systems by recognising that problem solving contexts do not exist in isolation by:

- Applying knowledge of tyre types and characteristics and of repair and retreading processes to produce quality retreaded tyres.

Evident in all Exit Level Outcomes.

Contribute to the full personal development of each learner and the social and economic development of the society at large by:

- Providing a structured environment within which the learner is able to develop a range of skills which will enhance the learner's contribution to society and the workplace.

Evident in all Exit Level Outcomes.

ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

- Routine tasks are performed safely and effectively and in accordance with company standards.
- Tasks are performed so that product quality conforms to company requirements, manufacturers' specifications and relevant standards.
- Own activities are performed so as to contribute to maintaining overall workflow.
- Information related to the process is gathered, interpreted and responded to.
- Understanding is demonstrated of the purpose of quality, safety and productivity standards.

Associated Assessment Criteria for Exit Level Outcome 2:

- A variety of routine problems are identified and responded to in a manner appropriate to the nature of the problem.
- Where applicable, problems are accurately reported to relevant personnel in accordance with company procedures.
- The need to take appropriate action in response to routine problems is understood and explained focussing on the consequences of not taking appropriate action.

Associated Assessment Criteria for Exit Level Outcome 3:

- Tools are selected and used in accordance with the requirements of the task.
- Equipment is operated in accordance with standard operating procedures.
- Machines are set up in accordance with process requirements.

Associated Assessment Criteria for Exit Level Outcome 4:

- All required documentation is completed in accordance with company requirements.
- Instructions received are accurately interpreted and acted upon in accordance with requirements.
- The work station is maintained in a clean and organised manner.
- Group objectives are understood as well as the way own role contributes to their achievement.

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 context. The assessment process should cover the explicit tasks required for the qualification as well as the learner's understanding of the relevant concepts and principles. 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 presented if pertinent to any of the Exit Level Outcomes.

Assessors should also evaluate evidence that the learner is able to perform consistently over a period of time.

INTERNATIONAL COMPARABILITY

Internationally, the tyre industry is characterised by large multinational companies which extend their influence throughout the world. The quality and scope of training is thus determined by international standards for safety and quality in addition to specific product or process issues and localised statutory requirements.

Research was carried out to identify the scope, methods and trends in training for tyre retreading in countries which have a retreading industry, such as Australia, Europe, the United Kingdom, India, Canada, the United States of America, South America and Africa. Nearly all of this training is either in-house or in the form of short courses offered by industry associations and product or material suppliers, with only a few countries, such as the United Kingdom and Australia, offering national qualifications.

Australia:

Australia has been selected for detailed comparison because it has a national qualification which covers tyre retreading, and conditions in the industry are similar to those in South Africa.

The 'Certificate II in Rubber' (PMB20201), is part of a series of qualifications for Plastics, Rubber and Cablemaking. It is generic in nature and flexible in order to meet the needs of a range of sectors within the rubber industry. This is achieved through a design based on units of competency which are clustered into 'competency groupings' covering three areas:

- Core: Competencies that are essential to working in any type of industry (compulsory).
- Production: Competencies that relate specifically to the equipment and processes of the particular industry.
- Support: Competencies that have a broader application, such as those relating to interpersonal relationships or the environment.

This allows a selection to be made for the particular industry sector, ie tyre retreading, while allowing flexibility for enterprises and individuals to select combinations relevant to their training needs. Learning may comprise a wide range of learning methods and programmes, provided that an integration of theoretical learning, practical application and workplace experience is achieved. Assessment is workplace based and includes the use of portfolios of evidence.

A typical selection of units of competency for an individual who operates machines and performs related duties for retreading tyres would be as follows:

Core Units:

- Shift materials safely by hand.
- Follow OH&S policies and procedures.
- Apply quality processes.
- Apply work procedures and practices.
- Complete workplace documents.

Production Units:

- Inspect tyres for retreading.
- Prepare tyre casings for retreading.
- Lay on retreads.
- Operate retread curing equipment.
- Undertake basic maintenance.
- Use materials and process knowledge to complete work operations.

Support Units:

- Work with others in a team.
- Collect waste for recycling or safe disposal.

The 'Employability Skills' defined for the 'Certificate 11' provide insight into the level of skills, knowledge and generic abilities required for this qualification. Some examples are as follows:

- Teamwork: Work as part of a team; identify own role and responsibility within a team.
- Problem solving: Recognise known faults that occur during the operation; identify and take action on causes of routine faults; identify non-routine process and quality problems and take appropriate action; respond to routine problems.
- Initiative and enterprise: Determine problems needing action; report problems outside area of responsibility.
- Planning and organising: Achieve production targets; recognise hazards and follow appropriate hazard control methods.
- Self-management: Identify work requirements; operate within appropriate time constraints and work standards; select and use appropriate equipment, materials, processes and procedures; identify task outcomes and work role.
- Technology: Carry out pre-operational checks on equipment; monitor equipment operation; use appropriate instruments, power tools and electrical systems; monitor and adjust machine functions.

