No. 1364 **19 December 2008**

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

Generic Manufacturing, Engineering & Technology

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 19 January 2009.*** All correspondence should be marked **Standards Setting SGB for Generic Manufacturing, Engineering & Technology** and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:
National Certificate: Lifting Machine Operations

SAQA QUAL ID	*QUALIFICATION TITLE*		
64829	National Certificate: Lifting Machine Operations		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
QUALIFICATION TYPE	*FIELD*	*SUBFIELD*	
National Certificate	6 - Manufacturing, Engineering and Technology	Engineering and Related Design	
ABET BAND	*MINIMUM CREDITS*	*NQF LEVEL*	*QUAL CLASS*
Undefined	121	Level 3	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:

This Qualification is for any individual who is, or wishes to be, involved in operating a lifting machine/s or dealing with challenges in a lifting machine. Typical learners will be persons who are currently performing a range of activities and processes in lifting machine environment who have not received any formal recognition for their skills and knowledge, or learners who wish to embark on this qualification or those with a broad knowledge and skills base who work with lifting machines and who want to specialise in certain aspects of the lifting machine environment. While the Qualification is primarily aimed at providing the lifting machine operator the opportunity to acquire the knowledge, skills and attributes required to perform a variety of activities using lifting equipment, it does not preclude any other individual both within and outside the lifting machine environment from accessing it.

This Qualification also enables the learner to work with a degree of responsibility during the performance pf the lifting operation without working under direct supervision. The learner will also be able to display leadership skills among fellow workers in operating the lifting machine to perform a variety of tasks.

The Core component contains lifting machine and generic competencies covering:

> Basic first aid and firefighting skills.
> Knowledge of legislation pertaining to lifting machines.
> Knowledge of loads.
> The dynamics of the lifting environment and housekeeping within the lifting machine context.
> Appreciation of the lifting machine environment.
> Communication skills specific to the lifting machine environment.
> Hazardous substances.
> HIV and Aids.
> Occupational Health and Safety and the Environment.

The Elective component consists of three streams of specialisation in lifting machines, namely lift truck operations, crane operation and mobile elevated work platforms (MEWP), and a general stream which has Unit Standards related to the specialisation streams and Unit Standards relevant to the context in which the learner will operate. Each of these streams constitutes a set of appropriate Unit Standards that allow the learner to obtain competencies in particular areas within the lifting machine environment.

The Qualification ensures progression of learning, enabling the learner to meet standards of service excellence required within the lifting machine field of learning and provide access to a higher Qualification within the same or a related sector.

The Qualification also focuses on the skills, knowledge, values and attitudes required by a learner at this level and is designed to:

> To release the potential of people.
> To provide opportunities for people to move up the value chain.
> To provide opportunities for people to explore different activities within the lifting machine sector.

Rationale:

There are currently two Qualifications for lifting equipment on the NQF. However, both are for operating cranes and apply only to the construction context. They are the National Certificate: Construction: Crane Operations at NQF Level 2 and the National Certificate: Construction: Crane Operations at NQF Level 3. This National Certificate: Lifting Machine Operations at NQF Level 3 is the first of its kind to cover a variety of lifting machines including lift trucks, cranes and mobile elevated work platforms (MEWP). It is a generic qualification that encapsulates common competencies in the Fundamental and Core components and allows for the acquisition of specialised competencies in the Elective component. The Qualification encompasses both the NQF Levels 2, 3 and 4 competencies required by learners to operate the different lifting machines listed in the National Code of Practice for Training Providers (2005) - known as the NCOP and some of the new lifting machines being introduced into the South African market like the rubber-tyred gantry crane (RTG). The NCOP and has been incorporated into the Driven Machine Regulation 18 (11) of 1998.

The needs within various manufacturing, production and construction sectors has created a demand for people with the ability to use the different types of lifting machines to perform a wide range of activities safely and efficiently, with due consideration for the context in which they operate. This sector employs a large number of people. Currently most learners complete a particular Unit Standard or set of Unit Standards and the training prescribed in the NCOP in order to obtain a licence to operate a particular lifting machine. This qualification will allow learners and operators in the industry the opportunity to complete an entire qualification should they wish to do so and use it to progress further in their career path. This national Qualification and its related Unit Standards were developed to standardise the accreditation of learning programmes, resulting in improved quality in terms of programme delivery.

In terms of the learning pathway, the National Certificate: Lifting Machine Operations at NQF Level 3 will allow a learner to progress to work in plant production by completing the Further Education and Training Certificate (FETC): Plant Production at NQF Level 4. In addition, the learner could also acquire the Further Education and Training Certificate: Generic Management and pursue a career in management, at the appropriate level, within the lifting machine sector. The latter option contributes to transformation in the country as learners will acquire skills and competencies to gain access to positions within management structures. Other qualifications that allow for upward mobility are listed in the Articulation section.

The National Certificate: Lifting Machine Operations at Level 3 supports the objectives of the NQF in that it gives the learner access to a registered Qualification. It will ensure that the quality of education and training. The Qualification will allow learners to benchmark their competencies against international standards.

For those who have been in the workplace for a long time, this Qualification represents part of the Recognition of Prior Learning (RPL) process to acknowledge workplace skills acquired without the benefit of formal education or training.

RECOGNIZE PREVIOUS LEARNING?
Y

LEARNING ASSUMED IN PLACE
It is assumed that learners are competent in Communication and Mathematical Literacy at NQF Level 2.

Learners who have acquired the National Certificate: Constructions: Crane Operations at NQF Level 2 or any other relevant qualification.

Recognition of Prior Learning:

This Qualification may be achieved in part (or whole) through the recognition of relevant prior knowledge and/or experience. The learner must be able to demonstrate competence in the knowledge, skills, values and attitudes implicit in this Qualification. As part of the provision of recognition of prior learning providers are required to develop a structured means for the assessment of individual learners against the Unit Standards of the Qualification on a case-by-case basis. A range of assessment tools and techniques during formative and summative assessment procedures should be used which have been jointly decided upon by the learner and the assessor. Such procedures, and the assessment of individual cases, are subject to moderation by independent assessors. The same principles that apply to assessment of this Qualification also apply to recognition of prior learning.

Learners may provide evidence of prior learning for which they may receive credit towards the Unit Standards and/or the Qualification by means of portfolios, physical demonstrations or other forms of appropriate evidence as agreed to between the relevant provider and relevant ETQA or ETQA that has a Memorandum of Understanding in place with the relevant ETQA.

RPL is particularly important, as there are people in the sector or trade union movement with a variety of skills and competencies of differing quality and scope. It is important that an RPL process be available to assist in making sense of existing competencies and skills, and helping to standardise these competencies and skills towards a common standard.

Access to the Qualification:

There is an open access to this Qualification, keeping in mind the "Learning Assumed to be in Place".

QUALIFICATION RULES
A minimum of 121 credits is required to complete the Qualification which is made up of the following components:

> Fundamental: 36 credits.
> Core: 55 credits.
> Electives: 30 credits.

Total: 121 credits.

Motivation for the number of credits assigned to the Fundamental, Core and Elective Components:

Fundamental Component:

There are 36 credits - from Communications and Mathematical Literacy - allocated to this component at the level of the Qualification.

All the Unit Standards designated as Fundamental are compulsory.

Core Component:

55 credits have been allocated to Unit Standards designated as Core for the purpose of this Qualification. These Unit Standards provide the generic knowledge and competencies related to work in the lifting machine sector.

All the Unit Standards indicated as Core are compulsory.

Elective Component:

The Elective Component consists of Unit Standards in three streams of specialisation and a general stream, each with its own set of Unit Standards. The specialisation streams are: Crane Operations, Lift Trucks Operations, and the Mobile Elevated Working Platforms (MEWPs). The General stream has both lifting machine related Unit Standards and other Unit Standards relevant to the context in which they will operate. Learners are to choose a specialisation area and Elective Unit Standards at least to the value of 30 credits.

If the specialisation contains fewer credits than the minimum required for the Elective component, or if the learner chooses to operate just one type of machine and thereby does not achieve the full number of Elective credits required, then the learner must choose additional Elective Standards from the General stream to gain the number of credits required to complete the Qualification. Electives provide opportunities for the holistic development of the learner and allow for maximum flexibility and multi-skilling to enable the learners to achieve a qualification that is relevant to the context in which they work.

