**No. 353** **14 May 2010**

## 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 (Task Team) for

Fabrication and Extraction

registered by Organising Field 06 – Manufacturing Engineering and Technology, publishes the following Qualifications and Unit Standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualifications and Unit Standards. The full Qualifications 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 Qualifications and Unit Standards should reach SAQA at the address below and ***no later than*** 14 June 2010. All correspondence should be marked **Standards Setting – Task Team Fabrication and Extraction** and addressed to

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**D. MPHUTHING**
**ACTING DIRECTOR: STANDARDS SETTING AND DEVELOPMENT**

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***QUALIFICATION:***
***National Certificate: Diamond Design and Evaluation***

| *SAQA QUAL ID* | *QUALIFICATION TITLE* | | |
|---|---|---|---|
| 78966 | National Certificate: Diamond Design and Evaluation | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *QUALIFICATION TYPE* | *FIELD* | *SUBFIELD* | |
| National Certificate | 6 - Manufacturing, Engineering and Technology | Fabrication and Extraction | |
| *ABET BAND* | *MINIMUM CREDITS* | *NQF LEVEL* | *QUAL CLASS* |
| Undefined | 129 | Level 5 | Regular-Unit Stds Based |

New NQF Level: NQF Level 05

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

***PURPOSE AND RATIONALE OF THE QUALIFICATION***
Purpose:

This qualification will equip qualifying learners with the necessary knowledge, understanding and competence to evaluate, design and grade diamond gemstones to internationally recognised standards. It is aimed at people who work or intend to work within the diamond processing industry and who seek recognition for skills in processing diamond gemstones.

Recipients of this qualification know about and are able to evaluate or design rough diamond gemstones and grade them as cut and polished diamond gemstones for sale into local and international markets. The ability of the industry to develop its potential in the beneficiation of raw materials is dependent upon the development of design, evaluation and grading skills to provide the platform for expansion of the industry and to have a base of skilled workers in the industry, including knowledgeable and competent Diamond Board Valuators.

The qualification is designed to be flexible and accessible so that people are able to consistently demonstrate the competencies required to work safely and effectively in evaluating and designing the processing diamond gemstones. The role of the diamond processing sector in terms of the jewellery manufacturing and diamond distribution system will be understood as well as the importance of their role in the distribution chain.

The learner can select on of the following specialisations:

A: Advanced Evaluation of Rough diamond gemstones.
B: Advanced Grading of polished diamond gemstones.
C: Evaluation of diamond gemstones for importation and exportation.

Qualified learners will, subject to the specialisation chosen, be able to:

• Provide leadership in the workplace through knowledge of relevant legislation, good communication skills, understanding of manufacturing principles, problem solving skills, time management and high ethical conduct.
• Empower teams through leadership skills, manufacturing efficiency, people development and ensuring a safe, healthy and environmentally secure workplace.
• Adhere to occupational safety, health and environmental requirements.
• Examine and describe the structure and properties of diamond gemstones.
• Perform advanced evaluation of rough diamond gemstones and understand the properties influencing the design of the polished product.
• Perform advanced grading of polished diamond gemstones.
• Perform the role of an evaluator of the SA Gold and Precious Metals Board to monitor activities in the importation and exportation of diamond gemstones.

This qualification enhances the understanding of evaluation and design of rough diamonds and the grading of cut and polished diamond gemstones which falls in the sub-field Fabrication and Extraction.

Rationale:

The processing of diamonds is not a mechanical process, but one which requires understanding of the nature and structure of the diamond crystal, how the processing reveals the qualities of the gemstone and how impurities can affect the ultimate value of the gemstone. The need for this qualification was identified by a number of means:

• It has been identified as one of the priority areas within the Mining and Minerals Sector by means of the Sector Skills Plan.
• It has been identified by research commissioned and the German Technical Co-operation (GTZ) subsequently published in a work entitled "A Skills Analysis of the Jewellery Manufacturing and Gemstone Processing Industries in South Africa".
• Critical Stakeholders within the diamond processing industry have indicated the need to give formal recognition to the learning given to the majority of employees in the industry, most of whom were previously disadvantaged.
• The changing technology within the diamond processing industry requires that people engaged in the industry are equipped with recognised skills that are able to be applied under a variety of circumstances caused by the dynamic change in supply of rough stones for processing.
• The standards to enable the South African industry to compete favourably with overseas processing industries demand that stringent quality and operating standards are applied to enable the diamond processing sector to remain viable in South Africa and support the expansion of the wider jewellery manufacturing industry.

This qualification is designed to meet the needs of learners in the diamond processing industry as well as the needs of employers wishing to promote recognised levels of competence in the workforce.

Previously there has been no formal recognition of the trades that are represented in the qualification workers were trained and developed using either international gemmology programmes or programmes offered by private providers without accreditation.
The associated status of a nationally recognised qualification will serve as a motivation for high-level learners to enter and develop a career in the diamond processing industry.

It is a step towards obtaining a range of qualifications in diamond processing for learners who:

• Were previously disadvantaged.
• Have worked in the diamond processing industry for many years, but have no formal qualification in their area of work.

• Wish to extend their knowledge and understanding of the diamond processing industry.
• Have acquired the NQF Level 4 qualification in diamond design and evaluation and wish to extend their skills within the industry.
• Wish to prepare for advancement in design and evaluation skills, grading and Governmental evaluation.

This qualification will also provide entrants to the industry with a structured framework to develop a career path for themselves in the diamond processing industry. Learners for this qualification are likely to be working in the diamond processing industry already. The qualification will give them the opportunity to have their skills recognised in a structured way as it includes both practical experience and theoretical understanding. This qualification provides the knowledge and skills for access to qualifications at a higher level in diamond polishing.

There is a critical need in the industry to convert experienced personnel into qualified practitioners to raise the credibility of the industry and to enhance South Africa's reputation as a centre for diamond processing.

The intention is:

• To promote the development of knowledge and competencies that are required in the diamond processing industry.
• To develop the potential of employees in the diamond processing industry.
• To demonstrate the competencies in diamond processing across the jewellery manufacturing sector of the mining and minerals sector.

This qualification will produce knowledgeable workers who are able to contribute to improved productivity within the diamond processing industry. It should provide the means for current workers to receive Recognition of Prior Learning. The qualification is structured in a way that it exposes learners to the different aspects of diamond evaluation, grading and the design for converting rough diamonds into polished gemstones for sale into local and international markets.

This is the third qualification in a learning pathway for Diamond Processing.

The learner, once equipped with the competencies of this qualification will be recognised in one of the trades of Rough Evaluator or Polished Grader or SA Gold and Precious Metals Valuator. Alternatively the learner may pursue the path of factory processing in a Quality Control or Supervisory capacity and ultimately one of management in the industry. Learners may even wish to pursue formal qualification as a gemmologist. For some learners this qualification will provide the opportunity for progression into Management and Leadership responsibilities in the workplace.

***RECOGNIZE PREVIOUS LEARNING?***
Y

***LEARNING ASSUMED IN PLACE***
It is assumed that learners embarking on learning towards this qualification are already competent in Communication and Mathematical Literacy at NQF Level 4.

Recognition of Prior Learning:

This qualification can be obtained by completing all the required unit standards in a structured learning programme, or through Recognition of Prior Learning. The criteria for Recognition of Prior Learning would need to be in line with the MQA's ETQA requirements.

Evidence can be presented in a variety of forms, including international or previous local qualifications, reports, testimonials mentioning functions performed, work records, portfolios, videos of practice and performance records.

All such evidence would be judged according to the general principles of assessment.

Access to the Qualification:

Access is open, however it is preferable that learners have completed the National Certificate: Diamond Design and Evaluation at NQF Level 4.

***QUALIFICATION RULES***
Fundamental Component:

• All unit standards totalling 32 Credits are compulsory.

Core Component:

• All unit standards totalling 29 Credits are compulsory.

Elective Component:

• The Elective component consists of a number of specialisations. Learners are to choose a specialisation and complete the unit standards as indicted below for each specialisation so as to give a total of 68 Credits for the elective component.

The three specialisations are:

A: Advanced Evaluation of Rough diamond gemstones.
B: Advanced Grading of polished diamond gemstones.
C: Evaluation of diamond gemstones for importation and exportation.

Specialization area A: Advanced Evaluation of Rough diamond gemstones:

The following unit standards totalling 58 credits are compulsory:

• ID 376511: Plot impurities in rough and semi polished diamond gemstones, NQF Level 5, 6 Credits.
• ID 376740: Grade large rough diamond gemstones, NQF Level 6, 10 Credits.
• ID 376701: Calculate advanced weight yield for rough diamond gemstones, NQF Level 6, 12 Credits.
• ID 376502: Evaluate improvements to the quality of polished diamond gemstones, NQF Level 5, 12 Credits.
• ID 376760: Buy and sell rough diamond gemstones, NQF Level 5, 18 Credits.

Additional unit standards totalling a minimum of 10 Credits are to be chosen from the electives in the other specialisations to make up a minimum of 68 Credits for the elective component and 129 Credits for the qualification.

Specialization area B: Advanced Grading of polished diamond gemstones:

The following unit standards totalling 50 Credits are compulsory:

• ID 376502: Evaluate improvements to the quality of polished diamond gemstones, NQF Level 5, 12 Credits.

- ID 376700: Promote the grading of polished diamond gemstones, NQF Level 5, 18 Credits.
- ID 376780: Value polished diamond gemstones, NQF Level 6, 10 Credits.
- ID 376800: Buy and sell polished diamond gemstones, NQF Level 5, 10 Credits.

Additional unit standards totalling a minimum of 18 Credits are to be chosen from the electives in the other specialisations to make up a minimum of 68 Credits for the elective component and 129 Credits for the qualification.

