

QUALIFICATION PACK - OCCUPATIONAL STANDARD FOR MINING INDUSTRY

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standard that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack- Timber man

SECTOR: MINING

SUB-SECTOR: Underground Mines

OCCUPATION: Mining Operations

REFERENCE ID: MIN/Q 0419

ALIGNED TO: NCO-2004/7111.50

A Timber Man is involved in setting up and repair of timber or steel props.

Brief Job Description: Timber man examines the roof and side walls of haulage ways, air passages, shafts, galleries etc. inside the mines and erects timber or steel props, frames etc. He also removes or repairs the defective props fixed earlier.

Personal Attributes: This job requires the individual to work at site as Timber Man. The individual needs to be physically fit to withstand working in an underground environment and respond to the needs and requirement of the tasks.

Job Details

Qualification Pack Code	MIN/Q 0419		
Job Role	Timber man		
Credits(NSQF)	TBD	Version number	1.0
Industry	Mining	Drafted on	15/12/2014
Sub-sector	Underground Mines	Last reviewed on	24/03/2015
Occupation	Mining Operations	Next review date	24/03/2017

Job Role	Timber Man
Role Description	Examine roof and side walls of haulage ways, air passages, shafts, galleries etc. inside the mines and erects timber or steel props, frames etc. To support them. Also removes or repairs the defective props fixed earlier
NSQF level Minimum Educational Qualification Maximum Educational Qualification	3 Class X NA
Training (Suggested but not mandatory)	Training to be imparted so as to on completion candidate is capable to qualify for test & certification by authorized agency for Knowledge & Skill as per NOS Training Period may vary from 6 to 12 weeks. <ol style="list-style-type: none"> 1. Props development & erection and various material used 2. 5S 3. Quality 4. Safety Management
Experience	NIL
Applicable National Occupational Standard (NOS)	Compulsory: Click on the hyperlink to read/download the required NOS <ol style="list-style-type: none"> 1. MIN/ N0453 (Identification and use of Basic tools, Equipment, material and components) 2. MIN/ N0454 (Plan, prepare, install and remove timber support systems) 3. MIN/ N0455 (Erect and dismantle different type of Scaffolding) 4. MIN / N 0901 (Health and Safety) Optional: Not Applicable
Performance Criteria	As per Occupation Standard (OS)

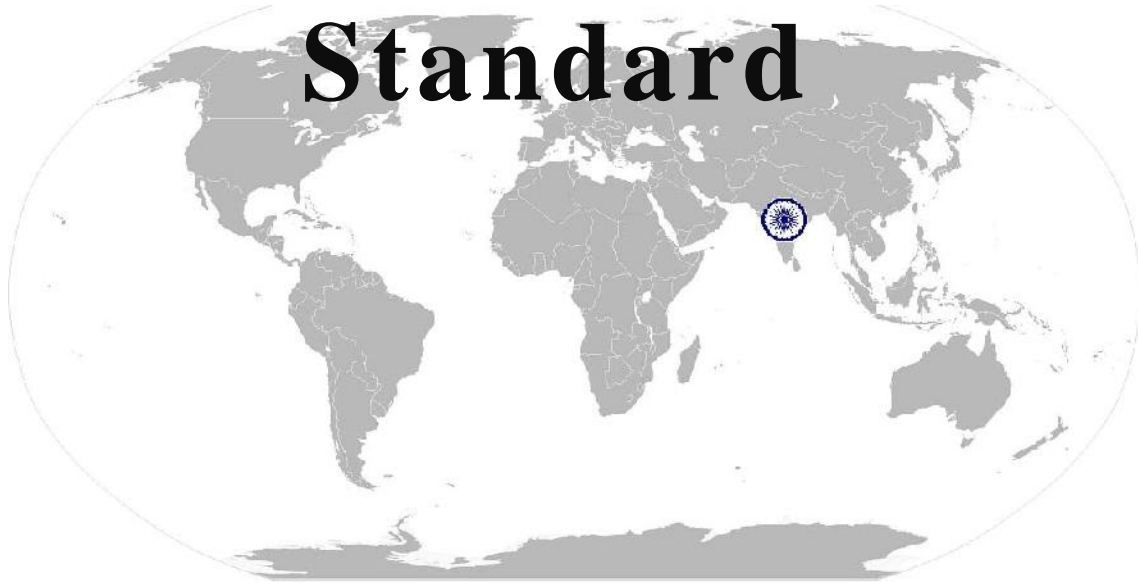
Definitions

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
OS	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard , which is denoted by an 'N'
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.