The following specialisations are available:

Specialisation Stream 1: Crane Operations:

Within this specialisation one or more of the following Unit Standards may be acquired. However, it must be noted that in the case of certain cranes (eg. mobile and tower) learners must acquire the NQF Level 2 Unit Standard for that particular type of crane before doing the NQF Level 3 Unit Standard for that type of crane, which involves more complex learning and skills.

> ID 116254: Operate a mobile crane, Level 2, 20 Credits.
> ID 253660: Supervise advanced mobile crane operations, Level 4, 20 Credits.
> ID 116981: Conduct advanced tower crane operations, Level 3, 20 Credits.
> ID 116231: Operate cab controlled overhead crane, Level 2, 8 Credits.
> ID 116235: Operate a pendant controlled overhead crane, Level 2, 5 Credits.
> ID 116255: Operate a tower crane, Level 2, 20 Credits.
> ID 116253: Operate a truck-mounted loader crane, Level 2, 5 Credits.
> ID 242982: Operate a heavy crane, Level 3, 14 Credits.
> ID 242976: Operate overhead/gantry crane, Level 2, 5 Credits.
> ID 242978: Operate truck-mounted cranes, Level 3, 8 Credits.

> ID 117086: Extract and transport timber using a tractor and trailer fitted with a self-loading crane in a production situation, Level 4, 25 Credits.
> ID 8039: Operating cranes, Level 3, 10 Credits.
> ID 260781: Operate a telescopic boom handler, Level 3, 10 Credits.
> ID 260761: Operate a reach stacker (telescopic container handler), Level 3, 10 Credits.
> ID 260757: Operate a straddle carrier, Level 3, 10 Credits.
> ID 260798: Operate a cantilever container crane (ship to shore), Level 3, 12 Credits.
> ID 260817: Operate a scotch derrick crane (ship mounted), Level 3, 10 Credits.
> ID 260760: Operate inland container crane (rail to road transfer) goliath type, Level 3, 10 Credits.
> ID 260760: Operate a ships crane, Level 3, 8 Credits.
> ID 260764: Operate a sugar cane crane, Level 3, 8 Credits.
> ID 260759: Operate a wharf side crane (rail mounted), Level 3, 8 Credits.
> ID 260765: Operate a rubber tyred gantry crane (RTG), Level 3, 12 Credits.
> ID 260763: Operate a floating crane, Level 3, 12 Credits.
> ID 260758: Operate a wall-mounted jib, Level 3, 7 Credits.
> ID 260838: Operate a wharf side jib crane, Level 3, 3 Credits.
> ID 260777: Operate a container side loader, Level 3, 8 Credits.

Total Number of Credits for Crane Electives: 293.

Specialisation Stream 2: Lift Truck Operations.

Within this specialisation one or more of the following Unit Standards may be acquired. However, it must be noted that in the case of certain lift trucks learners must acquire the NQF Level 2 Unit Standard for that particular type of lift truck before doing the NQF Level 3 Unit Standard, which involves more complex learning and skills.

> ID 8038: Operating lift trucks, Level 3, 6 Credits.
> ID 242981: Operate defined purpose lift trucks, Level 2, 4 Credits.
> ID 242974: Operate counter-balanced lift truck, Level 3, 7 Credits.
> ID 242972: Operate advanced defined purpose lift trucks, Level 3, 7 Credits.
> ID 260797: Operate a sideloader lift truck, Level 3, 8 Credits.
> ID 260762: Operate rough terrain/earthmoving/agricultural equipment with lift truck attachments, Level 3, 11 Credits.
> ID 260818: Operate a counter balanced lift truck in excess of 15 tons, Level 3, 9 Credits.

Total Number of Credits for Lift Truck Electives: 52.

Specialisation Stream 3: Mobile Elevated Working Platforms (MEWPs).

> ID 243276: Manage the transportation of mobile elevated work platforms (MEWP), Level 4, 7 Credits.
> ID 243273: Monitor and control the safety and operations of Mobile Elevating Work Platforms, Level 4, 8 Credits.

Total Number of Credits for MEWPs Electives: 15.

General Stream:

> ID 253638: Sling and communicate during crane operations, Level 2, 4 Credits.
> ID 116986: Sling complex loads and communicate during crane operations, Level 3, 12 Credits.
> ID 116075: Operate a sideboom, Level 2, 8 Credits.
> ID 117036: Conduct advanced sideboom operations, Level 3, 8 Credits.

> ID 253600: Use a sideboom to lift, lower and carry materials, Level 2, 5 Credits.
> ID 243021: Shift loads using lifting equipment, Level 2, 4 Credits.
> ID 12481: Sling loads, Level 2, 4 Credits.
> ID 116583: Perform tandem lifting, Level 4, 12 Credits.
> ID 115900: Demonstrate knowledge of skills required in the crane industry, Level 2, 5 Credits.
> ID 116976: Apply generic crane operation skills, Level 3, 5 Credits.
> ID 117001: Use mobile crane to carry out pile-driving, Level 3, 8 Credits.
> ID 115903: Demonstrate knowledge of the requirements for mobile crane delivery, Level 2, 8 Credits.
> ID 116989: Use a mobile crane to carry out demolition activities with demolition equipment, Level 3, 8 Credits.
> ID 253582: Lift and move a load using manual lifting equipment and tackle, Level 2, 8 Credits.
> ID 119927: Lift and move a load on a construction site, Level 3, 15 Credits.
> ID 253595: Direct the operation of an overhead crane, Level 2, 3 Credits.
> ID 254355: Inspect and conduct routine maintenance on an overhead crane, Level 3, 2 Credits.
> ID 253590: Use and move a load in suspension using a mobile crane, Level 3, 4 Credits.
> ID 253658: Perform a lifting task by using a mobile crane, Level 3, 8 Credits.
> ID 116283: Demonstrate knowledge of and apply regulatory requirements pertaining to crane operation, Level 2, 5 Credits.
> ID 116976: Apply generic crane operation skills, Level 3, 5 Credits.
> ID 244407: Lift and move a load using mechanical lifting equipment, Level 3, 7 Credits.
> ID 244365: Lift and move a load by means of a forklift, Level 2, 3 Credits.
> ID 244406: Move material by means of a mobilift in an underground mine, Level 2, 6 Credits.
> ID 242977: Operate ship cargo lifting appliances, Level 3, 10 Credits.
> ID 123260: Operate tailgates and tail-lifts, Level 3, 2 Credits.
> ID 12429: Develop a personal financial plan, Level 3, 2 Credits.

Total Number of Credits for General Electives: 171.

EXIT LEVEL OUTCOMES

1. Demonstrate an understanding of Occupational Health, Safety and Environmental standards in the work environment.

2. Demonstrate and apply knowledge of the lifting machine.

3. Perform emergency procedures in the lifting machine environment.

4. Operate a lifting machine.

ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

> Relevant sections of the legislation pertaining to health, safety and the environment are identified, discussed and applied to ensure worker safety.
> Occupational health and safety and environmental principles are explained in accordance with workplace requirements.
> The impact of risks and hazards are explained and preventative measures are applied in order to minimise/eliminate risks and hazards in the lifting machine environment.
> Hazardous substances are handled according to specified legal requirements and standard operating procedure.
> Knowledge of HIV/Aids and it implications for employers and employees is demonstrated to emphasise awareness of the pandemic.

Associated Assessment Criteria for Exit Level Outcome 2:

> The types of lifting machines are identified to indicate the differences between them.
> The components of the machines are described in terms of their functions and the way in which the components are inter-related.
> The attachments to the lifting machines are identified in terms of the machines to which they belong and the functions that they perform.
> The principles of leverage are described so that the lifting machines are used in a safe manner.
> The systems, instruments and controls of the lifting machines are described in terms of their functions.
> Refuelling and maintenance procedures are described to indicate the importance of these activities to maintain production.
> Calculations are used to perform minor routine maintenance and repairs.

