

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR GEMS & JEWELLERY INDUSTRY



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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 standards 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- Window Opener

SECTOR: GEMS & JEWELLERY

SUB-SECTOR: Diamond processing

OCCUPATION: Rough assorting

REFERENCE ID: G&J/Q4103

ALIGNED TO: NCO-2004/ NIL

Window Opener: Also known as Windower or Windowing *karigar* or *Chapkakarigar*, the window opener has an important role in the pre-cutting and pre-planning process of diamond polishing.

Brief Job Description: The individual at works with dop-tang system to make an opening or a window on the rough diamond by polishing it on the polishing wheel or scaife in order to observe and map internal features of the diamond prior to cutting and planning, while maintaining minimal weight loss.

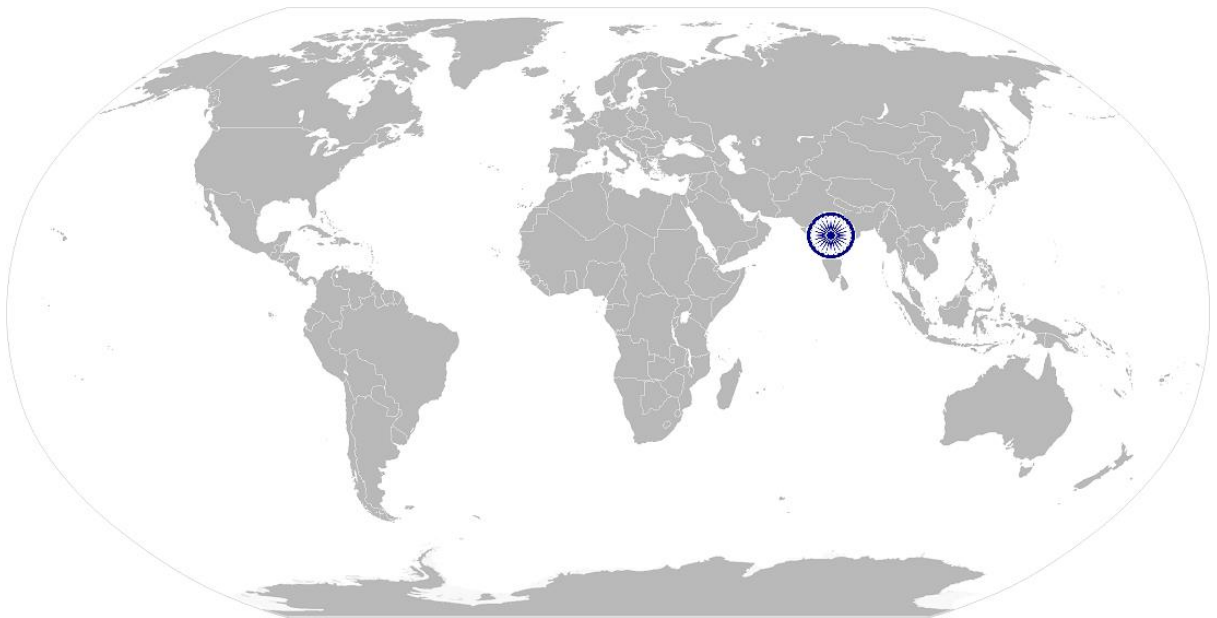
Personal Attributes: The job requires the individual to have: attention to details; good eyesight; steady hands; ability to work in a process driven team; ability to work for long hours in sitting position on a bench or on the floor; and a lot of patience.