Acronyms	Keywords /Terms	Description
	SCMS	Skill council for Mining Sector
	NOS	National Occupational Standard
	NSQF	National Skill Qualification Framework
	NVEQF	National Vocational Educational Qualification Framework
	NVQF	National Vocational Qualification Framework
	OS	Occupational Standard
	PC	Performance Criteria
	QP	Qualification Pack
SSC	Sector Skill Council	

MIN/ N0453 Identification and use of Basic tools, Equipment, material and components

National Occupational Standard



Overview

This OS unit is about identifying and using basic tools, equipment, materials and components used in the Formwork Carpentry trade.

MIN/ N0453 Identification and use of Basic tools, Equipment, material and components

National Occupational Standard	Unit Code	MIN/ N0453
	Unit Title (Task)	Identification and use of basic tools, equipment, materials and components
	Description	This unit describes the skill and knowledge required for identification and use of basic tools, equipment, materials and components.
	Scope	Identification and use of basic tools, equipment, materials and components
	Performance Criteria (PC) w.r.t. the Scope	
	Element	Performance Criteria
	Identification and use of basic tools, equipment, materials and Components	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Identify, select and use of Hand & measuring tools such as Hand saw, Claw Hammer, Planners etc.</p> <p>PC2. Identify, select and use of support materials such as timbers, plywood, formwork, props, etc. in respect of quality, type, handling and quantity measurement.</p> <p>PC3. Identify the required availability of basic power tools such as sawing machine, planer machine, power/ manual wrenches etc. and procure such tools if required</p>
	Knowledge and Understanding (K)	
	A. Regulatory context (knowledge of safety guidelines specified by Director General of Mine Safety (DGMS))	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Different types of mines and detail of the mine he is working in</p> <p>KA2. Mine organization, time keeping, need for discipline and punctuality</p> <p>KA3. Galleries in underground mine, dressing of roof, stable/ unstable strata etc</p> <p>KA4. Standing orders in force at the mine. Safety in the vicinity of machinery</p> <p>KA5. Shot-firing and Safety regulations. How and where to take shelter</p> <p>KA6. Duties of workmen</p> <p>KA7. Provision of wages, working hours and accident compensation as per Mines act</p> <p>KA8. Knowledge of mining safety procedures</p> <p>KA9. Impact of violation of safely procedures</p>

MIN/ N0453 Identification and use of Basic tools, Equipment, material and components

B. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KB1. Select, identify and use of right tools at right job KB2. Receiving and handing over tools, materials and consumables from the store. KB3. Importance of indent details KB4. Safety in handling the tools and materials KB5. Precautions and measures in handling, storing and transporting KB6. Do' and Don'ts in care and maintenance of tools KB7. Measures related to environment and pollution.
C. Technical Knowledge	The user/individual on the job needs to know and understand: KC1. Storing and handling technique of tools and components KC2. Upkeep repair and maintenance of tools and components KC3. Classification and storage of materials as per the grouping of uses and compositions. KC4. Checking and testing of materials
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Make the line, sketch and label
	Reading Skills
	The user / individual needs to know and understand how to: SA2. Read instructions, guidelines, sign boards, safety rules and safety tags.
	Oral Communication (Listening and Speaking skills)
	The user / individual needs to know and understand how to: SA3. follow instruction accurately SA4. orally communicate to others effectively
B. Professional Skills	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB1. use identify the tools such as Hand saw, Claw Hammer, Planners etc. SB2. place material in correct position near the job to ensure sufficient availability.
	Decision Making
	The user/individual on the job needs to know and understand how to: SB3. use all formwork carpentry tools to their best advantage including correct handling and maintenance of the same.