Associated Assessment Criteria for Exit Level Outcome 3:

> Knowledge of first aid equipment and procedures is applied after casualties at an accident scene have been prioritised.
> Knowledge of types of fires, the procedures to deal with them and firefighting equipment is used to extinguish fires.
> Emergencies arising from lifting machine operations are managed according to standard operating procedure.

Associated Assessment Criteria for Exit Level Outcome 4:

> Work activities are planned and work areas prepared according to worksite procedure.
> Lifting machine is checked at pre-start and shut down as per manufacturer's instructions and standard operating procedure.
> Attachments for lifting equipment are used according to manufacturer's instructions.
> Information on the operational fitness of the lifting machine is recorded according to company procedure.
> Technical writing skills are applied in order to record extraordinary or unusual occurrences pertaining to lifting machines.
> Lifting equipment is operated as per manufacturer's instructions and standard operating procedure.
> Approved communication techniques are used during lifting and slinging operations to ensure that work is performed safely and optimally.
> Lifting gear is inspected and evaluated and loads are prepared and slung in accordance with relevant Codes of Practice and standard operating procedure.
> Lifting machine is configured for specialised service, operated in accordance with manufacturer's instructions for specialised purpose and reconfigured for normal service.
> Knowledge of loads is applied during the operation of a lifting machine.
> Safety measures with respect to specific lifting machines are conducted according to manufacturer's instructions and relevant legislation.
> Quality safety and environmental procedures are followed in terms of worksite procedures.

Integrated Assessment:

The importance of integrated assessment is to confirm that the learner is able to demonstrate applied competence (practical, foundational and reflexive) and ensure that the purpose of this Qualification is achieved. Both formative and summative assessment methods and strategies are used to ensure that the Exit Level Outcomes and the purpose of the Qualification are achieved through achieving the Unit Standards. Learning, teaching and assessment are inextricably linked.

Learning and assessment should be integrated and assessment practices must be fair, transparent, valid and reliable. A variety of assessment strategies and approaches must be used. This could include tests, assignments, projects, demonstrations and/or any applicable method. Evidence of the acquisition of competencies must be demonstrated through the Unit Standards, which enhance the integration of theory and practice as deemed appropriate at this level.

Formative assessment is an on-going process which is used to assess the efficacy of the teaching and learning process. It is used to plan appropriate learning experiences to meet the learner's needs. Formative assessments can include a mix of simulated and actual (real) practice or authentic settings. Feedback from assessment informs both teaching and learning. If the learner has met the assessment criteria of all the Unit Standards then s/he has achieved the Exit Level Outcomes of the Qualification.

Summative assessment is concerned with the judgement of the learning in relation to the Exit Level Outcomes of the Qualification. Such judgement must include integrated assessment(s) which test the learners' ability to integrate the larger body of knowledge, skills and attitudes, which are represented by the Exit Level Outcomes. Summative assessment can take the form of oral, written and practical examinations as agreed to by the relevant ETQA.

Integrated assessment must be designed to achieve the following:

> An integration of the achievement of the Exit Level Outcomes in a way that reflects a comprehensive approach to learning and shows that the purpose of the Qualification has been achieved.
> Judgement of learner performance to provide evidence of applied competence or capability.

Assessors and moderators should make use of a range of formative and summative assessment methods. Assessors should 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 assessed. The assessment of the critical cross-field outcomes should be integrated with the assessment of specific outcomes and embedded knowledge.

INTERNATIONAL COMPARABILITY

This National Certificate: Lifting Machine Operations at NQF Level 3 embraces a whole range of lifting machines from cranes (of all types), to lift trucks (of all types) to mobile elevated working platforms (MEWPs). In addition, the Core component of this generic Qualification addresses the following competencies:

> Basic first aid and firefighting skills.
> Knowledge of legislation pertaining to lifting machines.
> Knowledge of loads.
> The dynamics of the lifting environment and housekeeping within the lifting machine context.
> Appreciation of the lifting machine environment.
> Communication skills specific to the lifting machine environment.
> Hazardous substances.
> HIV and Aids.
> Occupational Health and Safety and the Environment.

Hence, the international comparability mainly covers training on the range of machines, safety, communication and hazardous substances.

United States:

Most of the courses offered are short courses, many for people already working in the lifting machine environment.

America Crane Training:

This provider offers programmes which comprise of classroom and hands-on training, mostly in the form of short course. Most effective learning takes place on the actual equipment used by employees. It is for this reason that on-site training is encouraged.

CCO Prep Course:

Length of Program 3 - 4 Days.

This prepares the candidate in each of the four domains included in the Core examination and the four specialty exams. By the end of this training, the operator will have the confidence and skills necessary to successfully complete the National Commission for the Certification of Crane Operator's examination.

Core Examination:

> Domain 1: Site (Approximately 24% of the test).
> Domain 2: Operations (Approximately 23% of the test).
> Domain 3: Technical Knowledge (Approximately 28% of the test).
> Domain 4: Manufacturer's Load Charts (Approximately 25% of the test).

Specialty Examinations:

> Lattice Boom Truck Cranes.
> Lattice Boom Crawler Cranes.
> Small Telescopic Boom Cranes (17.5 Tons).
> Large Telescopic Boom Cranes (>17.5 Tons).

The organisation also runs a number of crane safety courses, namely:

Offshore Crane Safety:

> Length of Program 4 - 5 Days.

Regulations and Standards Referenced:

> ASME B30.8: Floating Cranes and Derricks.
> ASME B30.6: Derricks.
> ASME B30.9: Slings.
> OSHA 1917.45: Cranes and Derricks.

Topics and Subject Matter Covered:

> Causes and Results of Crane Accidents.
> Types, Components and Terminology.
> Operator Qualifications.
> Operators Responsibilities.
> Vessel and Weather Considerations.
> Pre-Operational Inspections.
> Making a Lift Plan.

> Types of Lifts Static/Dynamic.
> Utilizing Crane's Full Potential.
> Structural Ratings V. Stability.
> Understanding and Using Load Charts.
> Safe Operating Procedures.
> Hand Signals and Responsibilities of Signal Person.
> Boom Assembly and Disassembly.
> Securing the Crane.
> Rigging (Safe Procedures and Proper Inspection).

Crane Safety and Rigging:

4 Day Program or 2 Day Refresher.

Regulations and Standards Referenced:

> ASME B30.5: Mobile Cranes.
> OSHA 1926.550: Cranes and Derricks.
> OSHA 1910.180: Crawler, Locomotive and Truck Cranes.
> Power Crane Shovel Association Number 4.

Overhead Crane Safety:

1-2 Day Program.

Regulations and Standards Referenced:

> OSHA 1910.179: Overhead and Gantry Cranes.
> ASME B30.2: Overhead and Gantry Cranes.
> ASME B30.11: Monorails and Underhung Cranes.
> ASME B30.16: Overhead Hoists (Underhung).
> ASME B30.17: Overhead and Gantry Cranes.

Inspecting Mobile Cranes.

3 Day Program.

Regulations and Standards Referenced:

> USAS B30.5 1968.
> ASME B30.5 Mobile Cranes.
> ASME B30.10 Hooks.
> OSHA 1926.550 and 1910.180.
> Power Crane Shovel Association #2 and #4.

Rough Terrain Fork Lift Safety:

1-2 Day Program.

Regulations and Standards Referenced:

> OSHA 1926.602: Material Handling Equipment.
> ASME B56.6: Rough Terrain Fork Lift Trucks.

Industrial Lift Trucks:

1-2 Day Program.

Regulations and Standards Referenced:

> OSHA 1910.178: Powered Industrial Trucks.
> ASME B56.1: Low Lift and High Lift Trucks.

Aerial Lift Safety:

1 Day Program.

Regulations and Standards Referenced:

> OSHA 1910.67: Vehicle-Mounted Elevating Work Platforms.
> OSHA 1926.556: Aerial Lifts.
> ASME/SIA A92.2: Vehicle Mounted Elevating & Rotating Aerial Devices.
> ASME/SIA A92.3: Manually Propelled Elevating Aerial Platforms.
> ASME/SIA A92.5: Boom Supported Elevating Work Platforms.
> ASME/SIA A92.6: Self-Propelled Elevating Work Platforms.