Specialization area C: Evaluation of diamond gemstones for importation and exportation:

The following unit standards totalling 54 Credits are compulsory:

- ID 259777: Describe the structure and properties of gem diamonds, NQF Level 4, 10 Credits.
- ID 376720: Explain the requirements for importing and exporting diamond gemstones, NQF Level 5, 12 Credits.
- ID 259838: Use laboratory equipment to examine diamond gemstones, NQF Level 4, 4 Credits.
- ID 376760: Buy and sell rough diamond gemstones, NQF Level 5, 18 Credits.
- ID 376800: Buy and sell polished diamond gemstones, NQF Level 5, 10 Credits.

Additional unit standards totalling a minimum of 14 Credits are to be chosen from the electives in the other specialisations to make up a minimum of 68 Credits for the elective component and 129 Credits for the qualification.

***EXIT LEVEL OUTCOMES***

1. Communicate and apply mathematical concepts and operations to solve problems.

2. Adhere to occupational health, safety and environmental standards in the workplace.

3. Empower teams through leadership.

4. Describe the structure and properties of diamond gemstones and evaluate against recognised price lists.

5. Conduct advanced evaluation of rough diamond gemstones.

OR

6. Conduct advanced grading of polished diamond gemstones.

OR

7. Evaluate diamond gemstones and the requirements for importation and exportation against local legislation and international conventions.

Critical Cross-field Outcomes:

Critical Cross-Field Outcomes have been addressed by the exit level outcomes as follows:

While conducting activities related to diamond design and evaluation operations, learners are able to:

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

• Identifying and using tools, equipment and relevant price lists in the evaluation, grading and valuation of diamond gemstones in accordance with international standards and best practices.
• Evaluating the potential to improve diamond gemstones in terms of accepted international standards and being able to articulate the risks associated with such improvements.
• Responding to non-conformances in a diamond processing and trading environment.
• Apply preventative or remedial action in accordance with operating procedures.

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

• Contributing to team goals and achievements by adhering to agreed working methods and processes.
• Contributing to team efficiency by supporting other team members in the diamond processing and trading environment.
• Adhering to team protocols, codes of ethics and conduct and generally promoting a positive team spirit.
• Coordinating one's work with that of others in the direct surrounding area, internal and external operations.

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

• Applying ethical standards to adhere to international protocols and respond to conditions in the diamond trading environment.
• Taking preventive and remedial action to solve operating problems while evaluating, grading and valuing diamonds.
• Maintaining product integrity with reference to key aspects and critical conditions in a diamond trading environment.
• Adhering to strict security and control requirements particular to the diamond industry.

Collect, analyse, organise and critically evaluate information by:

• Applying the principles related to the properties of diamonds in terms of value and potential.
• Applying relevant basis and techniques to determine the value of diamonds.
• Use and interpret instruments such as recognised price lists.

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

• Interpreting, recording and reporting information pertaining to diamond evaluation, grading and valuation.
• Preparing and submitting reports, non-conformance reports and other required documentation.
• Providing guidance and opinion on methods to improve diamond value and expressing the associated risks with such measures.

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

• Applying occupational health, safety and environmental requirements in the workplace.
• Using relevant terminology and adhering to standard protocols such as SI, ISO and international standards applicable in the diamond evaluation, grading and valuation field.
• Deploying computers to assist in the diamond evaluation, grading and valuation process.

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

• Understanding the impact of diamond evaluation, grading and valuation activities in the context of the broader diamond and gemstone industry, and his/her own role in each context.
• Requesting assistance from other team members and support personnel.
• Assisting other team members and working together with support personnel to conduct diamond evaluation, grading and valuation activities and to investigate and resolve problem areas.

***ASSOCIATED ASSESSMENT CRITERIA***
Associated Assessment Criteria for Exit Level Outcome 1:

• Oral communication is maintained and adapted as required to promote effective interaction in a work context.
• Written communication is conducted at an appropriate level for designated target audiences.
• Mathematical principles and techniques are applied while performing the tasks in the operational context.
• Problems and solutions are recorded and monitored for reoccurrence.
• Responsibilities of a team leader are identified and communicated in the workplace.

Associated Assessment Criteria for Exit Level Outcome 2:

• Occupational Health and Safety legislation applicable to the workplace is understood and applied at all times as per workplace requirements.
• Safe, healthy and environmentally related activities are conducted in a diamond processing environment according to the Occupational Health, Safety and Environmental requirements.
• Knowledge of relevant legislation is applied to safeguard people, operations and the environment.
• Appropriate high ethical standards are applied in terms of legal compliance, standards of conduct and upholding rights and obligations of conducting business in the diamond industry.

Associated Assessment Criteria for Exit Level Outcome 3:

• Principles of leadership are displayed in the workplace.
• Efficient and effective use of resources are deployed in manufacturing operations.
• Team members are valued, empowered and developed through application of best practices in human relationships.

Associated Assessment Criteria for Exit Level Outcome 4:

• The properties of diamonds are explained and the implications on ultimate value of the processed diamond are interpreted against international standards.
• The structure of diamonds is described and are related to the risks and opportunities for processing to make polished diamond gemstones.
• The basis of valuation of diamond gemstones is understood; and the impact of non compliance with processing procedures is explained in terms of the loss of potential value.
• The requirements for stone security are explained when handling and possessing diamond gemstones.

Associated Assessment Criteria for Exit Level Outcome 5:

• Impurities in rough and semi-polished diamond gemstones are plotted in accordance with international standards.
• The determination of the potential clarity and associated grade of large rough diamond gemstones when converted into polished stones is demonstrated.
• The expected weight loss of large rough diamond gemstones is determined for the ultimate polished gemstones after processing.

• The potential to improve diamond gemstones and the associated risks are evaluated and explained.
• The requirements to effectively buy and sell rough diamond gemstones is demonstrated.

OR

Associated Assessment Criteria for Exit Level Outcome 6:

• The potential to improve diamond gemstones and the associated risks are evaluated and explained.
• Large polished diamond gemstones are graded against internationally established standards.
• Polished diamond gemstones are valued against internationally accepted standards and price lists.
• The requirements to effectively buy and sell polished diamond gemstones is demonstrated.

OR

Associated Assessment Criteria for Exit Level Outcome 7:

• The legal requirements for importing and exporting of diamond gemstones is explained and applied.
• Laboratory equipment is used to examine diamond gemstones and describe their features.
• The requirements to effectively buy and sell rough diamond gemstones is demonstrated.
• The requirements to effectively buy and sell polished diamond gemstones is demonstrated.

Integrated Assessment:

• Integrated assessment at the level of the qualification provides an opportunity for learners to show they are able to integrate concepts, actions and. ideas achieved across a range of unit standards and contexts.

• Integrated assessment must evaluate the quality of observable performance as well as the thinking behind the performance, and must be based on a summative assessment guide. The guide will spell out how the assessor will assess different aspects of the performance and will include:
o Observing the learner at work (both in the primary activity as well as other interactions).
o Asking questions and initiating short discussions to test understanding.
o Looking at records and reports in the portfolio and reviewing previous assessments.
In some cases interference will be necessary to determine competence depending on the nature and context within which performance takes place.

• It is necessary to ensure that the fundamental part of the qualification is also targeted to ensure that while the competence may have been achieved in a particular context, learners are able to apply it in a range of other contexts and for future learning. The assessment should also ensure that all the Critical Cross-Field Outcomes have been achieved.

• The learner may choose in which language s/he 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 introduced if pertinent to any of the Exit-Level Outcomes. The assessment process should cover both the explicit tasks required for the qualification as well as the understanding of the concepts and principles that underpin the activities associated with processing diamonds.

***INTERNATIONAL COMPARABILITY***

There are a number of institutions offering courses in rough evaluation and polished grading. There are none that offer any qualifications for regulatory inspecting. There are a number of gemmological societies and institutes that offer courses and these have been listed below. Whilst some of them have approval from state or national education authorities, none appear to have accreditation as national qualifications of the countries concerned.

The Gemmological Institute of America (GIA) offers diplomas in Diamond Essentials that familiarizes learners with their own GIA clarity grading system to facilitate grading diamonds and colour and how colour affects value; Diamonds and Diamond Grading, also teaches learners skills of judging and grading the colour, clarity, and cut of diamonds, how to determine proportions and estimate weight. It addresses the fundamentals of diamond treatments, synthetics, and simulants, the effect of fluorescence on colour in diamonds, the role played by cut in the marketplace; The Diamond Grading Lab and the Advanced Grading Lab courses teaches learners how to grade clarity, colour, and cut quality factors of round brilliant diamonds and advanced grading techniques. The GIA offers grading courses in South Africa through the auspices of the Harry Oppenheimer Diamond Training School. These programmes would be equivalent to the Grading stream contained in the Level 4 qualification and the Advanced Grading Lab to the Grading stream that is contained in this qualification.

The Gemmological Institute of America (GIA) is a non-profit, private, postsecondary educational institution incorporated for the purpose of promoting education and research in gemmology and related subjects. It is accredited by the Accrediting Commission of Career Schools and Colleges of Technology (ACCSCT). (The ACCSCT is listed by the U.S. Department of Education as a nationally recognized accrediting agency). GIA New York is licensed by the New York State Education Department.

The Swiss Gemmological Institute (SSEF) offers various courses in gemmology that include a Basic Diamond Course that serves as introduction to diamonds covering formation, properties and grading. This would be less detailed that the Grading stream contained in the Level 4 qualification. The Scientific Diamond Course addresses some of the features covered in this qualification dealing with the properties of diamonds. None of their programmes addresses rough evaluation. They claim no accreditation.

The Indian Institute of Gemmology (IMI) offers a course in Diamonds and Diamond Grading that addresses gem identification and diamond properties. This programme would not attain the level of the, Level 4 qualification. They claim no accreditation.