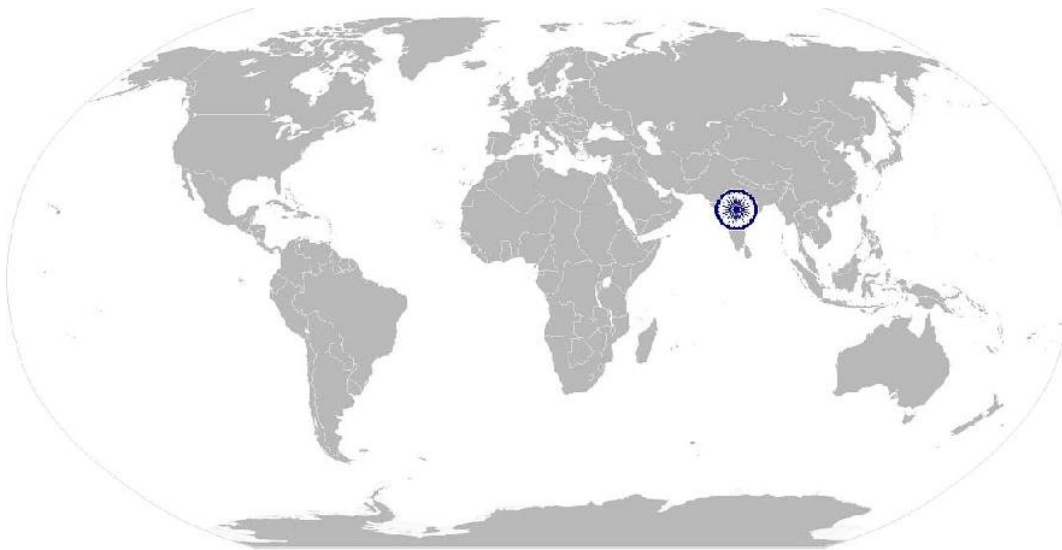
MIN/ N0453 Identification and use of Basic tools, Equipment, material and components

	SB4. compute the quantity of material and the tools and equipment required for its application / use
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB5. minimize wastage and optimum use of material
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB6. use resources correctly
	Team Working
	The user / individual needs to know and understand how to: SB7. work in coordination with trade senior SB8. look after the interest other in case of emergency & requirement



MIN/ N0453 Identification and use of Basic tools, Equipment, material and components

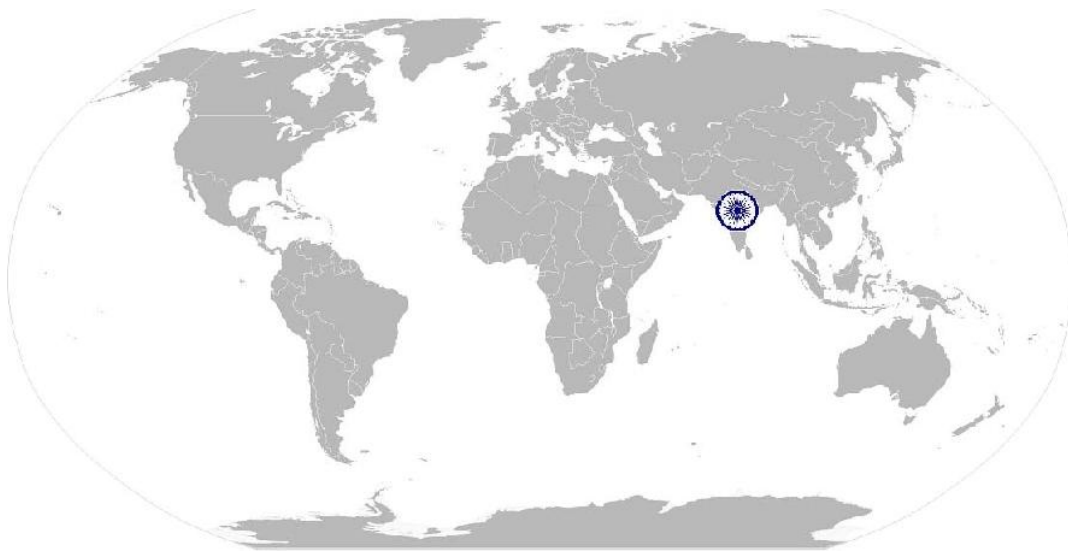
NOS Version Control



NOS Code	MIN/ N0453		
Credits(NSQF)	TBD	Version number	1.0
Industry	Mining	Drafted on	15/12/2014
Industry Sub-sector	Underground Mines	Last reviewed on	24/03/2015
Occupation	Mining Operations	Next review date	24/03/2017