World Wide Crane Training:

This provider, based in California, also offers a number of short courses.

CCO Preparatory Training:

A 2-3 day course to prepare the candidate to take each of the four specialty exams including the Core examination. This training will prepare the candidate to successfully complete the National Commission for the Certification of Crane Operator's examination.

Crane Operator:

Eight hour classroom training followed by a minimum of one hour per student of individual hands-on training, and is the governing factor for the program duration. Crane nomenclature and component identification:

> Structural and stability factors.
> Radius v. boom angle.
> Proper set up procedures.
> Crane accidents and their prevention.
> Pick and carry procedures.
> Detailed study of load charts.

Boom Truck Crane:

Crane Operator's Course with eight hours of classroom training followed by individual hands-on training. A minimum of one hour per student is required for the hands-on training, The two-day course highlights the following:

> Crane nomenclature and component identification.
> Structural and stability factors.
> Radius v. boom angle.
> Crane accidents and their prevention.
> Proper set up procedures.

> Quadrants of operation.
> Detailed study of load charts.

A complete course outline will be sent upon request.

Overhead Crane Operator:

Overhead Crane Operator's Course with classroom session followed by individual hands-on training. This is a two-day course. Crane nomenclature and components:

> Structural factors.
> Capacity factors.
> Operational procedures.
> Crane accidents and their prevention.
> Rigging Procedures.

Portable Tower Crane Operator:

Portable Tower Crane Operator's Course with individual hands-on training. This is a two-day course. The course highlights the following:

> Inspection and Maintenance.
> Proper setup.
> Crane component identification.
> Quadrants of operation.
> Crane controls.
> Proper operating procedures.
> Riggings loads.
> Start up and Shut down procedures.
> Detailed study of load charts.

Forklift Operator:

Forklift Operator's Course is a two-day program. The course is based on National Safety Council approved courses, and highlights the following:

> Safe operating principles.
> Maintenance and inspection.
> Safe operating rules.
> Lifting mechanics.

Aerial Work Platform/Manlift Operator Training:

A two-day course, highlighting the following:

> Safe operating principles for type of machine.
> Maintenance and Inspection.
> Safe operating rules.
> Lifting mechanics.
> Detailed study of load charts (that apply).

U.S. Navy NAVFAC P-307 Safety Course:

The course is a detailed study of NAVFAC P-307 requirements for category I, II and III weight handling equipment. This program exceeds the Navy training requirements for its personnel and is presented around the world.

Canada:

The Electrical Industry Training Institute Limited.

This company offers the following refresher courses:

Forklift Certification:

This is a one-day course consisting of classroom theory and a practical evaluation on a supplied machine. Courses will cover all application of forklifts and their operation. Theory of stability will also be covered. Also WCB Regulations will be reviewed.

Course duration: 1 day.

Target audience: Persons who already operate a forklift or lift truck as part of their employment.

The Bright Training and Safety Wear:

This is a company that operates throughout North America and provides training in the following.

Fork Truck Operator Training Course Content:

The two segments to the forklift certification program include classroom theory and practical evaluation:

> Review legislation and fines/penalties relating to the (OSHA) Occupational Health and Safety Act.
> Outline the responsibilities of Owner, Employer, Supervisors, and Workers.
> Options available to a driver who is asked to perform unsafe work, or an unsafe act.
> Group discussion on experiences of actual incidents or close calls.
> Consequences of unsafe driving of an Industrial Fork Truck: Legal, Moral, Ethical, Social and Psychological.
> Review the classifications of the Industrial Forklifts and highlight differences.
> Pre-shift inspections.
> Stability triangle/trapezoid.
> Centre of Gravity of the load and Centre of Gravity of the truck.
> Capacity of Industrial Forklifts, capacity plates (reading and understanding).
> Specific hazards and controls when driving an Industrial Forklift.
> How to respond to an emergency situation involving an Industrial Forklift Truck.
> List specific driving rules to your use of Industrial Forklifts.
> Forklift training will involve verification and review of 50 questions, True and False format.

Theory is approximately four hours in length.

Lift Truck Training/Forklift Operator Training:

Lift truck training/forklift operator evaluation driver review involves the following:

All drivers completing the "driver evaluation" must have successfully completed "concepts of safe and efficient driving" training. Upon successful completion of the driver operator training program, participants will be "Certified" as Industrial Lift Truck Drivers.

Each lift truck driver completes a Pre-shift inspection.

Criteria: Observed Picking up a Load:

> Forks at correct height.
> Smooth stopping.
> Forks level before entering.
> Load is centered.
> Load is stable for lifting and transporting.
> Load all way to heel of forks.

> Proper tilt for type of load.
> Looks before backing up.
> Stops at all blind corners.
> Proceeds with load at safe height.
> Proceeds at safe speed.
> How to deal with obstructed view.

Criteria: Observed Stacking a Load:

> Approach with load down.
> Looks behind before backing out.
> Raising load.
> Smooth operation.
> Levels load before putting in place.
> Gently places.
> Insures all people are at a safe distance.
> Aware of rear end swing.

Propane Handling Observation if applicable:

> Review physical characteristics of an on site propane tank.
> Complete overview of tank condition (O-ring, collar, dating, soap solution check, etc).
> Lift Truck Training will require all participants to change a propane tank on an Industrial Lift Truck, or propane heater (site specific) in a competent manner.
> Review evaluation form with participant.

Parking: Forks flat, Tilt forward, Parking brake on.

Duration: The average time to complete a "driver training evaluation" is one hour, for experienced drivers. It is suggested that "new" drivers be instructed for a minimum of four hours prior to being evaluated.

Overhead Crane Training Hoist/Sling Operator Safety Certification:

Overhead crane training/hoists sling operator certification safety course. Our professional staff of trainers and consultants will teach the basics of safe crane/sling operation and preshift inspections, so as to increase productivity and efficiency while reducing the risk of product damage, property damage, and accidents. Overhead crane training certification, like some of our other safety courses is also customized for people in the workplace struggling with illiteracy.

Concepts of Safe Use of Cranes/Slings:

> Material Handling regulations under the OSHA 49 through 64.

> Pre-Shift checks and inspection.
> Analyze the lift.
> Load limits and capacity.
> Maintaining a safe distance.
> Lifting, moving, placing loads.
> Standard safe practices.
> Controls and basic operation.
> Use of chains, slings, spreader bars, grabbers, and other attachments.

Observation Of Safe Use Of Cranes/Slings:

> Each Operator will be evaluated on the safe use of cranes/slings.
> Using equipment they will be using in their regular use of the crane hoist/slings.
> A written evaluation of this observation is completed, reviewed with participants, and given to the company for their records.

Aerial Platform Training Course: Elevated Work On Boom Lifts:

This program is divided into two segments:

> Part one consists of an in class theoretical course which includes a competency evaluation (true & false test) and review.
> Part two consists of an on site evaluation which will verify the individuals ability to operate a specific Manlift, in a safe manner.

Part One: "Concepts of Safe and Efficient Operation":

Scissor Lift Purpose:

Provide participants a general understanding of the safe and efficient operation of "Power Operated Mobile Work Platforms". Participants will be able to identify specific health and safety hazards associated with operating manlifts/boom lift.

Course Content:

Review related sections of the OHS Act, CSA Standards, and Scaffold Industry Association of Canada specifications:

> Operating unsafe equipment or perform unsafe acts.
> Outline fines and penalties for improper use of the equipment.
> Lifting device and mobile equipment definitions.
> Complete review of "fall arrest" required, and recommended.
> Pre-shift equipment inspection and work area survey requirements.
> Review site specific Hazards, and controls for safe operation of a Manlift.
> Review safety decals, load capabilities, and specific equipment requirements.
> Fifteen key elements for safe operation of a "Power Elevated Mobile Aerial Work Platform".

Part Two: "Practical Evaluation":

Purpose:

All operators must successfully complete the theoretical portion of this program prior to being evaluated on site-specific equipment.

> Each individual will be tested to ensure they can safely and efficiently operate your site-specific equipment. Evaluations will be completed during regular working shifts, wherever possible. On successful completion of both parts one and two of this program, the participant will be certified as a "Power Operated Mobile Platform (Manlift) Operator".