Job Details

Qualifications Pack Code	G&J/Q4103		
Job Role	Window Opener		
Credits(NVEQF/NVQF/NSQF)	TBD	Version number	1.0
Sector	Gems & Jewellery	Drafted on	05/06/13
Sub-sector	Diamond Processing	Last reviewed on	30/07/13
Occupation	Rough Assorting	Next review date	15/07/15

Job Role	Window Opener Also known as 'Windower' or 'Windowing Karigar' or 'ChapkaKarigar'
Role Description	Polishing a facet (window) on a coated rough diamond in order to assess its internal features accurately prior to cutting and planning
NVEQF/NVQF level	3
Minimum Educational Qualifications	Preferably 10 th Standard Passed
Maximum Educational Qualifications	
Training	Not Applicable
Experience	Not Applicable
Applicable National Occupational Standards (NOS)	<p>Compulsory:</p> <ol style="list-style-type: none"> G&J/N4103 Polish a window on the rough diamonds G&J/N9930 Maintain IPR G&J/N9931 Coordinate with team and superiors G&J/N9933 Maintain safety <p>Optional: Not applicable</p>
Performance Criteria	As described in the relevant OS units

National Occupational Standard



Overview

This unit is about using the dop-tang system and making facet-like opening on a rough diamond by polishing it on the scaife. The objective is to create an opening to be able to look inside and assess the internal features of the rough accurately, prior to planning.

G&J/N4103

Polish a window on the rough diamonds

National Occupational Standard

Unit Code	G&J/N4103
Unit Title (Task)	Polish a window on the rough diamond
Description	This OS unit is about creating a facet like opening on the rough diamond to be able to assess its internal features prior to planning or cutting
Scope	<p>This unit/task covers the following:</p> <p>Set up the polishing bench</p> <ul style="list-style-type: none"> • fix the polishing mill using nuts and bolts • level the machine to remove vibrations • clean the scaife with non-greasy thinner or acetone • remove all dust particles and oily substances • fix the scaife on the bench • level tang for polishing • prepare scaife by applying diamond powder on its surface <p>Collect the rough diamond</p> <ul style="list-style-type: none"> • match specifications such as size, dimensions, etc., and marking (if any) of the rough received as per those mentioned on the bag <p>Polish a window on the rough diamond</p> <ul style="list-style-type: none"> • understand the marking (if any) on the rough and plan the work accordingly • if no marking is provided, decide on which plane, should a window be created, ensuring maximum view and minimum weight loss • as per the size of the diamond and the thickness of the coating, decide on the size of the window to be created • fix the rough securely on the windowing dop-tang system, aligned to the surface to be polished for windowing • create a window on the rough, by polishing it on a polishing wheel • repeat the process on another surface, if required, if the view from previous window is not clear • bag the windowed roughs and label as per the company's procedure • return to the supervisor for further processing <p>Polish quality check</p> <ul style="list-style-type: none"> • repeatedly check the window and view the internal structure of the rough with the help of an eye glass • ensure minimum weight loss during the windowing process <p>Report problems to supervisor about:</p> <ul style="list-style-type: none"> • technical problems with any part of the bench/ mill such as levelling, loose screws • higher weight loss than expected • damage while windowing • problems related to the machines and tools' wear and tear • personal problems and those with other workers

G&J/N4103

Polish a window on the rough diamonds

Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Quality of Output	To be competent, the user/individual on the job must be able to: PC1. set up the bench/mill without vibration and level all its parts PC2. accurately fix the rough on the tang and level the tang PC3. accurately create a window as per requirement PC4. ensure re-windowing is not required PC5. ensure minimum weight loss
Productivity	To be competent, the user/individual on the job must be able to: PC6. achieve the productivity in terms of carats or number of pieces as set by the company PC7. deliver in time to next process
Problems Handling	To be competent, the user/individual on the job must be able to: PC8. detect and correct / repair a faulty window
Controlling Damage	To be competent, the user/individual on the job must be able to: PC9. ensure no breakage or damage to the rough diamond
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The individual on the job needs to know and understand: KA1. company's policies on: acceptable limits of weight loss; incentives; delivery standards; safety practices and hazards; security and performance measurement KA2. work flow involved in company's diamond processing process KA3. importance of the individual's role in the workflow KA4. reporting structure KA5. issue return procedures followed by the company
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. properties of a rough diamond KB2. planning process requirement KB3. windowing process KB4. 4Cs of diamond (Colour, Cut, Clarity and Carat) KB5. use of various scopes in diamond processing KB6. stress (tension) of the diamond KB7. process of preparation of scaife KB8. types of diamond inclusions KB9. repair work KB10. assembly of different parts of the bench KB11. leveling the scaife, plate and the tang KB12. preparing the scaife for polishing KB13. uses of different types of tools and materials for different purposes KB14. maintaining and preparing tools as per job requirement KB15. potential work hazards, particularly, when using machine tools