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National Occupational Standard



Overview

This OS unit is about preparing to install and remove timber support system by sizing, cutting, joining of timber and steel structures

MIN/ N0454 Plan, prepare, install and remove timber support systems

National Occupational Standard

Unit Code	MIN/ N0454
Unit Title	Plan, prepare, install and remove timber support systems
Description	This unit is about the planning, preparing, installing and removing timber support system by sizing, cutting, joining of timber and steel structures
Scope	<p>This OS unit/task covers the following:</p> <ul style="list-style-type: none"> Plan to install timber support system Prepare to install and remove timber support system Install and remove timber support system Inspect timber support systems
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Plan to install timber support system	<p>PC1. Determine the work location by interpreting relevant documentation, systematic support plan, work instructions or as directed by the supervisor</p> <p>PC2. Review the support system design to be installed/removed</p> <p>PC3. Carry out measurements for support</p> <p>PC4. Calculate requirement of timber, props, steel support structure for the selected type of support</p>
Prepare to install and remove timber support system	<p>PC5. Inspect and prepare locating equipment required to complete the work activity in accordance with work instructions and equipment specifications</p> <p>PC6. Carry out site-specific risk assessment to assess the suitability of the selected support system, stability of the excavation, immediate strata and the adjacent ground conditions and structures</p> <p>PC7. Record findings from site-specific risk assessment and notify the supervisor regarding the same</p> <p>PC8. Select, inspect and prepare the materials for temporary works</p> <p>PC9. Read and prepare simple sketch of timber joints</p> <p>PC10. Identify, select and prepare rough timbers to finalize size</p> <p>PC11. Mark and make cross lap joint, mortis and tenon joint, dovetail joints and housing joint</p>
Install and remove timber support system	<p>PC12. Provide safe entry to and exit from the excavation face</p> <p>PC13. Ensure appropriate edge protection, guard rails/stop blocks are around the excavation</p> <p>PC14. Install/remove the timber support systems in accordance with Systematic Support Rules (SSR) and sequence</p>
Inspect timber support systems	<p>PC15. Check and test the conventional supports in the development and depillaring area and shall assess the requirement of additional supports to be provided during the shift</p> <p>PC16. After every round of blasting, support of roof and sides shall be tested at all places within the zone of influence of blasting</p> <p>PC17. Inspect and maintain timber support systems to ensure that they meet the SSR requirements</p> <p>PC18. Review and record site conditions in accordance with company procedures</p>