The International Gemmological Institute (IGI) offers a course in Polished Diamonds that teaches learners how to grade polished diamonds and would appear to cover the contents of the Grading stream of the Level 4 qualification. The Rough Diamond Course covers sorting, sorting for parting and identification of diamonds. It covers some of the aspects of the Rough Evaluation stream contained in this qualification, but does not cover the depth of this qualification. Whilst the IGI has its own school of Gemology, it does not cite any accreditation.

The Hode Raad voor Diamant (HRD) offers courses in rough sorting, diamond grading, diamond treatments which would appear to cover the scope of some of the Rough Evaluation stream and the Grading stream of this qualification. The HRD was recognised by the Flemish community as an educational institute, but they do not claim national accreditation for their programmes.

The MSU Gemmological Center (MSU) offers courses in diamond grading and Rough diamonds. These courses appear to cover some of the general scope of the Grading and Rough Evaluation streams of this qualification, but the MSU claims no accreditation. The duration of the programmes would indicate that the scope may be less comprehensive that the Level 4 qualification.

The Canadian Institute of Gemmology (CIG) offers a Diamond Grading course that appears to cover the scope of the Grading stream of the Level 4 qualification. They claim no national accreditation for their programmes.

The EGL College of Gemmology (EGL) is part of an international laboratory and consulting service that offers courses in Diamonds and Diamond Grading. The programme covers the scope of the Grading stream of the Level 4 qualification and part of this qualification. EGL is accredited with the MQA.

The search indicates that whilst there are a number of organisations offering certification programmes in rough diamonds and polished grading, none of these appear to be nationally accredited, although some have international reputation for their standards and would offer programmes at the level of this qualification in these streams. None, however, offer regulator valuator qualifications.

Contact was established with leading diamond cutting operations, internationally linked gemstone valuators, internationally linked training institutions, and people with many years established connections to De Beers, the leading role-player in the distribution of diamond gemstones in the world such as:

- Austria: World Federation of Diamond Clubs.
- Belgium: Beurs Voor Diamanthandel, Syndikaat Der Belgische Diamantnijverheid (SDB) and HRD Antwerp NV.
- Canada: Canadian Jewellers Institute.
- China: Shanghai Diamond Exchange.
- England: The London Diamond Bourse.
- India: Bharat Diamond Bourse.
- Israel: Israel Diamond Exchange Ltd: and the Israel Manufacturers Association Ltd.
- Netherlands: Vereniging Beurs Voor Den Diamonthandel, Diamondbourse and Algemene Juweliersvereniging.
- Sri Lanka: Sri Lanka Diamond Manufacturers Association.
- Thailand: Bangkok Diamond and Precious Stones Exchange: and the Thai Diamond Diamond Manufacturers Association.
- USA: New York Diamond Dealers Club: and Diamond Manufacturers and importers Association of America.

These countries were contacted because they are the countries where major diamond processing takes place.

Feedback from associates of South African training and professional service providers from Belgium and Canada has indicated that the qualification and unit standards are of a high standard. Experienced managers and craftsmen in South Africa with international experience have also indicated that the standard of unit standards that make up this qualification are at a level that is comparable to best practices in countries such as Belgium, Israel, China and India.

Contact has been made with organisations in SADC countries who are also seeking to establish recognition for the same skills as covered by this qualification. Neither Namibia nor Botswana, who are rapidly developing diamond processing skills, have a formal system and the MQA has been approached to establish whether through SADC qualifications developed in South Africa could be used to establish regional standards.

In conclusion, it appears that South Africa has been the first country to establish formal national qualifications in diamond processing and that, outside of rough evaluation and polished grading, no other comparable international qualifications yet exist.

***ARTICULATION OPTIONS***

This qualification allows for both vertical and horizontal articulation.

Vertical articulation exists with:

• ID 19532: Advanced Diploma: Management, NQF Level 6.

Horizontal articulation exists with:

• ID 78843: National Certificate: Diamond Processing, NQF Level 5.

***MODERATION OPTIONS***

• Anyone assessing a learner or moderating the assessment of a learner against the 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, or with an ETQA that has a Memorandum of Understanding with the relevant ETQA.

• 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 relevant ETQA, according to the ETQA's policies and guidelines for assessment and moderation.

• Moderation must include both internal and external moderation of assessments, unless ETQA policies specify otherwise. Moderation should also encompass achievement of the competence described in the associated unit standards.

• 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***

Assessors should be in possession of:

• An appropriate qualification above the level of the qualification and preferably relevant workplace practical experience.
• Registration as an assessor with the relevant ETQA.

***NOTES***

N/A

***UNIT STANDARDS***

| | ID | UNIT STANDARD TITLE | LEVEL | CREDITS |
|---|---|---|---|---|
| Fundamental | 242706 | Analyse problems | Level 5 | 4 |
| Fundamental | 15234 | Apply efficient time management to the work of a department/division/section | Level 5 | 4 |
| Fundamental | 335800 | Apply professional values and ethics in the operational environment | Level 5 | 4 |
| Fundamental | 119947 | Conciliate a dispute in relation to training legislation | Level 5 | 5 |
| Fundamental | 10622 | Conduct communication within a business environment | Level 5 | 8 |
| Fundamental | 10631 | Demonstrate an understanding of manufacturing, principles, methodologies and processes | Level 5 | 7 |
| Core | 260402 | Demonstrate understanding of the implementation of occupational health, safety and environmental legislation in a diamond processing workplace | Level 4 | 5 |
| Core | 14586 | Monitor and control quality control practices in a manufacturing/engineering environment | Level 4 | 8 |

| | ID | UNIT STANDARD TITLE | LEVEL | CREDITS |
|---|---|---|---|---|
| Core | 259761 | Use a loupe for advanced applications in examining diamond gemstones | Level 4 | 6 |
| Core | 115821 | Apply business financial practices | Level 5 | 4 |
| Core | 335894 | Optimise the quality assurance system | Level 5 | 6 |
| Elective | 259777 | Describe the structure and properties of gem diamonds | Level 4 | 10 |
| Elective | 259838 | Use laboratory equipment to examine diamond gemstones | Level 4 | 4 |
| Elective | 376800 | Buy and sell polished diamond gemstones | Level 5 | 10 |
| Elective | 376760 | Buy and sell rough diamond gemstones | Level 5 | 18 |
| Elective | 376502 | Evaluate improvements to the quality of polished diamond gemstones | Level 5 | 12 |
| Elective | 376720 | Explain the requirements for importing and exporting diamond gemstones | Level 5 | 12 |
| Elective | 376511 | Plot impurities in rough and semi polished diamond gemstones | Level 5 | 6 |
| Elective | 376700 | Promote grading of polished diamond gemstones | Level 5 | 18 |
| Elective | 376701 | Calculate advanced weight yield for rough diamond gemstones | Level 6 | 12 |
| Elective | 376740 | Grade Large Rough Diamond Gemstones | Level 6 | 10 |
| Elective | 376780 | Improve the value of polished diamond gemstones | Level 6 | 10 |
| Elective | 110235 | Make a model and determine the optimal processing of a diamond gemstone | Level 6 | 13 |

***LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION***
***None***

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Promote grading of polished diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376700 | Promote grading of polished diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 18 |

New NQF Level: NQF Level 05

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

**SPECIFIC OUTCOME** 1
Apply the systems and tools used to grade large diamond gemstones.

**SPECIFIC OUTCOME** 2
Assess and plot characteristics of large polished diamond gemstones.

**SPECIFIC OUTCOME** 3
Grade large polished diamond gemstones.

**SPECIFIC OUTCOME** 4
Conduct post-grading reconciliation, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Calculate advanced weight yield for rough diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376701 | Calculate advanced weight yield for rough diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 6 | 12 |

New NQF Level: NQF Level 06

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

**SPECIFIC OUTCOME** 1
Identify the equipment and tools applicable to examine rough diamond gemstones.

**SPECIFIC OUTCOME** 2
Differentiate types and categories of diamond gemstones in the rough.

**SPECIFIC OUTCOME** 3
Predict the size and weight of the polished diamond gemstones from the rough.

**SPECIFIC OUTCOME** 4
Conduct post-examination reconciliation, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Explain the requirements for importing and exporting diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376720 | Explain the requirements for importing and exporting diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 12 |

New NQF Level: NQF Level 05

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

**SPECIFIC OUTCOME** 1
Identify the diamond exchanges and describe their nature.

**SPECIFIC OUTCOME** 2
Explain the tendering processes for diamonds and the obligations on the parties involved.

**SPECIFIC OUTCOME** 3
Explain the processes for collection of diamond gemstones.

**SPECIFIC OUTCOME** 4
Explain the requirements regarding customs, excise and taxation relating to trade in diamonds.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Grade Large Rough Diamond Gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376740 | Grade Large Rough Diamond Gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 6 | 10 |

New NQF Level: NQF Level 06

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

**SPECIFIC OUTCOME** 1
Identify the equipment and tools used to examine and grade the clarity of large rough diamond gemstones.