G&J/N4103

Polish a window on the rough diamonds

Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Basic reading and writing skills
	The user/individual on the job needs to know and understand how: SA1. to read descriptions on the job packets/ bags SA2. to make markings and windowing requirements SA3. to document work done for status and performance appraisal
	Calculation and geometry skills
	The user/individual on the job needs to know and understand how: SA4. to judge the planes, angles and other dimensions and setting the same on the tang for polishing SA5. to gauge the extent of windowing required for a particular type of rough SA6. to check the leveling of the scaife, plate and the tang used
	Communication skills
	The user/individual on the job needs to know and understand how: SA7. to discuss task, schedules, and work-loads with co-workers and supervisors SA8. to understand instructions and report problems
	Teamwork and multitasking skills
	The user/individual on the job needs to know and understand how: SA9. to share work load as required SA10. to assist others who require help SA11. to share knowledge with co-workers SA12. to work with other people sharing the bench
B. Professional Skills	Decision making
	The user/individual on the job needs to know and understand how: SB1. to decide which surface must be selected for windowing, which will ensure maximum view and minimum weight loss SB2. to decide the size of the window created and the number of windows required per stone type
	Using tools and machines
	The user/individual on the job needs to know and understand how: SB3. to use the right dop as per size of the rough SB4. to prepare and charge the scaife as required SB5. to use the correct tang and level it correctly SB6. to use tools like eye glass to view the rough and other tools like spanner, hammer, allen key, etc. used to set up the bench SB7. to maintain tools and machines used SB8. to work in a safe environment, i.e., without injuries
	Windowing technique
The user/individual on the job needs to know and understand how: SB9. to decide the direction and angle of moving the tang for windowing SB10. to judge the extent of pressure to be applied while windowing	

G&J/N4103

Polish a window on the rough diamonds

	Reducing loss
	The user/individual on the job needs to know and understand how: SB11. to handle rough diamonds with care SB12. to minimize damage or loss of any diamond during the windowing process SB13. to report diamond losses via documentation as per company policy SB14. to suggest improvements in order to reduce loss
	Planning skills
	The user/individual on the job needs to know and understand how: SB15. to plan and organize work in order to ensure maximum productivity
	Reading design dimensions
	The user/individual on the job needs to know and understand how: SB16. to read the marking mentioned on the job packet or the rough, in order to achieve perfect window as per requirement
	Innovative thinking
	The user/individual on the job needs to know and understand how: SB17. to devise new means of working to improve productivity or reduce efforts SB18. to suggest improvements in tools/machines which can lead to improved productivity or quality
	Problem solving
	The user/individual on the job needs to know and understand how: SB19. to rectify defects occurred
	Reflective thinking
	The user/individual on the job needs to know and understand how: SB20. to work for long hours in a sitting position without health problems SB21. to minimise weight loss
	Critical thinking
	The user/individual on the job needs to know and understand how: SB22. to apply, analyze, and evaluate the knowledge gathered from observation, experience, reasoning, or communication, as a guide to thought and action SB23. to spot process disruptions and delays