United States of America:

The USA has been selected for comparison because it has a well-established retreading industry as well as a strong international presence in retreading technology and training through the relationships between American companies and their counterparts worldwide. In the USA, training for tyre retreading is provided through companies and associations. For example, the 'Tire Industry Association' and the 'Rubber Manufacturers Association' supply a variety of reference and learning materials for in-company use. They also certificate learning achieved for regulatory purposes. Training of new entrants is typically company-based and in-house, with individuals learning on-the-job under the guidance of experienced practitioners and with the support of learning resources and materials supplied by the parent company or industry association. Short courses for on-going professional development of industry members are also available.

Conclusion:

The South African qualification is very similar in content and scope to the retreading aspect of the Australian 'Certificate 11 in Rubber'. Both qualifications require an integration of theoretical learning and workplace experience, and they share a common approach to assessment. The Australian version does not specify fundamental learning of the type that the South African qualification does. The content and level of the associated 'Employability Skills' shows a close correspondence with the Critical Cross-Field Outcomes embedded in the South African qualification.

South African company-based training is similar in nature, content and scope to that provided in the United States of America.

South Africa's expertise in tyre retreading is recognised internationally, with South Africa being viewed as the market leader in some areas of technology. The quality of training within South Africa is similarly well-regarded. This expertise, both in technology and in training, is now being reflected in this qualification.

ARTICULATION OPTIONS

This qualification has been designed and structured so that qualifying learners can move from one context within the tyre retreading field to another. They would have to acquire the specific knowledge related to the new context and adjust their skills and values accordingly.

Employers or institutions should be able to evaluate the outcomes of this qualification against the needs of their context and structure top-up learning appropriately. Holders of other qualifications may be evaluated against this qualification for the purpose of RPL and placement in learning programmes.

This qualification articulates horizontally with the following qualifications:

- ID 60390: National Certificate: Tyre and Tube Repairing and Fitting at NQF Level 2.
- ID 23257: National Certificate: Industrial Rubber Manufacturing at NQF Level 2.
- ID 48800: National Certificate: Quality Checking and Finishing of Manufactured Tyres at NQF Level 2.
- ID 48793: National Certificate: Tyre and Tyre Component Manufacturing at NQF Level 2.

In the non-technical area, horizontal articulation would be possible with the:

- ID 49280: National Certificate: Wholesale and Retail Distribution at NQF Level 2.

Vertical articulation would first require the individual to obtain relevant experience and/or learning at NQF Level 2, after which articulation would be possible with the:

- ID 23258: National Certificate: Industrial Rubber Manufacturing at NQF Level 3.
- ID 48794: National Certificate: Quality Checking of Tyres and Tyre Components at NQF Level 3.
- ID 48795: National Certificate: Tyre Assembly at NQF Level 3.
- ID 48798: National Certificate: Tyre and Tyre Component Manufacturing at NQF Level 3.

MODERATION OPTIONS

● Anyone assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor with the relevant Education, Training, Quality, Assurance (ETQA) Body, or with an ETQA that has a Memorandum of Understanding with the relevant ETQA.

● Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider with the relevant Education, Training, Quality, Assurance (ETQA) Body.

- Assessment and moderation of assessment will be overseen by the relevant Education, Training, Quality, Assurance (ETQA) Body, or by an ETQA that has a Memorandum of Understanding with the ETQA, according to the ETQA's policies and guidelines for assessment and moderation.

- Moderation must include both internal and external moderation of assessments at exit points of the Qualification, unless ETQA policies specify otherwise. Moderation should also encompass achievement of the competence described both in individual Unit Standards as well as the integrated competence described in the Qualification.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

For an applicant to register as an assessor, the applicant needs:

- An appropriate qualification with a minimum of 2 years' practical, relevant occupational experience in the field of tyre retreading. The subject matter expertise of the assessor can also be established by recognition of prior learning.
- Be active in the industry and be familiar with the particular aspect of tyre retreading and technology in which the learner has contextualised his/her skills and knowledge.
- To be declared competent in all the outcomes of the National Assessor Unit Standards as stipulated by South African Qualifications Authority.

