


SKILLS PROGRAMME DOCUMENT						 Quality Council for Trades & Occupations
This Skills Programme Doc is applicable to three (3) Skills Programmes						
Skills Programme ID Number(s)		Skills Programme Title(s)				
SP-230306		Mining Rock Drill Operator-Underground Hardrock Operations				
SP-230307		Mining Rock Drill Operator – Underground Coal Operations				
SP-230308		Mining Rock Drill Operator – Surface Mining Operations				
NQF Level	2	Credits	20	Duration in days	25 days	
Skills Programme Status	APPROVED			Start Date	End Date	
				25/03/2023	25/03/2028	
Last date for enrolment	25/03/2028	Last date for achievement	25/03/2032			

SKILLS PROGRAMME DETAILS

1.	Title	<ul style="list-style-type: none"> - Mining Rock Drill Operator-Underground Hardrock Operations - Mining Rock Drill Operator – Underground Coal Operations - Mining Rock Drill Operator – Surface Mining Operations
2.	Sub Title	711302 Rock Drill Operator
3.	NQF Level	NQF Level 2
4.	Duration	25 days
5.	Credits	20 credits
6.	Quality Assuring Body	Quality Council for Trades and Occupations (QCTO)
7.	Skills Programme Rationale	<p>The need for this skills programme is that various industry sectors use drilling machines. In particular, hand-held rock-drilling operations are an essential part of the mining sectors, so it is essential that Rock Drill Operators are trained in their duties and responsibilities.</p> <p>Mining legislation prescribes that the machine operators must be qualified, by virtue of their knowledge, training, skills, and experience, before they are appointed. They must be trained, assessed, and found competent, in accordance with recognised training and development programmes.</p> <p>There are three specific unique mining contexts where rockdrill operations are undertaken: Underground Hardrock, Underground Coal and Surface mining operations. Learners will be trained in a specific context.</p> <p>There is no similar skills programme recorded.</p> <p>Typical learners for this skills programme will be new entrants into the mining sector</p> <p>A typical learning pathway for hand-held rock drill operators will be to other machine operator specialisations and to occupations in operations, engineering or training.</p> <p>The benefits of this skills programme to the mining sector will be to have persons who are trained and declared competent for their specific duties and responsibilities, and to provide introductory, specialised training to enable them to advance their careers. Safe and productive mining operations are fundamental to the sector.</p> <p>The work is done in excavations that do not exist naturally but are created through rock breaking and blasting activities. This unique environment holds many hazards and risks for all personnel. The skills required to for the work require dedicated learning, application, and specialised and technical skills. Mining will remain the</p>

		<p>backbone of the South African economy for many years to come, and with the advance of technology there will, in the coming decades, be opportunities to return to and access the minerals left behind in the older mines. The mining and minerals sector will also be able to access resources that are currently too deep to mine. The development of the occupational competence as set out in this skills programme is essential to maintain and advance mining in the country.</p> <p>This skills programme will benefit society in terms of skills and technical competencies since qualifying learners will improve work standards, health and safety, and effectiveness, and contribute to the growth of the country's economy.</p>	
8.	Related registered qualification/s	SAQA ID 120057 Intermediate Occupational Certificate: Miner	
9.	Purpose	<p>The purpose of this skills programme is to prepare a learner to operate as a Mining Rock Drill Operator.</p> <p>A Mining Rock Drill Operator operates a handheld rock drill to drill holes for mining operations. The qualifying learner will know the functioning and operating of the machine, including health, safety and the environmental requirements and will be able to operate the machine productively and safely.</p> <p>The curriculum will be contextualised for underground hardrock, underground coal or surface mining operations.</p> <p>A qualified learner will be able to:</p> <ul style="list-style-type: none"> Operate a handheld rock drill 	
10.	Content	<p><u>Knowledge component</u></p> <ul style="list-style-type: none"> 900134-000-00-KM-01, Mine Health, safety, and the environment, NQF Level 2, Credits 4 900152-000-00-KM-01, Mining operations and machines, NQF Level 2, Credits 4 	<p><u>Application component</u></p> <p><u>Compulsory module/s:</u></p> <ul style="list-style-type: none"> 900134-000-00-PM-01, Apply, exercise, and ensure safety, health and environmental measures and procedures for mining operations, NQF Level 2, Credits 4 <p><u>A learner may choose any of the below electives:</u></p> <p>Elective module1: Underground hardrock operations</p> <ul style="list-style-type: none"> 900152-000-00-PM-01, Operate a handheld rock