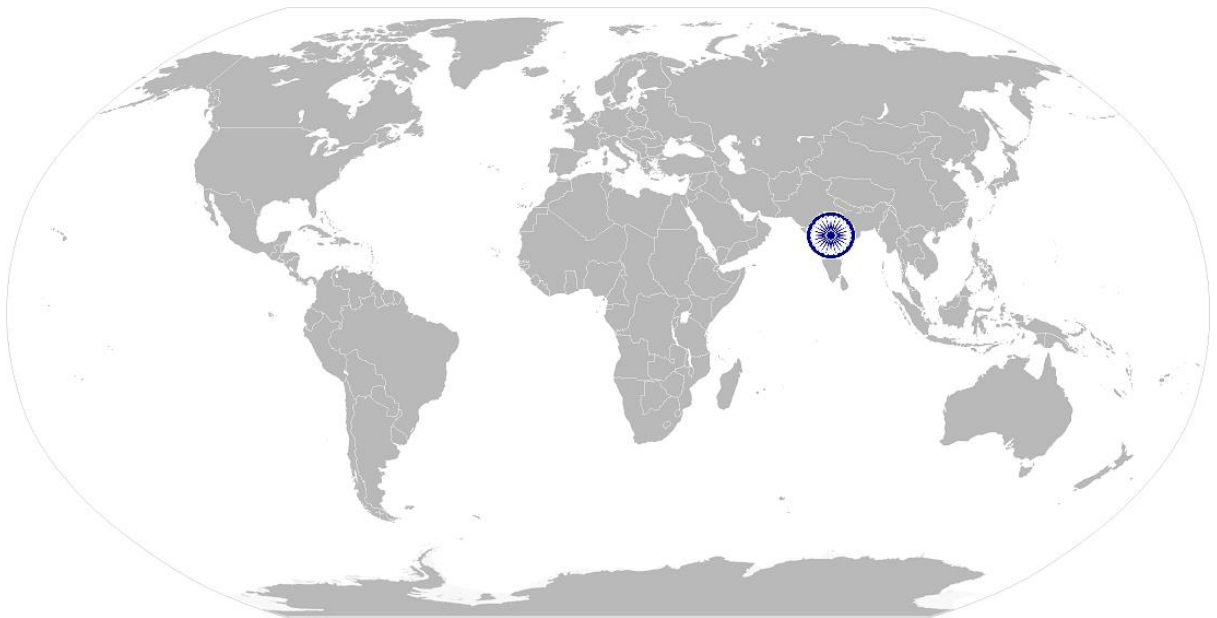
G&J/N4103

Polish a window on the rough diamonds

NOS Version Control

NOS Code	G&J/N4103		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	05/06/13
Industry Sub-sector	Diamond Processing	Last reviewed on	30/07/13
		Next review date	15/07/15

National Occupational Standard



Overview

This unit is about and respecting intellectual property rights (IPR) of the company's products, policies, procedures and orders.

G&J/N9930

Maintain IPR

Unit Code	G&J/N9930
Unit Title (Task)	Respect IPR of company
Description	This OS unit is about maintaining company's intellectual property
Scope	<p>This unit/task covers the following:</p> <p>Protect company's Intellectual Property Rights (IPR)</p> <ul style="list-style-type: none"> • prevent leak of new orders to competitors by reporting on time • prevent leak of the manufacturing processes or the policies followed by the company • be aware of any of company's product patents • report IPR violations observed in the market, to supervisor or company heads
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Respecting IPR	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. spot plagiarism and report</p> <p>PC2. understand rationale of patents and IPR</p> <p>PC3. avoid being involved in IPR violations</p>
Knowledge and Understanding (K)	
A. Organizational Context	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's policies on IPR, plagiarism and order leaks</p> <p>KA2. company's patented products</p> <p>KA3. market trends and company's unique product range</p> <p>KA4. reporting structure</p>
B. Technical Knowledge	<p>The individual on the job needs to know and understand:</p> <p>KB1. basics of patents and IPR laws</p> <p>KB2. how IPR protection is important for competitiveness of a company</p>
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Communication skills
	<p>The user/individual on the job needs to know and understand how:</p> <p>SA1. to effectively communicate any observed IPR violations or leaks</p>
B. Professional Skills	Decision making
	<p>The user/individual on the job needs to know and understand when and how:</p> <p>SB2. to report sources of IPR violations</p>
	Reflective thinking
	<p>The user/individual on the job needs to know and understand how:</p> <p>SB3. to learn from past mistakes and report IPR violations on time</p>
	Critical thinking
<p>The user/individual on the job needs to know and understand how:</p> <p>SB4. to spot signs of violations and alert authorities in time</p>	