**SPECIFIC OUTCOME** 2
Differentiate types and categories of large diamond gemstones in the rough.

**SPECIFIC OUTCOME** 3
Evaluate the clarity grade of large rough diamond gemstones.

**SPECIFIC OUTCOME** 4
Conduct post-grading reconciliation, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Buy and sell rough diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376760 | Buy and sell rough diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 18 |

New NQF Level: NQF Level 05

***This unit standard replaces:***

| US ID | Unit Standard Title | NQF Level | Credits | Replacement Status |
|---|---|---|---|---|
| 110228 | Buying and selling rough diamond gemstones | Level 5 | 36 | Will occur as soon as 376760 is registered |

**SPECIFIC OUTCOME** 1
Demonstrate knowledge of the trading practices in rough diamond gemstones.

**SPECIFIC OUTCOME** 2
Identify the costs associated with processing rough diamond gemstones.

**SPECIFIC OUTCOME** 3
Estimate the added value of diamonds after processing.

**SPECIFIC OUTCOME** 4
Identify the markets in which the best price of polished diamond gemstones can be obtained.

**SPECIFIC OUTCOME** 5
Buy rough diamond gemstones.

**SPECIFIC OUTCOME** 6
Sell rough diamond gemstones.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

### *UNIT STANDARD:*

### *Improve the value of polished diamond gemstones*

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376780 | Improve the value of polished diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 6 | 10 |

New NQF Level: NQF Level 06

***This unit standard replaces:***

| US ID | Unit Standard Title | NQF Level | Credits | Replacement Status |
|---|---|---|---|---|
| 110226 | Value polished diamond gemstones | Level 4 | 6 | Will occur as soon as 376780 is registered |

**SPECIFIC OUTCOME** 1
Identify the qualities of polished diamond gemstones.

**SPECIFIC OUTCOME** 2
Recommend ways to improve the qualities of diamond gemstones.

**SPECIFIC OUTCOME** 3
Price polished diamond gemstones.

**SPECIFIC OUTCOME** 4
Conduct post valuing activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Buy and sell polished diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376800 | Buy and sell polished diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 10 |

New NQF Level: NQF Level 05

***This unit standard replaces:***

| US ID | Unit Standard Title | NQF Level | Credits | Replacement Status |
|---|---|---|---|---|
| 110183 | Buy and sell polished diamond gemstones | Level 4 | 10 | Will occur as soon as 376800 is registered |

**SPECIFIC OUTCOME** 1
Demonstrate knowledge of the trading practices in polished diamond gemstones.

**SPECIFIC OUTCOME** 2
Identify the costs associated with improving diamond gemstones.

**SPECIFIC OUTCOME** 3
Estimate the added value of diamonds after improvement.

**SPECIFIC OUTCOME** 4
Identify the markets in which the best price of polished diamond gemstones can be obtained.

**SPECIFIC OUTCOME** 5
Buy polished diamond gemstones.

**SPECIFIC OUTCOME** 6
Sell polished diamond gemstones.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***QUALIFICATION:***
***National Certificate: Diamond Processing***

| *SAQA QUAL ID* | *QUALIFICATION TITLE* | | |
|---|---|---|---|
| 78843 | National Certificate: Diamond Processing | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *QUALIFICATION TYPE* | *FIELD* | *SUBFIELD* | |
| National Certificate | 6 - Manufacturing, Engineering and Technology | Fabrication and Extraction | |
| *ABET BAND* | *MINIMUM CREDITS* | *NQF LEVEL* | *QUAL CLASS* |
| Undefined | 121 | Level 5 | Regular-Unit Stds Based |

New NQF Level: NQF Level 05

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

***PURPOSE AND RATIONALE OF THE QUALIFICATION***
Purpose:

This qualification will equip qualifying learners with the necessary knowledge, understanding and competence to process diamond gemstones to internationally recognised standards. It is aimed at people who work or intend to work within the diamond processing industry and who seek recognition for skills in processing diamond gemstones.

Qualifying learners will be able to process rough diamond gemstones into cut and polished diamond gemstones for sale into local and international markets. The ability of the industry to develop its potential in the beneficiation of raw materials is dependent upon the development of processing skills to provide the platform for expansion of the industry and to have a base of skilled workers in the skilled occupations of Advanced Crossworkers, Advanced Brillianteers, Advanced Fancy Stone Makers, Quality Controllers, Factory and Maintenance Supervisors.

The qualification is designed to be flexible and accessible so that people are able to consistently demonstrate the competencies required to work safely and effectively in processing diamond gemstones. The learner will understand the role of the diamond processing sector in the jewellery manufacturing and diamond distribution system as well as the important role it plays in the distribution chain.

The Learner can specialize in:

- Advanced Crossworking.
- Advanced Brillianteering.
- Advanced Fancy Stone Making.
- Production Quality Control.
- Factory Supervision.
- Maintenance Supervision.

Qualified learners will be able to:

• Provide leadership in the workplace through knowledge of relevant legislation, good communication skills, understanding of manufacturing principles, problem solving skills, time management and high ethical conduct.
• Empower teams through leadership skills, manufacturing efficiency, people development and ensuring a safe, healthy and environmentally secure workplace.
• Adhere to occupational safety, health and environmental requirements.
• Crosswork diamond gemstones at an advanced level.
• Polish crossworked diamond gemstones (Brillianteering) at an advanced level.
• Make fancy shaped diamond gemstones at an advanced level.
• Exercise quality control over a diamond processing workplace.
• Provide effective supervision in a diamond processing workplace.
• Provide effective maintenance supervision in a diamond processing workplace.

This qualification enhances the understanding of the processing of rough diamonds into cut and polished diamond gemstones, which falls in the sub-field Fabrication and Extraction. It will enable learners to be informed leaders in the Industry. It provides a balanced learning experience that allows flexible access to life long learning in higher education and productive employment in the diamond processing industry.

Rationale:

The processing of diamonds is not a mechanical process, but one which requires understanding of the nature and structure of the diamond crystal, how the processing reveals the qualities of the gemstone and how impurities can affect the ultimate value of the gemstone.

The need for this qualification was identified because:

• It has been identified as one of the priority areas within the Mining and Minerals Sector by means of the Sector Skills Plan.
• It has been identified as a necessity by research commissioned by the Mining Qualifications Authority (MQA) and the German Technical Co-operation (GTZ) which was published in May 2003 in a work entitled "A Skills Analysis of the Jewellery Manufacturing and Gemstone Processing Industries in South Africa".
• Employers within the diamond processing industry have indicated the need to give formal recognition to the learning given to the majority of employees in the industry (most of whom are previously disadvantaged).
• Unions and employers in the industry recognise the need to replace previous "journeyman trades" with structured outcomes based qualifications.
• The changing technology within the diamond processing industry requires that people in the industry are equipped with recognised skills that are able to be applied under a variety of circumstances caused by the dynamic change in supply of rough stones for processing.
• The quality standards to enable the South African industry to compete favourably with overseas processing industries demand that stringent quality and operating standards are applied to enable the diamond processing sector to remain viable in South Africa and support the expansion of the wider jewellery manufacturing industry.

This is a key qualification that allows for mobility and portability within the diamond processing sector. It is a step towards obtaining a range of qualifications in diamond processing for learners who:

• Were previously disadvantaged.
• Have worked in the diamond processing industry for many years, but have no formal qualification in their area of work.
• Wish to extend their knowledge and understanding of the diamond processing industry.

• Have acquired the NQF Level 4 qualification in diamond processing and wish to extend their skills within the industry.
• Wish to prepare for advancement in polishing skills, quality control and management.

This qualification will also provide entrants to the diamond processing industry with a structured framework to develop a measured career path. Most of the learners enrolling for this qualification are likely to be working in the diamond processing industry already. This qualification will give them an opportunity to have their skills recognised in a more structured way covering practical experience and theoretical understanding. Furthermore, this qualification would provide a launching pad for development into diamond polishing qualifications at a higher level.

There is a critical need in the industry to convert experienced personnel into qualified practitioners to raise the credibility of the industry and to enhance South Africa's reputation as a centre for diamond processing. This qualification would provide experienced people in the industry an opportunity to establish and have recognised their skills for further development.

The intention is:

• To promote the development of knowledge and competencies that are required in the diamond processing industry.
• To develop the potential of employees in the diamond processing industry.
• To provide opportunities for life long learning for learners who work in the diamond processing industry where no general formal qualification previously existed, and who have not been given the opportunity to take up the previous qualification yet.

This is the third qualification in a learning pathway for Diamond Processing. The learner, once equipped with the competencies of this qualification will be recognised in one of the trades of Advanced Crossworker, Advanced Brillianteer, Advanced Fancy Stone Maker, Production Quality Controller, Factory Supervisor or Maintenance Supervisor.

The learner may pursue the path of diamond design and examination and ultimately one of management in the industry. For some learners this qualification will provide the opportunity for progression into Management and Leadership responsibilities in the workplace.

***RECOGNIZE PREVIOUS LEARNING?***
Y

***LEARNING ASSUMED IN PLACE***
It is assumed that learners embarking on learning towards this qualification are already competent in:

• Communication and Mathematical Literacy at NQF Level 4.

Access to the qualification:

Access is open; however it is preferable that learners have completed the National Certificate: Diamond Processing NQF Level 4.

Recognition of Prior Learning:

This qualification can be obtained by completing all the required unit standards in a structured learning programme, or through Recognition of Prior Learning (RPL). The criteria for Recognition of Prior Learning (RPL) would need to be in line with the MQA's ETQA requirements.

Evidence can be presented in a variety of forms, including international or previous local qualifications, reports, testimonials mentioning functions performed, work records, portfolios, videos of practice and performance records.

All such evidence would be judged according to the general principles of assessment.

***QUALIFICATION RULES***
Fundamentals:

All unit standards totalling 31 Credits are compulsory and must be achieved.

Core:

All unit standards totalling 27 Credits are compulsory.

Electives:

Learners are to choose one of the specialisation areas listed below and complete unit standards totalling at least 63 Credits as specified in each specialisation area.

In total the minimum requirement of the qualification must be 121 Credits.

There are six possible specialisations:

A: Advanced Crossworking.
B: Advanced Brillianteering.
C: Advanced Fancy Stone Making.
D: Production Quality Control.
E: Factory Supervision.
F: Maintenance Supervision.

Specialization area A: Advanced Crossworking, the following unit standards (57 Credits) are to be achieved:

Unit Standard Title:

- Use laboratory equipment to examine diamond gemstones.
- Plot impurities in rough and semi-polished diamond gemstones.
- Examine the crystalline structure of rough diamond gemstones to determine how to process them.
- Monitor the fabrication process for crossworking diamond gemstones Crosswork large diamond gemstones.
- Crosswork critical diamond gemstones.
- Evaluate improvements to the quality of polished diamond gemstones.