NOTES

N/A

UNIT STANDARDS

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	119463	Access and use information from texts	Level 2	5
Fundamental	9009	Apply basic knowledge of statistics and probability to influence the use of data and procedures in order to investigate life related problems	Level 2	3
Fundamental	12461	Communicate at work	Level 2	5
Fundamental	7480	Demonstrate understanding of rational and irrational numbers and number systems	Level 2	3
Fundamental	9008	Identify, describe, compare, classify, explore shape and motion in 2-and 3-dimensional shapes in different contexts	Level 2	3
Fundamental	119454	Maintain and adapt oral/signed communication	Level 2	5
Fundamental	12463	Understand and deal with HIV/AIDS	Level 2	3
Fundamental	7469	Use mathematics to investigate and monitor the financial aspects of personal and community life	Level 2	2
Fundamental	9007	Work with a range of patterns and functions and solve problems	Level 2	5
Fundamental	119456	Write/present for a defined context	Level 2	5
Core	255458	Apply tread rubber to casings	Level 2	8
Core	13222	Deal with safety, health and environmental emergencies in the workplace	Level 2	4
Core	12465	Develop a learning plan and a portfolio for assessment	Level 2	6
Core	12466	Explain the individual's role within business	Level 2	4
Core	13220	Keep the work area safe and productive	Level 2	8
Core	13258	Participate in work group activities	Level 2	4
Core	255459	Perform activities to cure retreaded and repaired tyres	Level 2	6
Core	110078	Plan, organise and manage oneself in the organisation	Level 2	2
Core	255455	Prepare casings for retreading	Level 2	16
Core	9879	Use and care for tools and equipment	Level 2	10
Elective	13202	Apply study and learning techniques	Level 2	3
Elective	120313	Investigate work opportunities in order to make a personal employment or work decision	Level 2	2
Elective	9268	Manage basic personal finance	Level 2	6
Elective	117898	Move, pack and maintain stock in a distribution centre/warehouse	Level 2	12

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Elective	114902	Operate a computer in a Wholesale/Retail outlet	Level 2	6
Elective	242981	Operate defined purpose lift trucks	Level 2	4
Elective	242976	Operate overhead/gantry cranes	Level 2	5
Elective	12484	Perform basic fire fighting	Level 2	4
Elective	12483	Perform basic first aid	Level 2	4
Elective	12481	Sling loads	Level 2	4
Elective	9868	Demonstrate knowledge of, and rectify faults in motor vehicle tyres and wheels	Level 3	7
Elective	255454	Operate equipment for repairing and retreading off-road tyres	Level 3	4
Elective	242978	Operate truck-mounted cranes	Level 3	8

LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION**None**



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate equipment for repairing and retreading off-road tyres

SAQA US ID	UNIT STANDARD TITLE		
255454	Operate equipment for repairing and retreading off-road tyres		
ORIGINATOR	PROVIDER		
SGB Manufacturing and Assembly Processes			
FIELD	SUBFIELD		
6 - Manufacturing, Engineering and Technology	Manufacturing and Assembly		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 3	4

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Determine equipment parameters and set up the equipment.

SPECIFIC OUTCOME 2

Operate buffing equipment, repair systems, tread winding and curing equipment.

SPECIFIC OUTCOME 3

Monitor equipment operations and adjust equipment settings as required.

SPECIFIC OUTCOME 4

Finalise the process.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	60389	National Certificate: Tyre Retreading (Hot or Precure)	Level 2



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:*Prepare casings for retreading*

SAQA US ID	UNIT STANDARD TITLE		
255455	Prepare casings for retreading		
ORIGINATOR			PROVIDER
SGB Manufacturing and Assembly Processes			
FIELD			SUBFIELD
6 - Manufacturing, Engineering and Technology			Manufacturing and Assembly
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 2	16

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Prepare workstation for work activity.

SPECIFIC OUTCOME 2

Carry out initial inspection of tyre.

SPECIFIC OUTCOME 3

Use buffing machine to remove oxidised rubber.

SPECIFIC OUTCOME 4

Identify and skive imperfections and damage.

SPECIFIC OUTCOME 5

Identify repair requirements and repair injuries to tyres.

SPECIFIC OUTCOME 6

Apply cement to buffed surfaces and skived areas.

SPECIFIC OUTCOME 7

Apply quality checks on completed casing and complete work operations.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	60389	National Certificate: Tyre Retreading (Hot or Precure)	Level 2



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Apply tread rubber to casings***

SAQA US ID	UNIT STANDARD TITLE		
255458	Apply tread rubber to casings		
ORIGINATOR		PROVIDER	
SGB Manufacturing and Assembly Processes			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 2	8

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Prepare workstation for work activity.

SPECIFIC OUTCOME 2

Prepare tread rubber.

SPECIFIC OUTCOME 3

Apply tread rubber to prepared casing.

SPECIFIC OUTCOME 4

Complete work operations.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	60389	National Certificate: Tyre Retreading (Hot or Precure)	Level 2



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:*Perform activities to cure retreaded and repaired tyres*

SAQA US ID	UNIT STANDARD TITLE		
255459	Perform activities to cure retreaded and repaired tyres		
ORIGINATOR		PROVIDER	
SGB Manufacturing and Assembly Processes			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 2	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Prepare for work activity.

SPECIFIC OUTCOME 2

Prepare equipment and tyre for curing process

SPECIFIC OUTCOME 3

Load prepared tyre and initiate the curing process.

SPECIFIC OUTCOME 4

Complete curing process and unload tyre.

SPECIFIC OUTCOME 5

Perform final inspection and trimming of tyre and complete work process.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	60389	National Certificate: Tyre Retreading (Hot or Precure)	Level 2