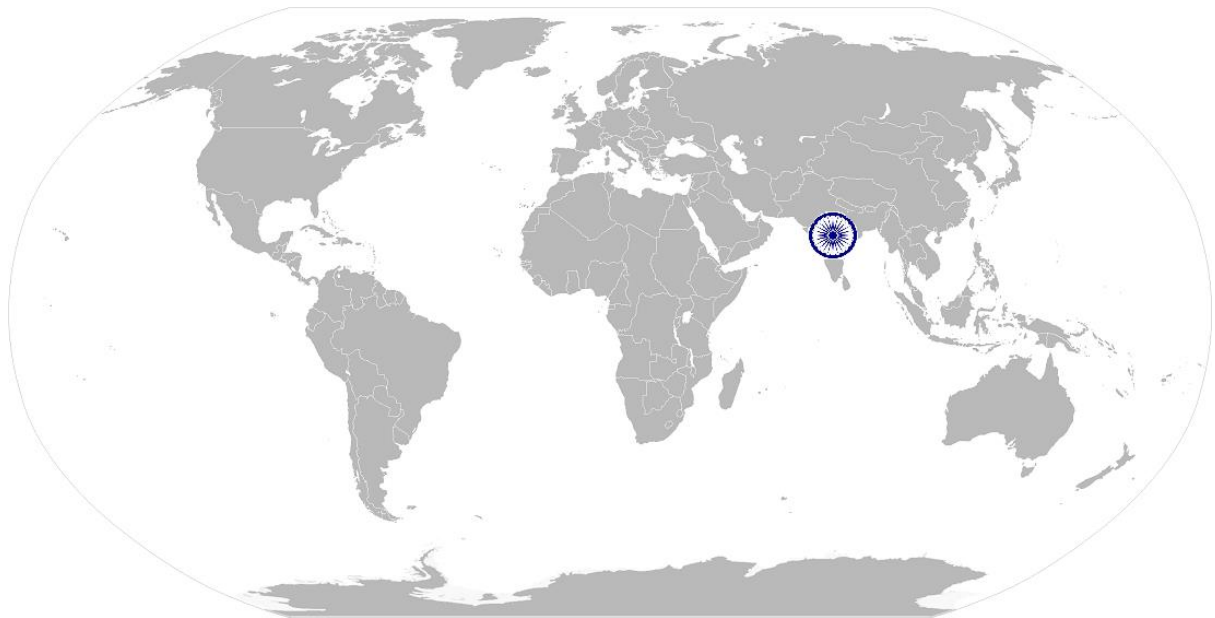
G&J/N9930

Maintain IPR

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NOS Code	G&J/N9930		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	05/06/13
Industry Sub-sector	Diamond Processing	Last reviewed on	30/07/13
		Next review date	15/07/15

National Occupational Standard



Overview

This unit is about the work ethics, team work, and level of communication with colleagues or clients in the diamond processing industry. It determines the ability to work as a team member, share work and multi-task in order to achieve the required deliverables on schedule.

G&J/N9931

Coordinate with team and superiors

National Occupational Standard

Unit Code	G&J/N9931
Unit Title (Task)	Interact with colleagues and seniors
Description	This OS unit is about communicating with colleagues and seniors in order to maintain smooth and hazards free work flow
Scope	<p>This unit/task covers the following:</p> <p>Interact with supervisor to:</p> <ul style="list-style-type: none"> • receive work instructions and raw materials from reporting supervisor • communicate to reporting supervisor about process flow improvements, product defects received from previous process, repairs and maintenance of tools and machinery as required • communicate any potential hazards or expected process disruptions • handover completed work to supervisor <p>Interact with colleagues within and outside the department to:</p> <ul style="list-style-type: none"> • work as a team with colleagues and share work as per their or own work load and skills • work with colleagues of other departments • communicate and discuss work flow related difficulties in order to find solutions with mutual agreement • receive feedback from QC and rework in order to complete work on time
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Interaction with supervisor	To be competent, the user/individual on the job must be able to: PC1. understand the work output requirements PC2. comply with company policy and rule PC3. deliver quality work on time as required by reporting any anticipated reasons for delays
Interactions with colleagues and other departments	To be competent, the user/individual on the job must be able to: PC4. put team over individual goals PC5. conflicts resolution and multi-tasking
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The individual on the job needs to know and understand: KA1. company's policies on personnel management KA2. work flow involved in company's diamond processing KA3. importance of the individual's role in the workflow KA4. reporting structure
B. Technical Knowledge	The individual on the job needs to know and understand: KB1. how to communicate effectively