A further 6 Credits are to be chosen from any of the electives to make up a minimum of 121 Credits for the qualification.

Specialization area B: Advanced Brillianteering, the following unit standards (54 Credits) are to be achieved:

Unit Standard Title:

- Use laboratory equipment to examine diamond gemstones.

• Examine the crystalline structure of rough diamond gemstones to determine how to process them.
• Monitor the fabrication process for brillianteering diamond gemstones Brillianteer large diamond gemstones.
• Brillianteer critical diamond gemstones.
• Evaluate improvements to the quality of polished diamond gemstones.

A further 15 Credits are to be chosen from any of the electives to make up a minimum of 121 Credits for the qualification.

Specialization area C: Advanced Fancy Stone making, the following unit standards (50 Credits) are to be achieved:

Unit Standard Title:

• Use laboratory equipment to examine diamond gemstones.
• Plot impurities in rough and semi-polished diamond gemstones.
• Examine the crystalline structure of rough diamond gemstones to determine how to process them.
• Monitor the fabrication process for fancy stone making diamond gemstones.
• Fancy cut large diamond gemstones.
• Fancy cut critical diamond gemstones.
• Evaluate improvements to the quality of polished diamond gemstones.

A further 13 Credits are to be chosen from any of the electives to make up a minimum of 121 Credits for the qualification.

Specialization area D: Production Quality Control, the following unit standards (61 Credits) are to be achieved:

Unit Standard Title:

• Demonstrate understanding of the implementation of occupational health, safety and environmental legislation in a diamond processing workplace.
• Monitor the fabrication process for crossworking diamond gemstones.
• Monitor the fabrication process for brillianteering diamond gemstones.
• Monitor the fabrication process for fancy stone making diamond gemstones.
• Grade polished diamond gemstones.
• Monitor and control quality control practices in a manufacturing/engineering environment.
• Optimise the quality assurance system.

A further 8 Credits are to be chosen from any of the electives to make up a minimum of 121 Credits for the qualification.

Specialization area E: Factory Supervision, the following unit standards (55 Credits) are to be achieved:

Unit Standard Title:

• Demonstrate understanding of the implementation of occupational health, safety and environmental legislation in a diamond processing workplace.
• Monitor the fabrication process for crossworking diamond gemstones.
• Monitor the fabrication process for brillianteering diamond gemstones.
• Monitor the fabrication process for fancy stone making diamond gemstones.
• Prepare and set up a bench for polishing diamond gemstones.

- Describe the process of fabrication for polishing diamond gemstones.
- Evaluate improvements to the quality of polished diamond gemstones.
- Apply business financial practices.

A further 8 Credits are to be chosen from any of the electives to make up a minimum of 121 Credits for the qualification.

Specialization area F: Maintenance Supervision, the following unit standards (54 Credits) are to be achieved:

Title:

- Demonstrate understanding of the implementation of occupational health, safety and environmental legislation in a diamond processing workplace.
- Prepare and set up a bench for polishing diamond gemstones.
- Describe the process of fabrication for polishing diamond gemstones.
- Collect and return diamond processing equipment for repair o refurbishment.
- Refurbish a scoured scaiffe.
- Machine a scaiffe.
- Prepare and impregnated scaiffe.
- Prepare an electroplated scaiffe.
- Repair or refurbish diamond processing equipment.
- Develop and manage maintenance policies and schedules.

A further 9 Credits are to be chosen from any of the electives to make up a minimum of 121 Credits for the qualification.

***EXIT LEVEL OUTCOMES***

1. Communicate and solve problems by applying practical applications in a variety of ways.

2. Observe occupational health, safety and environmental standards in the workplace.

3. Empower teams through leadership.

4. Crosswork diamond gemstones at an advanced level.

5. Brillianteer diamond gemstones at an advanced level.

6. Make Fancy Cut Diamond Gemstones at an advanced level.

Range: Fancy Cut Shapes either square shaped diamond gemstones or irregular shaped diamond gemstones.

7. Exercise quality control over a diamond processing workplace.

8. Provide effective supervision in a diamond processing workplace.

9. Provide effective maintenance supervision in a diamond processing workplace.

***ASSOCIATED ASSESSMENT CRITERIA***

Associated Assessment Criteria for Exit Level Outcome 1:

- Oral communication is maintained and adapted as required to promote effective interaction in a work context.
- Written communication is conducted at an appropriate level for designated target audiences.

• Oral and written communication is conducted at an appropriate level in a second language.
• Mathematical principles and techniques are applied while performing the tasks in the operational context.
• Knowledge of relevant legislation is used to apply to safeguard people, operations and the environment.
• Problems and solutions are recorded and monitored for reoccurrence.
• Responsibilities of a team leader are identified and communicated in the workplace.

Associated Assessment Criteria for Exit Level Outcome 2:

• Occupational Health and Safety legislation applicable to the workplace is understood and applied at all times as per workplace requirements.
• Safe, healthy and environmentally related activities are conducted in a diamond processing environment according to the Occupational Health, Safety and Environmental requirements.
• Knowledge of relevant legislation is used to apply to safeguard people, operations and the environment.
• High ethical standards are applied in terms of legal compliance, standards of conduct and upholding rights and obligations of conducting business in the diamond industry.

Associated Assessment Criteria for Exit Level Outcome 3:

• Principles of leadership are displayed in the workplace.
• Efficient and effective use of resources are deployed in manufacturing operations.
• Team members are valued, empowered and developed through application of best practices in human relationships.

The following Exit Level Outcomes are specific in terms of Advanced Crossworking, Advanced Brillianteering, Advanced Fancy Stone Making, Production Quality Control, Factory Supervision and Maintenance Supervision:

Associated Assessment Criteria for Exit Level Outcome 4:

• The tools and equipment are identified and their uses explained in terms of their application for crossworking diamonds.
• Benches and equipment are prepared, balanced, levelled and set to enable accurate and efficient crossworking of diamond gemstones.
• The structure of diamonds are described and are related to the risks and opportunities for processing to make polished diamond gemstones.
• The basis of valuation of diamond gemstones is understood; and the impact of non compliance with processing procedures is explained in terms of the loss of potential value and practical remediation that can be applied.
• The potential impact of proportion on the ultimate value of the diamond gemstone is explained.
• The activities in crossworking diamond gemstones are explained and the importance to the process demonstrated in terms of the properties and value of the finished gemstone.
• The importance of communication between Crossworker, Marker, Brillianteer and Manager is explained in terms of clarification of work to be conducted.
• Large and critical diamond gemstones are crossworked according to acceptable international standards.

OR

Associated Assessment Criteria for Exit Level Outcome 5:

• The tools and equipment are identified and their use is explained in terms of their application for brillianteering diamonds.

• Benches and equipment are prepared, balanced, levelled and set to enable accurate and efficient brillianteering of diamond gemstones.
• The structure of diamonds are described and are related to the risks and opportunities for processing to make polished diamond gemstones.
• The basis of valuation of diamond gemstones is understood; and the impact of non compliance with processing procedures is explained in terms of the loss of potential value and practical remediation that can be applied.
• The potential impact of proportion on the ultimate value of the diamond gemstone is explained.
• The activities in brillianteering diamond gemstones are explained and the importance to the process demonstrated in terms of the properties and value of the finished gemstone.
• The importance of communication between Crossworker, Marker, Brillianteer and Manager is explained in terms of clarification of work to be conducted.
• Large and critical diamond gemstones are brillianteered according to acceptable international standards.

OR

Associated Assessment Criteria for Exit Level Outcome 6:

• The tools and equipment are identified and their use is explained in terms of their application for processing diamond gemstones.
• Benches and equipment are prepared, balanced, levelled and set to enable accurate and efficient fancy stone making of diamond gemstones.
• The structure of diamonds are described and are related to the risks and opportunities for processing to make polished diamond gemstones.
• The basis of valuation of diamond gemstones is understood; and the impact of non compliance with processing procedures is explained in terms of the loss of potential value and practical remediation that can be applied.
• The potential impact of proportion on the ultimate value of the diamond gemstone is explained.
• The activities in fancy stone making of diamond gemstones are explained and the importance to the process demonstrated in terms of the properties and value of the finished gemstone.
• The importance of communication between Fancy Stone Maker, Marker and Manager is explained.
• Large and critical diamond gemstones are made to fancy shapes according to acceptable international standards.

OR

Associated Assessment Criteria for Exit Level Outcome 7:

• Occupational health, safety and environmental aspects of working in a diamond processing workplace are applied.
• The standards and controls at critical stages in the processing of diamonds are described and monitored to ensure work is performed to the required standard and remedial action is initiated to rectify shortcoming where required.
• The tools and equipment are identified and their use is explained in terms of their application for processing diamond gemstones.
• Benches and equipment are prepared, balanced, levelled and set to enable accurate and efficient processing of diamond gemstones.
• The structure of diamonds are described and are related to the risks and opportunities for processing to make polished diamond gemstones.
• The process of fabrication of diamond gemstones is understood and appropriate controls with relevant corrective actions are applied in the workplace.

• The importance of adherence to quality control practices is explained and good practices are applied in the workplace.
• The workplace quality assurance system is explained and administered according to best practices.