Evaluation Content:

Pre-shift equipment inspection, and work area survey:

> Uses proper personal protective equipment as required by the OH&S Act and respective employer.
> Use and proper fitting of fall arrest (harness) device.
> Aware of the manufacturers specs for specific equipment (load limits, etc).
> Uses a signaller or spotter where required.
> Operates lift only on solid and level ground.
> Operates lift with all other workers clear of the site.
> Closes off site when doing major overhead work/projects.
> Smooth/safe operating speed for various plant conditions.
> Lift mobilizes only when the unit is in fully lowered position.
> All tools and associated equipment safely stored on the lift platform.

Lucid Safety Training and Consulting LTD:

This provider offers training in the following machines:

Lift Truck Operator Training:

Course Description:

The lift truck training certification course consists of classroom theory training and in-plant practical training. All participants must pass both the theory and practical test to be certified (OSHA).

This lift truck training program is designed to meet the needs of current workforces where literacy and/or language barriers are problematic. The theory testing provides the customer with actual test questions and participant answers. This due diligence measure helps prove appropriate and necessary questions were asked and answered. If the fork truck uses propane as a fuel, participants become certified in safe handling as required by the Energy Act of Ontario.

Program Content:

> Review of the Occupational Health and Safety Act and the legal requirement for using lifting equipment including responsibilities of the owner, supervisor and worker.
> Consequences of improper use of a lift truck.
> Key points of CSA B335-04 Safety Standard for Lift Trucks.
> Understanding the different kinds of lift trucks (electric motor rider lift trucks, electric motor narrow aisle lift trucks, electric hand trucks, and internal combustion engine lift trucks).
> The lifting capacity of the lift trucks.
> Understanding centre of gravity, the stability triangle and trapezoid and potential for lift truck flip overs.
> Safe operating practices.
> Use of Controls.
> Provisions for Lifting people.
> Understanding lifting attachments.
> Pre-shift checks of the lift truck.

> Theory and practical tests.

Who conducts the safety training?:

Our instructors have many years of expertise. They not only understand the requirements of current legislation but understand the everyday issues and concerns of the operators. Their focus is doing everything they possibly can to prevent lift truck-related accidents at your facilities.

We will conduct fork lift training anywhere in North America. It is advisable that forklift operators be trained on the lift trucks they will be assigned to use.
Overhead Crane Training/Lifting Devices.

Program Description:

The overhead crane training certification program consists of a classroom training session and a practical training session. All participants must pass both sessions to be certified. Successful participants receive a wallet certificate of achievement.

This program is designed to break through literacy and/or language barriers in its design while, at the same time provide the customer with actual test questions and participant answers.

Program Content:

> The Occupational Health and Safety Act and the legal requirement for using lifting equipment.
> Review of the Occupational Health and Safety Act and the legal requirement for using an industrial crane including.
> Responsibilities of the owner, supervisor and worker.
> Consequences of improper use of a crane- The function of different kinds of cranes and lifting devices.
> The lifting capacity of the cranes.
> Crane load limits.
> Using different kinds of slings, rigging methods, and the effect of sling angle.
> Safe lifting practices (lifting, moving, and placing loads).
> Maintaining a safe distance.
> Proper use of controls (pendent, radio, and cab).
> Understanding lifting attachments.
> Pre-shift checks of the crane.
> Theory and practical tests.

Aerial Platform/Boom Lift Training:

Program Description:

The aerial Platform/Boom Truck Training program consists of a classroom training session and a practical training session. In Canada, two CSA Standards are involved, B354.2 Self-Propelled Elevating Work Platforms and B354.4 Self-Propelled Boom-Supported Elevating Work Platforms. Self-propelled elevating work platforms refer to work platforms that cannot be positioned completely beyond the base on the machine. Self-propelled boom-supported elevating work platforms refer to platforms that can be positioned completely beyond the base of the machine. This theory training is quite similar for both types.

Elevated Work Program Content:

> Legal requirements under the Occupational Health and Safety Act and Regulations.

> Requirements of Canadian Standards Association Codes CAN3-B354.2 Self-Propelled Elevating Work Platforms for Use on Paved/Slab Surfaces and CAN3 -B354.4 Boom-Type Elevating Work Platforms.
> Pre-shift inspection of the elevating work platforms.
> Precautions for lifting, lowering, and moving.
> Personal protective equipment including fall arrest systems.
> Operation of the elevating work platforms.
> Safe operating practices.
> The lifting capacity of the lift trucks.
> Use of emergency controls.
> Theory and practical tests.

General Machine Operator Awareness:

Program Content:

> Legal requirements of the Occupational Health and Safety Act and Regulations.
> Key points of the Canadian Standards Association Z432-04 for Safeguarding of Machinery.
> Conducting risk assessments.
> Pre-shift inspections.
> Importance of lockout procedures when required.
> Use of blocking devices.
> Checking safety devices.
> Types of guards and guarding devices.

Machine Risk Assessment Training:

Program Content:

> Risk assessment and hazard analysis.
> Principles of machine safety.
> Types of hazards and suitable safeguards.
> Strategy for selecting safety measures.
> Suitable safeguards and lockout.

Denmark:

Description of the vocational education and training programme for:

Operation of tower and swing crane with international lifting certificate: A-certificate:

Profile of skills and competencies.

A person having obtained an A-certificate:

> Is able to perform crane lifts with construction machines, including assessing, planning and performing lifting assignments with due consideration of the point of gravity and the correct and safe position and handling of the load from a point of view of stability.
> Is able to assess and identify various risky points in the lifting and transport process, including taking into account sharp edges of the load, slippage effects and loose objects.
> Is able to identify ordinary lifting gear and has knowledge of the labelling of such gear and of applicable rules on load line loads, safety factors and rejection limits as well as of statutory overhauls and storage regulations.
> Is able to work as a banksman and to control the lifting and transport process by means of generally used standard signalling and radio communication.

> Is able to identify the major parts of a digging or loading machine and has knowledge of its statutory safety equipment in relation to the performance of crane operations, including statutory overhauls.

Duration and mode of education and training:

The total duration of the education programme is 20 days.

The education programme has taken place at a VET-institution which according to the resolutions of the legislation is approved by the Ministry of Education to offer and implement the education programme.

Level of certificate:

The training programme is a full vocational education and training programme, equivalent to level 3 in the Isced system (Isced 1997).

Explanatory note:

The purpose of this document is to explain the contents of the certificate. Wherever possible the various sections of the descriptions are based of the recommendations given in 2241/2004/EC of the European Parliament and Council of 15 December 2004, on a single Community framework for the transparency of qualifications and competences (Europass).

The United Kingdom:

Sivatech Ltd Fork Truck Training:

Operator Training:

> Truck Type: Counterbalance Truck.
> Truck Group: B1 B2 B3 G2.
> Course Title: 1 Day Refresher Safety Course.
> Delegates: Maximum of 3 trainees per course.

Course Objective: On successful completion of this theoretical and practical training course trainees should be able to operate the machine safely and competently. Trainees will have practised manoeuvring the machine both unladen and laden in the confined areas, stacked and de-stacked at various levels and will have been instructed in daily and pre-shift inspection and refuelling procedures. They will also have undergone the appropriate theoretical and practical tests of 'basic operating skills' which are recognized by the Independent Training Standards Scheme & Register (ITSSAR) and comply with the recommendations and standards of the Health and Safety Commission (HSC) ACoP and Supplementary Guidance, Rider Operated Lift Trucks - Operator Training (L117).

Course Syllabus: Theoretical:

> Introduction to lift trucks: Explanation of the need to train people to operate these machines correctly and the operator's responsibilities under the Health & Safety at Work legislation and regulations.
> Daily inspection procedure: Explanation of the reasons why operators must inspect the truck at the start of the day or shift and the procedure for reporting faults or defects. A practical session is also completed on this subject.
> Lift truck stability: Explanation of the trucks rated capacities and how weight, distance and forces affect the stability of the machine.