G&J/N9931

Coordinate with team and superiors

	KB2. how to build team coordination
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Teamwork and some multitasking
	The individual on the job needs to know and understand how: SA1. to share work load as required SA2. to deliver product to next work process on time
B. Professional Skills	Decision making
	The individual on the job needs to know and understand: SB1. how to report potential areas of disruptions to work process SB2. when to report to supervisor and when to deal with a colleague depending on the type of concern
	Reflective thinking
	The individual on the job needs to know and understand: SB3. how to improve work process
	Critical thinking
The individual on the job needs to know and understand: SB4. how to spot process disruptions and delays	

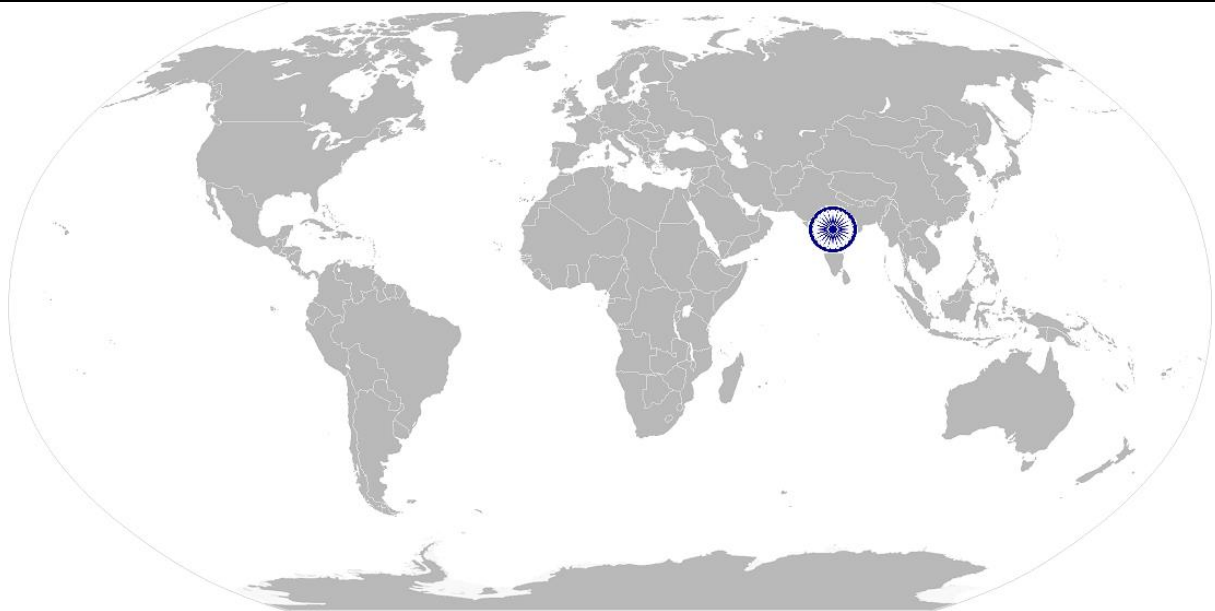


G&J/N9931

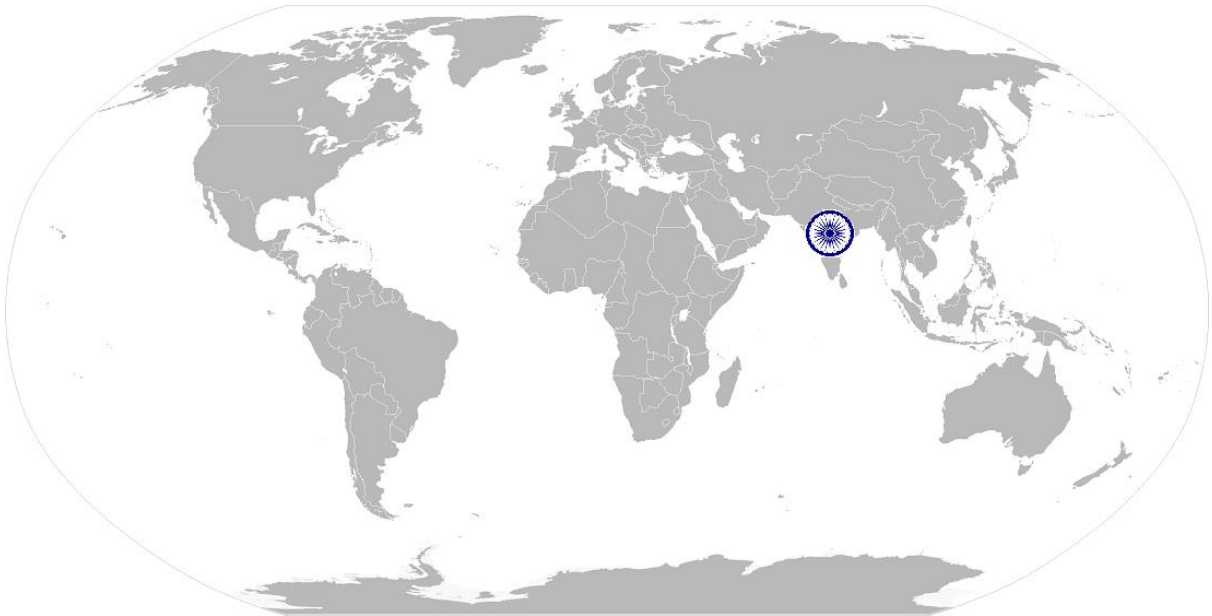
Coordinate with team and superiors

NOS Version Control

NOS Code	G&J/N9931		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	05/06/13
Industry Sub-sector	Diamond Processing	Last reviewed on	30/07/13
		Next review date	15/07/15



National Occupational Standard



Overview

This unit is about the worker's commitment towards reporting potential hazards and containing accidents in order to make the work environment safe for self and colleagues.

G&J/N9933

Maintain safety

National Occupational Standard

Unit Code	G&J/N9933
Unit Title (Task)	Maintain safety at work
Description	This OS unit is about being aware of and communicating potential hazards and dangers of accidents on the job