MIN/ N0454 Plan, prepare, install and remove timber support systems

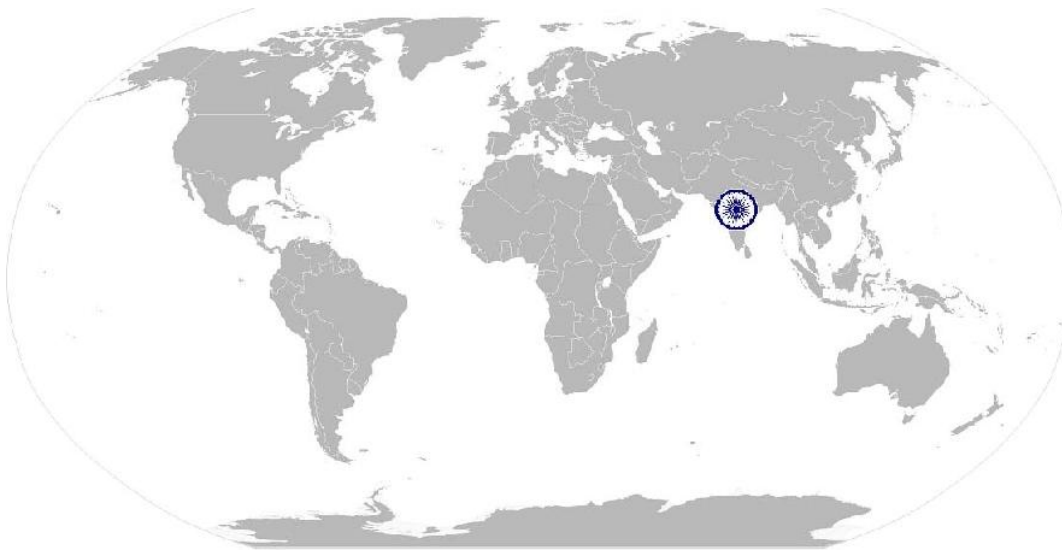
Knowledge and Understanding (K)	
A. Regulatory context (knowledge of safety guidelines specified by Director General of Mine Safety (DGMS))	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. Different types of mines and detail of the mine he is working in KA2. Mine Organisation, time keeping, need for discipline and punctuality KA3. Galleries in underground mine, dressing of roof, stable/ unstable strata etc KA4. Standing orders in force at the mine. Safety in the vicinity of machinery KA5. Shot-firing and Safety regulations. How and where to take shelter KA6. Duties of workmen KA7. Provision of wages, working hours and accident compensation as per Mines act KA8. Knowledge of mining safety procedures KA9. Impact of violation of safely procedures
B. Organizational Context (Knowledge of the company / organization)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KB1. Appreciate safe working methods including working on scaffolding, basic human kinetics and general site tidiness KB2. Safety equipment & safety drills KB3. Working at Heights
C. Technical Knowledge	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KC1. Identify overhead and underground services and apparatus KC2. Interpret systematic support design rules for underground mines KC3. Methods of providing support to freshly exposed excavation faces KC4. Methods and equipment used for timber support system KC5. The various types of timber support systems used in mines KC6. Types of rock and their characteristics; Dangers from fall of ground; Need for artificial support; Use of protective equipment etc KC7. Various techniques on handling and transport of timber including lowering in inclines and shafts, Correct methods of lifting, shifting etc KC8. Different materials for support, their strength, characteristics and application, fire danger from timber and cuttings etc KC9. Tools for timbering, their selection care and maintenance and tools for Sylvester prop withdrawal KC10. Various types of support like in galleries and drives, Support of faulted, disturbed and weak ground, Clearing of falls of roof and erecting supports, Roof support, Side support etc KC11. Various measurement techniques for placing supports, selection of timber etc

MIN/ N0454 Plan, prepare, install and remove timber support systems

	<p>KC12. System for support in depillaring area/ stopes and long wall faces; Systematic Timbering Rules both in development and depillaring areas.</p> <p>KC13. Various techniques including Sawing of timber, Erection of props and cogs, Withdrawal of supports.</p> <p>KC14. Type of supports in shafts (including sinking shafts), raises and winzes, repair of such supports, Erection of barricades, Erection of fences etc</p> <p>KC15. Maintenance of supports, Tightening, Testing of roofs and sides, Typical accidents in timbering and to Timber men.</p> <p>KC16. Techniques for erection of timber on steep gradients and supporting irregular places</p> <p>KC17. Hazards and risks that can occur with the use of incorrect support system</p> <p>KC18. Monitoring excavation faces and immediate strata for conditions of stability</p> <p>KC19. Causes of instability in excavation areas, including strata behavior, geological conditions, make of water etc.</p> <p>KC20. The simple calculation concerned with wood and metal frame working such as addition, subtraction, multiplication and division</p> <p>KC21. The checking of wood working tools and equipment prior to use</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Make the line, sketch and label
	Reading Skills
	The user / individual needs to know and understand how to: SA2. Read instructions, guidelines, sign boards, safety rules and safety tags.
	Oral Communication (Listening and Speaking skills)
	The user/individual should do the following: SA3. Listen & follow instruction accurately SA4. Orally communicate to others effectively
B. Professional Skills	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB1. use identify the tools such as Hand saw, Claw Hammer, Planners etc. SB2. place material in correct position near the job to ensure sufficient availability.
	Decision Making
	The user/individual on the job needs to know and understand how to:

MIN/ N0454 Plan, prepare, install and remove timber support systems

	<p>SB3. use all formwork carpentry tools to their best advantage including correct handling and maintenance of the same.</p> <p>SB4. compute the quantity of material and the tools and equipment required for its application / use</p>
	Analytical Thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p style="padding-left: 40px;">SB5. minimize wastage and optimum use of material</p>
	Critical Thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p style="padding-left: 40px;">SB6. use resources correctly</p>
	Team Working
	<p>The user / individual needs to know and understand how to:</p> <p style="padding-left: 40px;">SB7. work in coordination with trade senior</p> <p style="padding-left: 40px;">SB8. look after the interest other in case of emergency & requirement</p>



MIN/ N0454 Plan, prepare, install and remove timber support systems

NOS Version Control

NOS Code	MIN/ N0454		
Credits(NSQF)	TBD	Version number	1.0
Industry	Mining	Drafted on	15/12/2014
Industry Sub-sector	Underground Mines	Last reviewed on	24/03/2015
Occupation	Mining Operations	Next review date	24/03/2017

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National Occupational Standard



Overview

This OS unit is about erection and dismantling different types of Scaffoldings

MIN/ N0455 Erect and dismantle different type of Scaffolding

National Occupational Standard	Unit Code		MIN/ N0455
	Unit Title (Task)		Erect and Dismantle different types of scaffoldings
	Description	This unit describes the skill and knowledge required for Erect and Dismantle different types of Scaffoldings	
	Scope	This OS unit/task covers the following: <ul style="list-style-type: none"> Erect and Dismantle different types of Scaffoldings 	
	Performance Criteria(PC) w.r.t. the Scope		
	Element	Performance Criteria	
	Erect and Dismantle different types of Scaffoldings	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Arrange, shift, and stack the required materials, tools and tackles at the identified location.</p> <p>PC2. Identify, select and use of scaffolding materials such as platforms, props, timber, etc. in respect of quality, type, handling and quantity measurement.</p> <p>PC3. Identify the basic checking tools such as plumb bob, water tube level</p> <p>PC4. Erect and dismantle different types of scaffoldings</p> <p>PC5. Complete the task as per the Productivity and housekeeping requirement</p> <p>PC6. Maintain the site tidiness accordingly</p>	
	Knowledge and Understanding (K)		
	A. Regulatory context (knowledge of safety guidelines specified by Director General of Mine Safety (DGMS))	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Different types of mines and detail of the mine he is working in</p> <p>KA2. Mine Organisation, time keeping, need for discipline and punctuality</p> <p>KA3. Galleries in underground mine, dressing of roof, stable/unstable strata etc</p> <p>KA4. Standing orders in force at the mine. Safety in the vicinity of machinery</p> <p>KA5. Shot-firing and Safety regulations. How and where to take shelter</p> <p>KA6. Duties of workmen</p> <p>KA7. Provision of wages, working hours and accident compensation as per Mines act</p> <p>KA8. Knowledge of mining safety procedures</p> <p>KA9. Impact of violation of safely procedures</p>	

MIN/ N0455 Erect and dismantle different type of Scaffolding

B. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KB1. Appreciate safe working methods and basic human kinetics KB2. Safety on various personal Protection and Use of safety Gears, Safety equipment & safety drills KB3. Working on scaffolding & at Heights KB4. Knowledge of First Aid, House Keeping & other related environment aspects KB5. House Keeping
C. Technical Knowledge	The user/individual on the job needs to know and understand: KC1. Tools and equipment used for erecting and dismantling different types of scaffoldings KC2. Materials used for erecting and dismantling different types of scaffoldings KC3. Process of erecting and dismantling different types of scaffoldings KC4. Safety involved in working at height. KC5. Process of site tidiness.
Skills (S)	
C. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Make the line, sketch and label
	Reading Skills
	The user / individual needs to know and understand how to: SA2. Read instructions, guidelines, sign boards, safety rules and safety tags.
	Oral Communication (Listening and Speaking skills)
	The user/individual should do the following: SA3. Listen & follow instruction accurately SA4. Orally communicate to others effectively
D. Professional Skills	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB1. Identify and use the materials for Erecting and dismantling 3.6 meter temporary scaffold SB2. Check the stability, alignment, verticality
	Decision Making