> Battery Care/Refuelling: Explanation of the need for safe systems of work, when recharging batteries or refuelling gas and diesel trucks and the different hazards, which may be present. A practical session is also completed on this subject.
> Safe truck operations and Industrial safety: Explanation of the operator's safety rules and policies, the need for a safe working environment including personal responsibilities.
> Handling dangerous goods: Explanation of the various signs, labels and symbols, which the operator may encounter and the correct methods of handling hazardous or dangerous goods, including procedures to adopt in the event of spillage.

Course Syllabus: Practical:

> Elementary driving: Introduction to and explanation of the instruments, hydraulic and motive controls. Demonstration, explanation and guided practise in the correct techniques and procedures for travelling with an unladen and laden truck, both in the forwards and reverse directions, manoeuvring in unrestricted areas, progressing to confined areas.
> Safe operating procedures: Demonstration and explanation together with guided practise in the correct procedures to use when handling, carrying, stacking and de-stacking loads in free standing stacks and racking.
> Battery Care/Refuelling: Demonstration, explanation and guided practise in either the correct procedures to adopt when carrying out day to day recharging of batteries or refuelling gas and diesel trucks. Also covered in section 4 of the theoretical syllabus.
> Daily inspection procedures: Demonstration, explanation and guided practise in examining the machine at the start of the day or shift and when taking over from another operator during the shift. In addition, course candidates will have been instructed in the procedures for reporting faults or defects and the need for maintaining a record of the examination.
> Test:
> Theoretical Test: A multiple choice question paper covering the theory content of the course.
> Pre-use Check: Inspection of the machine.
> Practical Skills Test: A practical 'basic operating skills' test.

Australia:

Cranewise Australia:

The company provides nationally recognised training and assessment services in a wide range of occupational areas associated with the Civil and General construction, Mining/Extractive, Local government, Rural and Allied industries. Cranewise Australia is a Registered Training Provider under the Australian Quality Training Framework for Cranes, Rigging, Scaffolding and Loadshifting Courses.

They deliver a wide range of short courses in construction operations, elevated work platforms, loadshifting, materials handling (dogging & rigging), height safety, workplace health & safety and all mobile cranes.

Some popular short courses are the Vehicle Loading Crane (Truck crane under 10m/t). These courses are Lifting equipment Awareness, Harness Awareness and the under 11m Elevated Work Platform (YELLOW CARD).

Training Programs/Course List.

Cranes and Material Handling:

> Overhead Bridge and Gantry Crane.
> CV Vehicle loading crane < 10tm.
> CV Vehicle loading crane > 10tm (1 day courses available).
> CN - non slewing mobile crane.

> C2- 20 ton slewing mobile crane.
> C6- 60 ton slewing mobile crane.
> C1- 100 ton slewing mobile crane.
> CO- Unlimited slewing mobile crane.
> Lifting Equipment Awareness (1 day course available).
> Boom type elevating work platforms WP - 11m and over.

Elevating work platforms (yellow card - below 11m):

Loadshifting:

> Front End Loader.
> Forklift Operations.

All Skills Services:

The organisation offers a course of operating a forklift.

Students are new entrants to the transport industry who require licensing from the licensing body of Victoria operated by WorkCover. Prior to licensing students cannot be employed as forklift vehicle driver. Completion of this qualification is required for licensing eligibility.

The course provides a pathway to obtain a forklift licence. The course is delivered over an 8 hour period per student as an instructor led program. All delivery and assessment can be a combination of both on and off the job.

The program has been organized to provide students with general skills, background information and specific knowledge about driving a vehicle, which is then applied in discussion, questioning, role-plays and projects for the industry specific unit.

Japan:

Japan Crane Association (JCA) is a public corporation approved by the Ministry of Health, Labour and Welfare, the objectives of which are to prevent work-related accidents due to cranes, and upgrade the safety management of the load transportation.

JCA is playing a major role for international standardization activities for cranes (including mobile cranes) as a national drafting body of ISO/TC96 (Crane and related equipment) and the secretariat of ISO/TC96/SC5 (Use, operation and maintenance).

In addition, JCA acts as a drafting body of national standards and/or safety regulations of cranes and conducts the research entrusted by Government.

For preventing work-related accident due to cranes, etc., JCA provides the operator training course, skills training course and other various safety and health education courses.

Courses offered:

Operator Training:

Crane operator training:

> Crane operator training course.
> Mobile crane operator training course.

Skills Training:

> Skills training course for operating floor-operated type crane.
> Skills training course for operating small-sized mobile crane.
> Skills training course for sling work.

Special Education:

> Special education for operating a crane with small lifting capacity.
> Special education for operating a mobile crane with small lifting capacity Safety and Health Education.
> Safety and health education for personnel engaged in periodic self inspection for overhead traveling crane.
> Safety and health education for personnel engaged in periodic self inspection for mobile crane.
> Safety and health education for foremen engaged in erection and dismantling work of climbing tower crane.
> Safety and health brush-up education for crane operator.
> Safety and health brush-up education for mobile crane operator.

Africa:

The following countries in Africa were checked for purposes on international comparability: Namibia, Zambia, Zimbabwe, Egypt, Nigeria and Ghana. These countries train on the programmes provided by international training companies, some of which are listed below:

> Crane Operator Training School in California, USA.
> Crane Training Canada - International Overhead Crane Operator Safety Training.
> Safe-Tech Training in Canada.
> Thomas Truck Training in the United Kingdom.
> Train-a-Lift Ltd in the United Kingdom.
> Australian Skills Training.

Conclusion:

Most of the course/training offered internationally constitutes of short courses on particular machines. The training includes aspects of health and safety and the actual use of the lifting machine. One or two course are quite extended but not like this Qualification. This Qualification contains many generic competencies and will allow the learner to study for a qualification at a higher NQF level and thereby increase the learner's opportunities to obtain a higher position in the industry. While the training on a single lifting machine is focussed and less time-consuming, it must be noted that it does not allow for much mobility except to prepare the learner for that machine and possibly train on another lifting machine later.

ARTICULATION OPTIONS

This Qualification lends itself to both vertical and horizontal articulation possibilities.

Horizontal articulation is possible with the following Qualifications:

> ID 49052: National Certificate: Plant Production, NQF Level 3.
> ID 59730: National Certificate: Mechanical Handling (Rigging), NQF Level 3.
> ID 49080: National Certificate: Construction: Advanced Crane Operations, NQF Level 3.

Vertical articulation is possible with the following Qualifications:

> ID 49009: National Certificate: Plant Production, NQF Level 4.

> ID 57712: Further Education and Training Certificate: Generic Management, NQF Level 4.
> ID 59731: Further Education and Training Certificate: Mechanical Handling (Rigging), NQF Level 4.
> ID 49053: National Certificate: Supervision of Construction Processes, NQF Level 4.
> ID 59298: Further Education and Training Certificate: Freight Forwarding and Customs Compliance, NQF Level 4.

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, and Assurance (ETQA) Body.

> Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider with the relevant ETQA.

> Assessment and moderation of assessment will be overseen by the relevant ETQA according to the ETQA's policies and guidelines for assessment and moderation; in terms of agreements reached around assessment and moderation between ETQA's (including professional bodies); and in terms of the moderation guideline detailed immediately below.

> 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, the integrated competence described in the Qualification and will include competence within core sales and the elective standards relevant to the economic sector.

> Anyone wishing to be assessed against this Qualification may apply to be assessed by any assessment agency, assessor or provider institution that is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

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

> A relevant Qualification at NQF Level 4 or higher.
> To be registered as an assessor with the relevant ETQA.