OR

Associated Assessment Criteria for Exit Level Outcome 8:

• Occupational health, safety and environmental aspects are applied while working in a diamond processing workplace.
• The standards and controls at critical stages in the processing of diamonds are described and monitored to ensure work is performed to the required standard and remedial action is initiated to rectify shortcoming where required.
• The tools and equipment are identified and their uses explained in terms of their application for processing diamonds.
• Benches and equipment are prepared, balanced, levelled and set to enable accurate and efficient processing of diamond gemstones.
• The process of fabrication of diamond gemstones is explained and appropriate controls and remediation are applied to ensure quality and performance.
• The basis of valuation of diamond gemstones is understood; and the impact of non compliance with processing procedures is explained in terms of the loss of potential value and practical remediation that can be applied.
• The potential impact of proportion on the ultimate value of the diamond gemstone is explained.
• The workplace financial practices are explained and adhered to in terms of good business practice.

OR

Associated Assessment Criteria for Exit Level Outcome 9:

• Occupational health, safety and environmental aspects of working in a diamond processing workplace are applied.
• The tools and equipment are identified and their uses explained in terms of their application for processing diamond gemstones.
• Benches and equipment are prepared, balanced, levelled and set to enable accurate and efficient processing of diamond gemstones.
• The process of fabrication of diamond gemstones is explained and appropriate controls and remediation are applied to ensure quality and performance.
• Workplace procedures for collecting and returning equipment for repair are described and applied consistently in the workplace.
• Various scaiffes found in the workplace are assessed for refurbishment or repair and appropriate remediation is carried out according to the relevant refurbishment process.
• Other equipment used in a diamond processing workplace is assessed, refurbished or repaired as required.
• Effective maintenance policies for a given diamond processing workplace are devised and applied to ensure optimum availability to support production effectiveness.

Critical Cross Field Outcomes:

Critical Cross-Field Outcomes have been addressed as follows:

While conducting activities related to diamond processing, learners are able to:

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

- Identifying and using tools and equipment to process diamonds in accordance with the relevant requirements, techniques and best operating practices.
- Conducting evaluation, design and marking, grading or inspection activities related to diamond processing.
- Responding to non-conformances in a diamonds processing environment.
- Apply preventative or remedial action in accordance with operating procedures.

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

- Contributing to team goals and achievements by adhering to agreed working methods and processes.
- Contributing to team efficiency by supporting other team members in the diamonds processing environment.
- Adhering to team protocols, codes of conduct and generally promoting a positive team spirit.
- Coordinating one's work with that of others in the direct surrounding area, internal and external operations.

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

- Applying operating instructions to control and respond to conditions in the diamonds processing field.
- Taking preventive and remedial action to solve operating problems while processing diamonds.
- Maintaining product quality with reference to key aspects and critical conditions in a diamonds processing environment.
- Adhering to strict security and control requirements particular to the diamond industry.

Collect, analyse, organise and critically evaluate information by:

- Applying the principles related to the properties of diamonds in terms of value and potential.
- Applying relevant basis and techniques to determine the value of diamonds.
- Use and interpret instruments such as recognised price lists.

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

- Interpreting, recording and reporting information pertaining to diamonds processing.
- Preparing and submitting reports, non-conformance reports and other required documentation.

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

- Applying occupational health, safety and environmental requirements in the workplace.
- Using relevant terminology and adhering to standard protocols such as SI, ISO and international standards applicable in the diamond design and evaluation field.
- Controlling technologically advanced production equipment according to operating procedures.
- Deploying computers to assist in the diamond design and evaluation process.

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

• Understanding the impact of diamond processing and evaluation activities in the context of the broader diamond and gemstone industry, and his/her own role in each context.
• Requesting assistance from other team members and support personnel.
• Assisting other team members and working together with support personnel to conduct diamond fabrication activities and to investigate and resolve problem areas.

Integrated Assessment:

• Integrated assessment at the level of the qualification provides an opportunity for learners to show they are able to integrate concepts, actions and. ideas achieved across a range of unit standards and contexts.

• Integrated assessment must evaluate the quality of observable performance as well as the thinking behind the performance, and must be based on a summative assessment guide. The guide will spell out how the assessor will assess different aspects of the performance and will include:
o Observing the learner at work (both in the primary activity as well as other interactions).
o Asking questions and initiating short discussions to test understanding.
o Looking at records and reports in the portfolio and reviewing previous assessments.
o In some cases interference will be necessary to determine competence depending on the nature and context within which performance takes place.

• It is necessary to ensure that the fundamental part of the qualification is also targeted to ensure that while the competence may have been achieved in a particular context, learners are able to apply it in a range of other contexts and for future learning. The assessment should also ensure that all the Critical Cross-Field Outcomes have been achieved.

• The learner may choose in which language s/he 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 introduced if pertinent to any of the exit-level outcomes. The assessment process should cover both the explicit tasks required for the qualification as well as the understanding of the concepts and principles that underpin the activities associated with processing diamonds.

***INTERNATIONAL COMPARABILITY***
The search for internationally comparable qualifications indicates that there are a number of institutions offering courses in rough evaluation and polished grading. None could be found that offer any qualifications for regulatory inspecting. There are a number of gemmological societies and institutes that offer courses and these have been listed below. Whilst some of them have approval from state or national education authorities, none appear to have accreditation as national qualifications of the countries concerned.

The Gemological Institute of America (GIA) offers diplomas in Diamond Essentials that familiarizes learners with their own GIA clarity grading system to facilitate grading diamonds and colour and how colour affects value; Diamonds and Diamond Grading, also teaches learners skills of judging and grading the colour, clarity, and cut of diamonds, how to determine proportions and estimate weight. It addresses the fundamentals of diamond treatments, synthetics, and simulants, the effect of fluorescence on colour in diamonds, the role played by cut in the marketplace. The Diamond Grading Lab and the Advanced Grading Lab course teaches learners how to grade clarity, colour, and cut quality factors of round brilliant diamonds and advanced grading techniques. The GIA offers grading courses in South Africa through the auspices of the Harry Oppenheimer Diamond Training School. These programmes would be equivalent to the Grading stream contained in the NQF Level 4 qualification and the Advanced Grading Lab to the Grading stream that is contained in this qualification.

The Gemological Institute of America (GIA) is a non-profit, private, post-secondary educational institution incorporated for the purpose of promoting education and research in gemmology and related subjects. It is accredited by the Accrediting Commission of Career Schools and Colleges of Technology (ACCSCT). (The ACCSCT is listed by the U.S. Department of Education as a nationally recognized accrediting agency). GIA New York is licensed by the New York State Education Department. The process of skills transfer is effected through intense one or two week training interventions, based on gemmological theory and international practice. The programmes offered do not include workplace activities, and does not effectively impart knowledge of assessment of potential of rough diamonds after conversion to cut and polished stones.

The Swiss Gemological Institute (SSEF) offers various courses in gemmology that include a Basic Diamond Course that serves as introduction to diamonds covering formation, properties and grading. This would be less detailed that the Grading stream contained in the Level 4 qualification. The Scientific Diamond Course addresses some of the features covered in this qualification dealing with the properties of diamonds. None of their programmes addresses rough evaluation. They claim no accreditation. These programmes are also offered as intense training interventions imparting theory, with no workplace application in the programmes.

The Indian Institute of Gemology (IMI) offers a course in Diamonds and Diamond Grading that addresses gem identification and diamond properties. This programme would not attain the level of the Level 4 qualification. They claim no accreditation. This programme is a one-week programme based on theoretical explanation with no workplace application.

The Indian Diamond Institute (IDI) offers a diploma in diamond sorting (equivalent to 30 credits), a diploma in diamond grading (equivalent to 22 credits) as well as a certificate programme in rough sorting (equivalent to 25 credits) and polished grading (equivalent to 15 credits). This institute appears to be the leading institute in India and gemmological courses are supported by the Gemmological Society of Great Britain, an internationally recognised gemmological society.

The International Gemological Institute (IGI) offers a course in Polished Diamonds that teaches learners how to grade polished diamonds and would appear to cover the contents of the Grading stream of the Level 4 qualification. The Rough Diamond Course covers sorting, sorting for parting and identification of diamonds. It covers some of the aspects of the Rough Evaluation stream contained in this qualification, but does not cover the depth of this qualification. Whilst the IGI has its own school of Gemology, it does not cite any accreditation. The Rough Diamond Course offers the nearest equivalent to the South African qualification but does not as comprehensive as this qualification. It is delivered in an intense three-day programme.

The Hode Raad voor Diamant (HRD) offers courses in rough sorting, diamond grading, diamond treatments which would appear to cover the scope of some of the Rough Evaluation stream and the Grading stream of this qualification. The HRD was recognised by the Flemish community as an educational institute, but they do not claim national accreditation for their programmes.

The Gemological Society of Great Britain offers a six day certificate programme entitled Diamond Practical Certificate providing learners with diamond grading skills and this programme forms part of the Gem Diamond Diploma (accredited at Level 4 by the UK Qualifications and Curriculum Authority). The Diploma addresses polished grading as well as imitations, treatments and synthetics.

The MSU Gemological Center (MSU) offers courses in diamond grading and Rough diamonds. These courses appear to cover some of the general scope of the Grading and Rough Evaluation streams of this qualification, but the MSU claims no accreditation. The duration of the programmes would indicate that the scope may be less comprehensive that the Level 4 qualification.

The Canadian Institute of Gemology (CIG) offers a Diamond Grading course that appears to cover the scope of the Grading stream of the Level 4 qualification. They claim no national accreditation for their programmes.

The EGL College of Gemology (EGL) is part of an international laboratory and consulting service that offers courses in Diamonds and Diamond Grading. The programme covers the scope of the Grading stream of the Level 4 qualification and part of this qualification. EGL is accredited with the MQA.

The search indicates that whilst there are a number of organisations offering certification programmes in rough diamonds and polished grading, few appear to be nationally accredited, although some have international reputation for their standards and would offer programmes at the level of this qualification in these streams. None, however, offer regulator valuator qualifications. The UK Diploma course would appear to be the equivalent to the Level 4 Diamond evaluation and design qualification, as this qualification addresses advanced evaluation and grading, as well as the diamond evaluator content, designed to equip national regulators with the expertise to effectively monitor diamond trading. The GIA programme is widely accepted as the international standard in gem identification.