			<p>drill for underground hardrock operations, NQF Level 2, Credits 8</p> <p>Elective module 2: Underground Coal operations</p> <ul style="list-style-type: none"> 900153-000-00-PM-01, Operate a handheld rock drill for underground coal operations, NQF Level 2, Credits 8 <p>Elective module 3: Surface mining operations</p> <ul style="list-style-type: none"> 900154-000-00-PM-01, Operate a handheld rock drill for surface mining operations, NQF Level 2, Credits 8
		Total credits: 8	Total credits: 12
11.	Minimum entry requirements	Open access.	
12.	Exit Level Outcomes (ELO) and Associated Assessment Criteria (AAC)	<p>Exit Level Outcome 1: Operate a handheld rock drill, interpreting, applying, and exercising policies, procedures, performance parameters, controls, and operating standards.</p> <p>Associated Assessment Criteria:</p> <ul style="list-style-type: none"> Operational knowledge and understanding of occupational health, safety and environmental requirements and drilling operations are applied. The correct sequence of operations is followed. The machine is operated and used within specified limits. Man-machine interfaces are controlled safely and effectively. Rockdrill operations are completed, in accordance with requirements. 	
13.	Continuous Assessment and Final Integrated Supervised Assessment (FISA)	<p>Continuous Assessment</p> <p>The SDP must ensure that all learners are enrolled with the QCTO at the start of training (within 5 days) in the format required by the QCTO.</p> <p>Continuous assessments are set by the SDP in accordance with the outcomes provided.</p> <p>This may consist of a variety of methods, e.g. practical or written assessments, assignments, projects, demonstrations, presentations or any other form of</p>	

		<p>assessment to assist the learner in the learning process.</p> <p>During training, it is mandatory for formal summative assessments to take place at the end of each module/topic. These results must be formally recorded and be available for monitoring and/or evaluation by the QCTO.</p> <p>Final Integrated Supervised Assessment (FISA) All learners gain entrance to the Final Integrated Supervised Assessment by successfully completing all formal summative assessments conducted by the SDP.</p> <p>Format of FISA: A practical assessment integrating the relevant Exit Level outcomes, with simultaneous verbal assessment of embedded knowledge by the assessor before, during or after the FISA.</p> <p>All FISAs must be supervised, and virtual FISAs must be recorded throughout the assessment.</p> <p>All Exit Level Outcomes must be covered in the FISA. In the FISA, the learner must demonstrate applied knowledge and skills to prove that the competencies of the Skills Programme have been achieved.</p> <p>The FISA may not contain any assessments used in the "Continuous Assessment" process (thus no re-assessment).</p> <p>Special considerations should be made for candidates with special learning needs.</p> <p>Standards for Final Integrated Supervised Assessment (FISA):</p> <p>The learner should be provided with a brief/job card/task to demonstrate what the learner should show, know or produce in a product, relevant to the Exit Level Outcomes and the purpose of the Skills Programme. This is the section where the learner must show applied competency (what the learner must be able to do, and to what expected standard)</p> <p>The FISA INSTRUMENT (Written case study, scenario or brief/task [similar to a job card]) must be developed and moderated by the SDP and conducted in a supervised environment. It is assessed by means of a RUBRIC developed by the SDP for this purpose:</p> <p>A Competent Candidate must be able to carry out rock drilling operations, interpreting, applying, and exercising policies, procedures, performance parameters, controls, and operating standards.</p> <p>Given a simulated or actual Underground Hardrock,</p>
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14.	Recognition of Prior Learning	<ul style="list-style-type: none"> • Learners will gain access to the skills programme through RPL as provided for in the QCTO RPL Policy. RPL for access is conducted by accredited institution, skills development provider or workplace accredited to offer that specific skills programme.

		<ul style="list-style-type: none"> • Learners who have acquired competencies in skills programme will be credited for such topics through RPL. • RPL for access to the Final Supervised Assessment: Accredited providers and approved workplaces must apply the internal assessment criteria specified in the skills programme document to establish and confirm prior learning and achievement of required competencies for the skills programme.
15.	Work Opportunities and further learning	<p>This skills programme will enable qualifying learners to access Mining Worker occupations in the Mining and Minerals Sector.</p> <p>A typical learning pathway in mining production operations would be to Blasting Assistant or Team Leader at NQF Level 2, Miner at NQF Level 3, and Shift Supervisor at NQF Level 4.</p>
16.	Skills Development Provider Accreditation Requirements	<p>Skills Development Providers will be ISO9000:2015, Quality Management, Certified.</p> <p><i>Physical Requirements:</i></p> <ul style="list-style-type: none"> • Training/facilitation resources, including fully equipped classroom and simulated handheld rock drilling facilities and equipment, which comply with mining occupational health, safety, and environmental standards. • Assessment tools/instruments. • Relevant learning material. <p><i>Human Resource Requirements:</i></p> <ul style="list-style-type: none"> • Suitably qualified and experienced facilitators, with a minimum NQF Level 3 ETDP qualification; and 1 years' experience in handheld rock drilling or health and safety experience, support personnel and assessors appointed in accordance with the organisation's Quality Management system. <p><i>Legal Requirements:</i></p> <ul style="list-style-type: none"> • Registered Skills Development Providers (SDP) will comply with the requirements of the following, including all amendments, regulations, and directives, as applicable: <ul style="list-style-type: none"> ○ Occupational Health and Safety Act 85 of 1993 ○ Mine Health and Safety Act 29 of 1996 ○ Labour Relations Act 66 of 1995 ○ The Basic Conditions of Employment Act 75 of 1997