NOTES

N/A

UNIT STANDARDS

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	119472	Accommodate audience and context needs in oral/signed communication	Level 3	5
Fundamental	9013	Describe, apply, analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	Level 3	4
Fundamental	119466	Interpret a variety of literary texts	Level 3	5
Fundamental	119457	Interpret and use information from texts	Level 3	5
Fundamental	9012	Investigate life and work related problems using data and probabilities	Level 3	5
Fundamental	243838	Use and apply matrices and graphs to organise information and solve problems	Level 3	2
Fundamental	7456	Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	Level 3	5
Fundamental	119465	Write/present/sign texts for a range of communicative contexts	Level 3	5
Core	259619	Conduct workplace Occupational Health and Safety (OHS) inspections	Level 2	3
Core	116533	Demonstrate basic knowledge and understanding of emergency preparedness and response	Level 2	2
Core	8015	Executing general office administration	Level 2	4

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Core	12484	Perform basic fire fighting	Level 2	4
Core	116534	Carry out basic first aid treatment in the workplace	Level 3	2
Core	115093	Control workplace hazardous substances	Level 3	4
Core	13915	Demonstrate knowledge and understanding of HIV/AIDS in a workplace, and its effects on a business sub-sector, own organisation and a specific workplace	Level 3	4
Core	260778	Demonstrate knowledge of the regulatory framework for lifting machines	Level 3	8
Core	260779	Describe different categories of lifting machines	Level 3	8
Core	8016	Maintaining occupational health, safety and general housekeeping	Level 3	8
Core	260837	Move and store a hazardous load	Level 3	8
Elective	116283	Demonstrate knowledge of and apply regulatory requirements pertaining to crane operation	Level 2	5
Elective	115900	Demonstrate knowledge of skills required in the crane industry	Level 2	5
Elective	115903	Demonstrate knowledge of the requirements for mobile crane delivery	Level 2	8
Elective	253595	Direct the operation of an overhead crane	Level 2	3
Elective	253582	Lift and move a load using manual lifting equipment and tackle	Level 2	8
Elective	244365	Lift and move material and equipment by means of a forklift	Level 2	3
Elective	244406	Move material by means of a mobilift in an underground mine	Level 2	6
Elective	116231	Operate a cab controlled overhead crane	Level 2	8
Elective	116254	Operate a mobile crane	Level 2	20
Elective	116235	Operate a pendant controlled overhead crane	Level 2	5
Elective	116075	Operate a sideboom	Level 2	8
Elective	116255	Operate a tower crane	Level 2	20
Elective	116253	Operate a truck mounted loader crane	Level 2	20
Elective	242981	Operate defined purpose lift trucks	Level 2	4
Elective	242976	Operate overhead/gantry cranes	Level 2	5
Elective	243021	Shift loads using lifting equipment	Level 2	4
Elective	253638	Sling and communicate during crane operations	Level 2	4
Elective	12481	Sling loads	Level 2	4
Elective	253600	Use a side-boom to lift, lower and carry materials	Level 2	5
Elective	116976	Apply generic crane operational skills	Level 3	5
Elective	117036	Conduct advanced sideboom operations	Level 3	8
Elective	116981	Conduct advanced tower crane operations	Level 3	20
Elective	12429	Develop a personal financial plan	Level 3	2
Elective	254355	Inspect and conduct routine maintenance on an overhead crane	Level 3	2
Elective	253590	Lift and move a load in suspension using a mobile crane	Level 3	4
Elective	119527	Lift and move a load on a construction site	Level 3	15
Elective	244407	Lift and move a load using mechanical lifting equipment	Level 3	7
Elective	260798	Operate a cantilever container crane (ship to shore)	Level 3	12
Elective	260777	Operate a container side loader	Level 3	8
Elective	260818	Operate a counter balanced lift truck in excess of 15 tons	Level 3	9
Elective	260763	Operate a floating crane	Level 3	12
Elective	260760	Operate a inland container crane (rail mounted)	Level 3	10
Elective	260761	Operate a reach stacker	Level 3	10
Elective	260765	Operate a rubber tyred gantry crane	Level 3	12
Elective	260817	Operate a scotch derrick crane (ship mounted)	Level 3	10
Elective	260764	Operate a ships crane	Level 3	8
Elective	260797	Operate a sideloader lift truck	Level 3	8
Elective	260757	Operate a straddle carrier	Level 3	10
Elective	260780	Operate a sugar cane crane	Level 3	8
Elective	260781	Operate a telescopic boom handler	Level 3	10
Elective	260758	Operate a wall-mounted jib	Level 3	7
Elective	260759	Operate a wharf side crane (rail mounted)	Level 3	8
Elective	260838	Operate a wharf side jib crane	Level 3	8
Elective	242972	Operate advanced defined purpose lift trucks	Level 3	7
Elective	242974	Operate counter-balanced lift truck	Level 3	7
Elective	242982	Operate heavy crane	Level 3	14
Elective	260762	Operate rough terrain/earthmoving/agricultural equipment	Level 3	11

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Elective	242977	Operate ship cargo lifting appliances	Level 3	10
Elective	123260	Operate tailgates and tail-lifts	Level 3	2
Elective	242978	Operate truck-mounted cranes	Level 3	8
Elective	8039	Operating cranes	Level 3	10
Elective	8038	Operating lift trucks	Level 3	6
Elective	253658	Perform a lifting task by using a mobile crane	Level 3	8
Elective	116986	Sling complex loads and communicate during crane operations	Level 3	12
Elective	116989	Use a mobile crane to carry out demolition activities with demolition equipment	Level 3	8
Elective	117001	Use a mobile crane to carry out pile driving	Level 3	8
Elective	113981	Arrange and complete lifts on site using lifting equipment	Level 4	15
Elective	117086	Extract and transport timber using a tractor and trailer fitted with a self-loading crane in a production situation	Level 4	25
Elective	243276	Manage the transportation of mobile elevated work platforms (MEWP)	Level 4	7
Elective	243273	Monitor and control the safety and operations of Mobile Elevating Work Platforms	Level 4	8
Elective	116583	Perform tandem lifting	Level 4	12
Elective	253660	Supervise advanced mobile crane operations	Level 4	20

LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION
None

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a straddle carrier

SAQA US ID	*UNIT STANDARD TITLE*		
260757	Operate a straddle carrier		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	10

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating straddle carriers.

SPECIFIC OUTCOME 2
Describe the straddle carrier to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the machine.

SPECIFIC OUTCOME 4
Inspect the straddle carrier.

SPECIFIC OUTCOME 5
Handle loads with a straddle carrier.

SPECIFIC OUTCOME 6
Operate the straddle carrier.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a wall-mounted jib

SAQA US ID	*UNIT STANDARD TITLE*		
260758	Operate a wall-mounted jib		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	7

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating a wall-mounted jib.

SPECIFIC OUTCOME 2
Describe the wall-mounted jib to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the wall-mounted jib.

SPECIFIC OUTCOME 4
Inspect the wall-mounted jib.

SPECIFIC OUTCOME 5
Handle loads with a wall-mounted jib.

SPECIFIC OUTCOME 6
Operate a wall-mounted jib.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a wharf side crane (rail mounted)

SAQA US ID	*UNIT STANDARD TITLE*		
260759	Operate a wharf side crane (rail mounted)		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating a wharf side crane (rail mounted).

SPECIFIC OUTCOME 2
Describe the wharf side crane (rail mounted) to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the machine.

SPECIFIC OUTCOME 4
Inspect the wharf side crane (rail mounted).

SPECIFIC OUTCOME 5
Handle loads with a wharf side crane (rail mounted).

SPECIFIC OUTCOME 6
Operate the wharf side crane (rail mounted).

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a inland container crane (rail mounted)

SAQA US ID	*UNIT STANDARD TITLE*		
260760	Operate a inland container crane (rail mounted)		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	10

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating inland container cranes.

SPECIFIC OUTCOME 2
Describe the inland container crane to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the machine.

SPECIFIC OUTCOME 4
Inspect the inland container crane.

SPECIFIC OUTCOME 5
Handle loads with a inland container crane.

SPECIFIC OUTCOME 6
Operate the inland container crane.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a reach stacker

SAQA US ID	*UNIT STANDARD TITLE*		
260761	Operate a reach stacker		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	10

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating reach stackers.

SPECIFIC OUTCOME 2
Describe the reach stacker to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the machine.

SPECIFIC OUTCOME 4
Inspect the reach stacker.

SPECIFIC OUTCOME 5
Handle loads with a reach stacker.

SPECIFIC OUTCOME 6
Operate the reach stacker.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate rough terrain/earthmoving/agricultural equipment

SAQA US ID	***UNIT STANDARD TITLE***		
260762	Operate rough terrain/earthmoving/agricultural equipment		
ORIGINATOR		***PROVIDER***	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		***SUBFIELD***	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	***UNIT STANDARD TYPE***	***NQF LEVEL***	***CREDITS***
Undefined	Regular	Level 3	11

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating a rough terrain/earthmoving/ agricultural equipment.