In seeking to establish whether qualifications in diamond processing exist elsewhere the following channels have been pursued:

- Waonline.com-diamond links identified international diamond institutes.
- Contact with established payers in the South African industry, including leading diamond cutting operations, internationally linked gemstone valuators, internationally linked training institutions, and people with many years established connections to De Beers, the leading role-player in the distribution of diamond gemstones in the world.
- There are established diamond trading centres in the world and the diamond clubs and employer associations from the following countries were contacted with a view to establish comparable qualifications:
  - Austria: World Federation of Diamond Clubs.
  - Belgium: Beurs Voor Diamanthandel, Syndikaat Der Belgische Diamantnijverheid (SDB) and HRD Antwerp NV.
  - Canada: Canadian Jewellers Institute.
  - China: Shanghai Diamond Exchange.
  - England: The London Diamond Bourse.
  - India: Bharat Diamond Bourse.
  - Israel: Israel Diamond Exchange Ltd and The Israel Manufacturers Association Ltd.
  - Netherlands: Vereniging Beurs Voor Den Diamonthandel, Diamondbourse and Algemene Juweliersvereniging
  - Sri Lanka: Sri Lanka Diamond Manufacturers Association.
  - Thailand: Bangkok Diamond and Precious Stones Exchange and The Thai Diamond Manufacturers Association.
  - USA: New York Diamond Dealers Club and Diamond Manufacturers and importers Association of America.

These countries were contacted because they are the countries where major diamond processing takes place.

Feedback from associates of South African training and professional service providers from Belgium and Canada has indicated that the unit standards developed in South Africa are of a high standard. Experienced managers and craftsmen in South Africa with international experience have also indicated that the standard of unit standards that make up this qualification are at a level that is comparable to best practices in countries such as Belgium, Israel, China and India. Sources of this information come from experienced people working with international connections from organisations that include:

Contact has been made with organisations in SADC countries who are also seeking to establish recognition for the same skills as covered by this qualification. Neither Namibia nor Botswana, who are rapidly developing diamond processing skills, have a formal system and the MQA has been approached to establish whether through SADC qualifications developed in South Africa could be used to establish regional standards.

In conclusion, it appears that South Africa has been the first country to establish formal national qualifications in diamond processing and that, outside of rough evaluation and polished grading; no other comparable international qualifications yet exist.

***ARTICULATION OPTIONS***
This qualification allows for both vertical and horizontal articulation.

Vertical articulation exists with:

- Advance Certificate: Management, NQF Level 6.

Horizontal articulation exists between the six specialisation areas contained in this qualification:

- National Certificate: Diamond Trading, NQF Level 5.

***MODERATION OPTIONS***
- Anyone assessing a learner or moderating the assessment of a learner against the 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, or with an ETQA that has a Memorandum of Understanding with the relevant ETQA.

- 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 relevant ETQA, according to the ETQA's policies and guidelines for assessment and moderation.

- Moderation must include both internal and external moderation of assessments, unless ETQA policies specify otherwise. Moderation should also encompass achievement of the competence described in the associated unit standards.

- 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***
Assessors should be in possession of:

- An appropriate qualification above the level of the qualification and preferably relevant workplace practical experience

- Registered as an assessor with the relevant ETQA.

***NOTES***
N/A

***UNIT STANDARDS***

| | ID | UNIT STANDARD TITLE | LEVEL | CREDITS |
|---|---|---|---|---|
| Fundamental | 242706 | Analyse problems | Level 5 | 4 |
| Fundamental | 15234 | Apply efficient time management to the work of a department/division/section | Level 5 | 4 |
| Fundamental | 335800 | Apply professional values and ethics in the operational environment | Level 5 | 4 |
| Fundamental | 10622 | Conduct communication within a business environment | Level 5 | 8 |
| Fundamental | 10631 | Demonstrate an understanding of manufacturing, principles, methodologies and processes | Level 5 | 7 |
| Fundamental | 15225 | Identify and interpret related legislation and its impact on the team, department or division and ensure compliance | Level 5 | 4 |
| Core | 117701 | Address safety, health and environmental requirements and hazards in a technical context | Level 5 | 8 |
| Core | 15224 | Empower team members through recognising strengths, encouraging participation in decision making and delegating tasks | Level 5 | 4 |
| Core | 15223 | Implement training needs for teams and individuals to upgrade skills levels | Level 5 | 3 |
| Core | 119159 | Maintain manufacturing efficiencies | Level 5 | 12 |
| Elective | 376521 | Collect and return diamond processing equipment for repair or refurbishment | Level 4 | 2 |
| Elective | 260402 | Demonstrate understanding of the implementation of occupational health, safety and environmental legislation in a diamond processing workplace | Level 4 | 5 |
| Elective | 253794 | Describe the process of fabrication for polishing diamond gemstones | Level 4 | 12 |
| Elective | 259699 | Grade polished diamond gemstones | Level 4 | 10 |
| Elective | 14586 | Monitor and control quality control practices in a manufacturing/engineering environment | Level 4 | 8 |
| Elective | 260417 | Prepare and set up a bench for polishing diamond gemstones | Level 4 | 2 |
| Elective | 376523 | Refurbish a scoured scaiffe | Level 4 | 6 |
| Elective | 259838 | Use laboratory equipment to examine diamond gemstones | Level 4 | 4 |
| Elective | 115821 | Apply business financial practices | Level 5 | 4 |
| Elective | 376501 | Balance a brillianteered diamond gemstone | Level 5 | 5 |
| Elective | 376522 | Balance a crossworked diamond gemstone | Level 5 | 5 |
| Elective | 376503 | Brillianteer critical diamond gemstones | Level 5 | 12 |
| Elective | 7818 | Conduct on-the-job coaching | Level 5 | 5 |
| Elective | 376820 | Crosswork critical diamond gemstones | Level 5 | 15 |
| Elective | 376520 | Crosswork large diamond gemstones | Level 5 | 15 |
| Elective | 116456 | Develop and manage maintenance policies and schedules | Level 5 | 20 |
| Elective | 376502 | Evaluate improvements to the quality of polished diamond gemstones | Level 5 | 12 |
| Elective | 376500 | Fancy cut large diamond gemstones | Level 5 | 6 |
| Elective | 376504 | Machine a scaiffe | Level 5 | 5 |
| Elective | 376508 | Monitor the fabrication process for brillianteering diamond gemstones | Level 5 | 10 |
| Elective | 376507 | Monitor the fabrication process for crossworking diamond gemstones | Level 5 | 10 |
| Elective | 376509 | Monitor the fabrication process for fancy stone making of diamond gemstones | Level 5 | 12 |
| Elective | 335894 | Optimise the quality assurance system | Level 5 | 6 |
| Elective | 376511 | Plot impurities in rough and semi polished diamond gemstones | Level 5 | 6 |
| Elective | 376510 | Prepare an electroplated scaiffe | Level 5 | 5 |
| Elective | 376512 | Prepare an impregnated scaiffe | Level 5 | 5 |
| Elective | 376514 | Refurbish Diamond Processing Equipment | Level 5 | 8 |
| Elective | 119180 | Schedule and arrange maintenance and repairs for manufacturing operations | Level 5 | 4 |
| Elective | 376513 | Examine the crystalline structure of rough diamond gemstones to determine how to process them | Level 6 | 10 |

***LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION***
***None***

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Fancy cut large diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376500 | Fancy cut large diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 6 |

***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 structure of diamond gemstones and the implications for fancy cutting large diamond gemstones.

**SPECIFIC OUTCOME** 2
Fancy cut large diamond gemstones.

**SPECIFIC OUTCOME** 3
Conduct post-fancy cutting cleaning, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Balance a brillianteered diamond gemstone***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376501 | Balance a brillianteered diamond gemstone | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 5 |

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

**SPECIFIC OUTCOME** 1
Identify the equipment and tools used to balance brillianteered diamond gemstones.

**SPECIFIC OUTCOME** 2
Demonstrate knowledge of the structure of diamond gemstones and the implications for balancing brillianteered diamond gemstones.

**SPECIFIC OUTCOME** 3
Locate brillianteered diamond gemstones into and set tangs for balancing.

**SPECIFIC OUTCOME** 4
Balance brillianteered diamond gemstones.

**SPECIFIC OUTCOME** 5
Conduct post-balancing cleaning, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Evaluate improvements to the quality of polished diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376502 | Evaluate improvements to the quality of polished diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 12 |

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

**SPECIFIC OUTCOME** 1
Describe the methods of improving polished diamond gemstones.

**SPECIFIC OUTCOME** 2
Assess the dimensions and the make of diamond gemstones.

**SPECIFIC OUTCOME** 3
Estimate the potential added value of the improvement.

**SPECIFIC OUTCOME** 4
Explain the risks associated with improvement activities.

**SPECIFIC OUTCOME** 5
Identify and agree the scope of what can be changed with reference to the implications for the quality of the resultant gemstone and the process involved.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Brillianteer critical diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376503 | Brillianteer critical diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 12 |

***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 structure of diamond gemstones and the implications for brillianteering critical diamond gemstones.