MIN/ N0455 Erect and dismantle different type of Scaffolding

	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB3. Identify and use the tools</p> <p>SB4. Identify and use of all safety equipment</p>
	<p>Critical Thinking</p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB5. use resources correctly</p>
	<p>Team Working</p>
	<p>The user / individual needs to know and understand how to:</p> <p>SB6. work in coordination with trade senior</p> <p>SB7. look after the interest other in case of emergency & requirement</p> <p>SB8. Involve and complete housekeeping activities</p> <p>SB9. Distribute work among colleagues</p>



MIN/ N0455 Erect and dismantle different type of Scaffolding

NOS Version Control



NOS Code	MIN/ N0455		
Credits(NSQF)	TBD	Version number	1.0
Industry	Mining	Drafted on	15/12/2014
Industry Sub-sector	Underground Mines	Last reviewed on	24/03/2015
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National Occupational Standard



Overview

This unit is about health and safety measures critical in mines

MIN/ N0901 Health and Safety

National Occupational Standard	Unit Code	MIN/N 0901
	Unit Title (Task)	Health and Safety
	Description	This unit is about health and safety measures critical in mines
	Scope	This OS unit/task covers the following: <ul style="list-style-type: none"> • Health and safety measures critical in mines
	Performance Criteria (PC) w.r.t. the Scope	
	Element	Performance Criteria
	Safety, Security and Administrative	To be competent, the user/individual on the job must be able to: PC1. Comply with occupational health and safety regulations adopted by the employer. PC2. Follow mining operations procedures with respect to materials handling and accidents PC3. Follow the correct safety steps in case of accident or major failure PC4. Comply with safety regulations and procedures in case of fire hazard. PC5. Operate various grades of fire extinguishers. PC6. Work responsibly and as safe and careful as possible so as not to put the health and safety of self or others at risk, including members of the public PC7. Perform storage and transport of hazardous materials compliant with safety guidelines prescribed by DGMS. PC8. Deal with misfires as per statutory requirement PC9. Identify characteristics of post-blast fumes and take necessary precautions. PC10. Wears safety gear such as hard hat, respiratory protection, eye protection, ear protection PC11. Follow the manufacturer’s instructions for care and safe operation of the equipment.

MIN/ N0901 Health and Safety

Knowledge and Understanding (K)	
A. Regulatory context (knowledge of safety guidelines specified by Director General of Mine Safety (DGMS))	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KA1. Galleries in underground mine, dressing of roof, stable and unstable strata etc KA2. First aid and Hygiene KA3. Code of traffic in specific areas of mine. Significance of fences KA4. Standing orders in force at the mine. Safety in the vicinity of machinery KA5. Shot-firing and Safety regulations. How and where to take shelter KA6. Knowledge of mining safety procedures KA7. Impact of violation of safety procedures KA8. Locally prepared Emergency Preparedness / Disaster Management Plan. KA9. Environmental impact of mining KA10. Sources of dust, noise and vibration and measures to minimise KA11. Hazardous material safety and security rules and regulations as prescribed by DGMS KA12. Code of practice for safe handling and transport of dangerous material



MIN/ N0901 Health and Safety

NOS Version Control

NOS Code	MIN/N 0901		
Credits(NSQF)	TBD	Version number	1.0
Sector	Mining	Drafted on	15/12/2014
Sub-sector	Underground Mines	Last reviewed on	24/03/2015
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Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Timber man

Qualification Pack MIN/Q 0419

Sector Skill Council Mining

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

		Marks Allocation			
		Total Mark (100)	Out Of	Theory	Skills Practical
1. MIN/ N0453 (Identification and use of Basic tools, Equipment, material and components)	PC1. Identify, select and use of Hand & measuring tools such as Hand saw, Claw Hammer, Planners etc.	25	10	7	3
	PC2. Identify, select and use of support materials such as timbers, plywood, formwork, props, etc. in respect of quality, type, handling and quantity measurement.		10	6	4
	PC3. Identify the required availability of basic power tools such as sawing machine, planer machine, power/ manual wrenches etc. and procure such tools if required		5	3	2
		Total	25	16	9
2. MIN/ N0454 (Plan, prepare, install and remove timber support systems)	PC1. Determine the work location by interpreting relevant documentation, systematic support plan, work instructions or as directed by the supervisor	25	1	0.5	0.5