SPECIFIC OUTCOME 2
Describe the rough terrain/earthmoving/agricultural equipment to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the rough terrain/earthmoving/agricultural equipment.

SPECIFIC OUTCOME 4
Inspect the rough terrain/earthmoving/agricultural equipment.

SPECIFIC OUTCOME 5
Handle loads with a rough terrain/earthmoving/agricultural equipment.

SPECIFIC OUTCOME 6
Operate a rough terrain/earthmoving/agricultural equipment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a floating crane

SAQA US ID	*UNIT STANDARD TITLE*		
260763	Operate a floating crane		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	12

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating floating cranes.

SPECIFIC OUTCOME 2
Describe the floating crane to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the machine.

SPECIFIC OUTCOME 4
Inspect the floating crane.

SPECIFIC OUTCOME 5
Handle loads with a floating crane.

SPECIFIC OUTCOME 6
Operate the floating crane.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a ships crane

SAQA US ID	*UNIT STANDARD TITLE*		
260764	Operate a ships crane		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating ships cranes.

SPECIFIC OUTCOME 2
Describe the ships crane to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the machine.

SPECIFIC OUTCOME 4
Inspect the ships crane.

SPECIFIC OUTCOME 5
Handle loads with a ships crane.

SPECIFIC OUTCOME 6
Operate the ships crane.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a rubber tyred gantry crane

SAQA US ID	*UNIT STANDARD TITLE*		
260765	Operate a rubber tyred gantry crane		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	12

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating Rubber tyred gantry cranes.

SPECIFIC OUTCOME 2
Describe the Rubber tyred gantry crane to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the lifting machine.

SPECIFIC OUTCOME 4
Inspect the Rubber tyred gantry.

SPECIFIC OUTCOME 5
Handle loads with a Rubber tyred gantry.

SPECIFIC OUTCOME 6
Operate the Rubber tyred gantry.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a container side loader

SAQA US ID	*UNIT STANDARD TITLE*		
260777	Operate a container side loader		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Demonstrate knowledge of the regulatory framework for operating a container side loader.

SPECIFIC OUTCOME 2
Describe the container side loader to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the container side loader.

SPECIFIC OUTCOME 4
Inspect the container side loader.

SPECIFIC OUTCOME 5
Handle loads with a container side loader.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate knowledge of the regulatory framework for lifting machines

SAQA US ID	*UNIT STANDARD TITLE*		
260778	Demonstrate knowledge of the regulatory framework for lifting machines		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Explain the legislative framework governing lifting machines.

SPECIFIC OUTCOME 2
Explain the Driven Machinery Regulations (1988) [DMR] and related Regulations.

SPECIFIC OUTCOME 3
Ensure the safety of self and others.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Describe different categories of lifting machines

SAQA US ID	*UNIT STANDARD TITLE*		
260779	Describe different categories of lifting machines		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Present an overview of lifting machines.

SPECIFIC OUTCOME 2
Explain the various systems of the lifting machines.

SPECIFIC OUTCOME 3
Explain the instrumentation of lifting machines.

SPECIFIC OUTCOME 4
Explain the levers, controls and safety devices of lifting machines.

SPECIFIC OUTCOME 5
Inspect and report on lifting machines.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	64829	National Certificate: Lifting Machine Operation	Level 3

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a sugar cane crane

SAQA US ID	*UNIT STANDARD TITLE*		
260780	Operate a sugar cane crane		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating a sugar cane crane.

SPECIFIC OUTCOME 2
Describe the sugar cane crane to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the sugar cane crane.

SPECIFIC OUTCOME 4
Inspect the sugar cane crane.

SPECIFIC OUTCOME 5
Handle loads with a sugar cane crane.

SPECIFIC OUTCOME 6
Operate a sugar cane crane.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a telescopic boom handler

SAQA US ID	***UNIT STANDARD TITLE***		
260781	Operate a telescopic boom handler		
ORIGINATOR		***PROVIDER***	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		***SUBFIELD***	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	***UNIT STANDARD TYPE***	***NQF LEVEL***	***CREDITS***
Undefined	Regular	Level 3	10

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating a telescopic boom handler.

SPECIFIC OUTCOME 2
Describe the telescopic boom handler to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the telescopic boom handler.

SPECIFIC OUTCOME 4
Inspect the telescopic boom handler.

SPECIFIC OUTCOME 5
Handle loads with a telescopic boom handler.

SPECIFIC OUTCOME 6
Operate a telescopic boom handler.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a sideloader lift truck

SAQA US ID	*UNIT STANDARD TITLE*		
260797	Operate a sideloader lift truck		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Demonstrate knowledge of the regulatory framework for operating a sideloader lift truck.

SPECIFIC OUTCOME 2
Describe the sideloader lift truck to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the sideloader lift truck.

SPECIFIC OUTCOME 4
Inspect the sideloader lift truck.

SPECIFIC OUTCOME 5
Handle loads with a sideloader lift truck.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a cantilever container crane (ship to shore)

SAQA US ID	*UNIT STANDARD TITLE*		
260798	Operate a cantilever container crane (ship to shore)		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	12

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating cantilever container cranes.

SPECIFIC OUTCOME 2
Describe the cantilever container crane to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the machine.

SPECIFIC OUTCOME 4
Inspect the cantilever container crane.

SPECIFIC OUTCOME 5
Handle loads with a cantilever container crane.

SPECIFIC OUTCOME 6
Operate the cantilever container crane.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a scotch derrick crane (ship mounted)

SAQA US ID	*UNIT STANDARD TITLE*		
260817	Operate a scotch derrick crane (ship mounted)		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	10

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

SPECIFIC OUTCOME 1
Demonstrate knowledge of the regulatory framework for operating a scotch derrick crane.

SPECIFIC OUTCOME 2
Describe the scotch derrick crane to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the scotch derrick crane.

SPECIFIC OUTCOME 4
Inspect the scotch derrick crane.

SPECIFIC OUTCOME 5
Handle loads with a scotch derrick crane.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a counter balanced lift truck in excess of 15 tons

SAQA US ID	*UNIT STANDARD TITLE*		
260818	Operate a counter balanced lift truck in excess of 15 tons		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	9

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

SPECIFIC OUTCOME 1
Demonstrate knowledge of the regulatory framework for operating a counterbalanced lift truck.

SPECIFIC OUTCOME 2
Describe the counterbalanced lift truck to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the counterbalanced lift truck.

SPECIFIC OUTCOME 4
Inspect the counterbalanced lift truck.

SPECIFIC OUTCOME 5
Handle loads with a counterbalanced lift truck.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Move and store a hazardous load

SAQA US ID	*UNIT STANDARD TITLE*		
260837	Move and store a hazardous load		
ORIGINATOR		*PROVIDER*	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Describe the physical properties of loads.

SPECIFIC OUTCOME 2
Identify and explain hazardous substances that constitute a load.

SPECIFIC OUTCOME 3
Move and store a hazardous load.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	64829	National Certificate: Lifting Machine Operation	Level 3

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a wharf side jib crane

SAQA US ID	***UNIT STANDARD TITLE***		
260838	Operate a wharf side jib crane		
ORIGINATOR		***PROVIDER***	
SGB Generic Manufacturing, Engineering& Technology			
FIELD		***SUBFIELD***	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	***UNIT STANDARD TYPE***	***NQF LEVEL***	***CREDITS***
Undefined	Regular	Level 3	8

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

SPECIFIC OUTCOME 1
Discuss and apply the regulatory framework for operating wharf side jib cranes.

SPECIFIC OUTCOME 2
Describe the wharf side jib crane to be operated.

SPECIFIC OUTCOME 3
Demonstrate mechanical awareness of the machine.

SPECIFIC OUTCOME 4
Inspect the wharf side jib crane.

SPECIFIC OUTCOME 5
Handle loads with a wharf side jib crane.

SPECIFIC OUTCOME 6
Operate the wharf side jib crane.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	64829	National Certificate: Lifting Machine Operation	Level 3