**SPECIFIC OUTCOME 2**
Brillianteer critical diamond gemstones.

**SPECIFIC OUTCOME 3**
Conduct post-brillianteering cleaning, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Machine a scaiffe***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376504 | Machine a scaiffe | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 5 |

***This unit standard replaces:***

| US ID | Unit Standard Title | NQF Level | Credits | Replacement Status |
|---|---|---|---|---|
| 10533 | Machine a scaiffe | Level 3 | 12 | Will occur as soon as 376504 is registered |

**SPECIFIC OUTCOME 1**
Select required equipment and tools to machine a scaiffe.

**SPECIFIC OUTCOME 2**
Inspect a used scaiffe and identify its owner.

**SPECIFIC OUTCOME 3**
Machine the surface of a scaiffe for reuse.

**SPECIFIC OUTCOME 4**
Balance a machined scaiffe.

**SPECIFIC OUTCOME 5**
Conduct post machine-a-scaiffe activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Monitor the fabrication process for crossworking diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376507 | Monitor the fabrication process for crossworking diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 10 |

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

**SPECIFIC OUTCOME** 1
Utilise equipment and tools to clamp diamond gemstones.

**SPECIFIC OUTCOME** 2
Describe the stages in the fabrication process for crossworking diamond gemstones.

**SPECIFIC OUTCOME** 3
Describe the critical checkpoints in fabrication for crossworking diamond gemstones and their importance for overall quality, weight and value of the finished article.

**SPECIFIC OUTCOME** 4
Monitor the fabrication process for crossworking diamond gemstones.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Monitor the fabrication process for brillianteering diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376508 | Monitor the fabrication process for brillianteering diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 10 |

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

**SPECIFIC OUTCOME** 1
Utilise equipment and tools to brillianteer diamond gemstones.

**SPECIFIC OUTCOME** 2
Describe the stages in the fabrication process for brillianteering diamond gemstones.

**SPECIFIC OUTCOME** 3
Describe the critical checkpoints in fabrication for brillianteering diamond gemstones and their importance for overall quality, weight and value of the finished article.

**SPECIFIC OUTCOME** 4
Monitor the fabrication process for brillianteering diamond gemstones.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Monitor the fabrication process for fancy stone making of diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376509 | Monitor the fabrication process for fancy stone making of diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 12 |

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

**SPECIFIC OUTCOME** 1
Describe the stages in the fabrication process for fancy stone making of diamond gemstones.

**SPECIFIC OUTCOME** 2
Describe the critical checkpoints in fabrication for fancy stone making of diamond gemstones and their importance for overall quality, weight and value of the finished article.

**SPECIFIC OUTCOME** 3
Monitor the fabrication process for fancy stone making of diamond gemstones.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Prepare an electroplated scaiffe***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376510 | Prepare an electroplated scaiffe | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 5 |

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

**SPECIFIC OUTCOME** 1
Assess and identify the material, equipment and tools required to prepare an electroplated scaiffe.

**SPECIFIC OUTCOME** 2
Inspect a used scaiffe and identify its owner.

**SPECIFIC OUTCOME** 3
Clean the surface of a scaiffe for reuse.

**SPECIFIC OUTCOME** 4
Prepare the electroplated scaiffe for reuse.

**SPECIFIC OUTCOME** 5
Balance a cleaned and prepared electroplated scaiffe.

**SPECIFIC OUTCOME** 6
Conduct post refurbish-a-scaiffe activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Plot impurities in rough and semi polished diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376511 | Plot impurities in rough and semi polished diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 6 |

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

**SPECIFIC OUTCOME** 1
Clean rough and semi polished diamond gemstones.

**SPECIFIC OUTCOME** 2
Examine and identify impurities in rough and semi-polished diamond gemstones.

**SPECIFIC OUTCOME** 3
Plot the type and location of impurities in rough and semi polished diamond gemstones.

**SPECIFIC OUTCOME** 4
Conduct post plotting reconciliation, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78966 | National Certificate: Diamond Design and Evaluation | Level 5 |
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Prepare an impregnated scaiffe***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376512 | Prepare an impregnated scaiffe | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 5 |

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

**SPECIFIC OUTCOME** 1
Select material, equipment and tools required to prepare an impregnated scaiffe.

**SPECIFIC OUTCOME** 2
Inspect a used scaiffe and identify its owner.

**SPECIFIC OUTCOME** 3
Clean the surface of a scaiffe for reuse.

**SPECIFIC OUTCOME** 4
Prepare the impregnated scaiffe for reuse.

**SPECIFIC OUTCOME** 5
Balance a cleaned and prepared impregnated scaiffe.

**SPECIFIC OUTCOME** 6
Conduct post refurbish-a-scaiffe activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Examine the crystalline structure of rough diamond gemstones to determine how to process them***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376513 | Examine the crystalline structure of rough diamond gemstones to determine how to process them | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 6 | 10 |

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

**SPECIFIC OUTCOME** 1
Assess information relating to the characteristics, properties and crystalline structure of rough diamond gemstones.

**SPECIFIC OUTCOME** 2
Evaluate the optimum shape of polished diamonds from rough diamond gemstones.

**SPECIFIC OUTCOME** 3
Determine the strategy for processing based on crystalline structure.

**SPECIFIC OUTCOME** 4
Conduct post-evaluation reconciliation, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

### *UNIT STANDARD:*

### *Refurbish Diamond Processing Equipment*

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376514 | Refurbish Diamond Processing Equipment | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 8 |

***This unit standard replaces:***

| US ID | Unit Standard Title | NQF Level | Credits | Replacement Status |
|---|---|---|---|---|
| 10534 | Repair or refurbish equipment | Level 3 | 35 | Will occur as soon as 376514 is registered |

**SPECIFIC OUTCOME** 1
Identify the equipment used in the diamond polishing industry and evaluate the extent of repair or refurbishment necessary.

**SPECIFIC OUTCOME** 2
Liaise with the user of the equipment to be repaired or refurbished.

**SPECIFIC OUTCOME** 3
Arrange for the repair or refurbishment of equipment.

**SPECIFIC OUTCOME** 4
Inspect the installation and application of equipment in the workplace.

**SPECIFIC OUTCOME** 5
Conduct post-repair-or-refurbish equipment activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Crosswork large diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376520 | Crosswork large diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 15 |

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

**SPECIFIC OUTCOME** 1
Select equipment and tools used to crosswork diamond gemstones.

**SPECIFIC OUTCOME** 2
Demonstrate knowledge of the structure of diamond gemstones and the implications for crossworking large diamond gemstones.

**SPECIFIC OUTCOME** 3
Crosswork large diamond gemstones.

**SPECIFIC OUTCOME** 4
Conduct post-crossworking cleaning, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Collect and return diamond processing equipment for repair or refurbishment***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376521 | Collect and return diamond processing equipment for repair or refurbishment | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 4 | 2 |

***This unit standard replaces:***

| US ID | Unit Standard Title | NQF Level | Credits | Replacement Status |
|---|---|---|---|---|
| 10531 | Collect and return equipment for repair or refurbishment | Level 2 | 2 | Will occur as soon as 376521 is registered |

**SPECIFIC OUTCOME** 1
Identify and label the equipment required to be repaired or refurbished.

**SPECIFIC OUTCOME** 2
Liaise with the user of equipment and inter-departmental customers.

**SPECIFIC OUTCOME** 3
Comply with the workplace security requirements.

**SPECIFIC OUTCOME** 4
Secure the equipment in transit.

**SPECIFIC OUTCOME** 5
Conduct post-repair-or-refurbish equipment activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Balance a crossworked diamond gemstone***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376522 | Balance a crossworked diamond gemstone | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 5 |

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

**SPECIFIC OUTCOME** 1
Assess and identify the equipment and tools used to balance crossworked diamond gemstones.

**SPECIFIC OUTCOME** 2
Demonstrate knowledge of the structure of diamond gemstones and the implications for balancing crossworked diamond gemstones.

**SPECIFIC OUTCOME** 3
Locate crossworked diamond gemstones into and set tangs for balancing.

**SPECIFIC OUTCOME** 4
Balance crossworked diamond gemstones.

**SPECIFIC OUTCOME** 5
Conduct post-balancing cleaning, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Refurbish a scoured scaiffe***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376523 | Refurbish a scoured scaiffe | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 4 | 6 |

***This unit standard replaces:***

| US ID | Unit Standard Title | NQF Level | Credits | Replacement Status |
|---|---|---|---|---|
| 10532 | Refurbish a scaiffe | Level 3 | 36 | Will occur as soon as 376523 is registered |

**SPECIFIC OUTCOME** 1
Identify the material, equipment and tools required to refurbish a scoured scaiffe.

**SPECIFIC OUTCOME** 2
Inspect a used scaiffe and identify its owner.

**SPECIFIC OUTCOME** 3
Clean the surface of a scaiffe for reuse.

**SPECIFIC OUTCOME** 4
Prepare the surface of a scaiffe for reuse.

**SPECIFIC OUTCOME** 5
Maintain a scoured scaiffe.

**SPECIFIC OUTCOME** 6
Conduct post refurbish-a-scaiffe activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |

## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

***UNIT STANDARD:***

***Crosswork critical diamond gemstones***

| *SAQA US ID* | *UNIT STANDARD TITLE* | | |
|---|---|---|---|
| 376820 | Crosswork critical diamond gemstones | | |
| *ORIGINATOR* | | *PROVIDER* | |
| Task Team - Fabrication and Extraction | | | |
| *FIELD* | | *SUBFIELD* | |
| 6 - Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| *ABET BAND* | *UNIT STANDARD TYPE* | *NQF LEVEL* | *CREDITS* |
| Undefined | Regular | Level 5 | 15 |

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

**SPECIFIC OUTCOME** 1
Identify the equipment and tools used to crosswork diamond gemstones and describe their application.

**SPECIFIC OUTCOME** 2
Demonstrate knowledge of the structure of diamond gemstones and the implications for crossworking critical diamond gemstones.

**SPECIFIC OUTCOME** 3
Crosswork critical diamond gemstones.

**SPECIFIC OUTCOME** 4
Conduct post-crossworking cleaning, checking and security activities.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

| | ID | QUALIFICATION TITLE | LEVEL |
|---|---|---|---|
| Elective | 78843 | National Certificate: Diamond Processing | Level 5 |