Assessment Criteria

	PC2. Review the support system design to be installed/removed		1	0.5	0.5
	PC3. Carry out measurements for support		1	0.5	0.5
	PC4. Calculate requirement of timber, props, steel support structure for the selected type of support		2	1.5	0.5
	PC5. Inspect and prepare locating equipment required to complete the work activity in accordance with work instructions and equipment specifications		2	1.5	0.5
	PC6. Carry out site-specific risk assessment to assess the suitability of the selected support system, stability of the excavation, immediate strata and the adjacent ground conditions and structures		1	0.5	0.5
	PC7. Record findings from site-specific risk assessment and notify the supervisor regarding the same		1	0.5	0.5
	PC8. Select , inspect and prepare the materials for temporary works		1	0.5	0.5
	PC9. Read and prepare simple sketch of timber joints		2	1.5	0.5
	PC10. Identify, select and prepare rough timbers to finalize size		1	0.5	0.5
	PC11. Mark and make cross lap joint, mortis and tenon joint, dovetail joints and housing joint		1	0.5	0.5
	PC12. Provide safe entry to and exit from the excavation face		1	0.5	0.5
	PC13. Ensure appropriate edge protection, guard rails/stop blocks are around the excavation		2	1.5	0.5
	PC14. Install/remove the timber support systems in accordance with Systematic Support Rules (SSR) and sequence		2	1.5	0.5

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	PC15. Check and test the conventional supports in the development and depillaring area and shall assess the requirement of additional supports to be provided during the shift		2	1.5	0.5
	PC16. After every round of blasting, support of roof and sides shall be tested at all places within the zone of influence of blasting		2	1.5	0.5
	PC17. Inspect and maintain timber support systems to ensure that they meet the SSR requirements		1	0.5	0.5
	PC18. Review and record site conditions in accordance with company procedures		1	0.5	0.5
		Total	25	16	9
3. MIN/ N0455 (Erect and dismantle different type of Scaffolding)	PC1. Arrange, shift, and stack the required materials, tools and tackles at the identified location.	25	5	3	2
	PC2. Identify, select and use of scaffolding materials such as platforms, props, timber, etc. in respect of quality, type, handling and quantity measurement.		4	2	2
	PC3. Identify the basic checking tools such as plumb bob, water tube level		4	2	2
	PC4. Erect and dismantle different types of scaffoldings		4	2	2
	PC5. Complete the task as per the Productivity and housekeeping requirement		4	2	2
	PC6. Maintain the site tidiness accordingly		4	2	2
		Total	25	13	12
4. MIN / N 0901 (Health and Safety)	PC1. Comply with occupational health and safety regulations adopted by the employer.	25	2	1	1
	PC2. Follow mining operations procedures with respect to materials handling and accidents		3	2	1
	PC3. Follow the correct safety steps in case of accident or major failure		2	1	1

Assessment Criteria

	PC4. Comply with safety regulations and procedures in case of fire hazard.		2	1	1
	PC5. Operate various grades of fire extinguishers.		3	2	1
	PC6. Work responsibly and as safe and careful as possible so as not to put the health and safety of self or others at risk, including members of the public		2	1	1
	PC7. Perform storage and transport of hazardous materials compliant with safety guidelines prescribed by DGMS.		3	2	1
	PC8. Deal with misfires as per statutory requirement		2	1.5	0.5
	PC9. Identify characteristics of post-blast fumes and take necessary precautions.		2	1.5	0.5
	PC10. Wears safety gear such as hard hat, respiratory protection, eye protection, ear protection		2	1	1
	PC11. Follow the manufacturer's instructions for care and safe operation of the equipment.		2	1	1
		Total	25	15	10