Scope	<p>This unit/task covers the following:</p> <p>Understand potential sources of accidents</p> <ul style="list-style-type: none"> to avoid accidents related to use of potentially dangerous chemicals, gases, sharp tools and hazards from machines like rotating scaife, lasers, heating ovens, etc. <p>Use safety gear to avoid accidents</p> <ul style="list-style-type: none"> wear safety gear such as goggles, mask, gloves , jacket , etc. as prescribed for the job <p>Understand the safety procedures followed by the company</p> <ul style="list-style-type: none"> such as fire drills, emergency/ evacuation procedures, first aid, etc., which will be helpful in case of an emergency <p>Communicate to reporting supervisor about:</p> <ul style="list-style-type: none"> process flow improvements to reduce anticipated or repetitive hazards mishandling of tools, machines or hazardous materials electrical problems that could result in accident
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Understanding of potential sources of accidents and communicating	To be competent, the user/individual on the job must be able to: PC1. spot and report potential hazards on time PC2. follow company policy and rules regarding hazardous materials PC3. deliver quality work on time as required by reporting any anticipated reasons for delays
Using safety gear	To be competent, the user/individual on the job must be able to: PC4. understand which safety gear must we used for a particular task
Understanding of safety procedures	To be competent, the user/individual on the job must be able to: PC5. understand and follow the evacuation procedure properly during a fire drill PC6. provide first aid to self or others in case of emergency
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The individual on the job needs to know and understand: KA1. company's policies on handling: harmful chemicals and sharp tools, safety and hazards of machines, fire safety/drill, first aid and, disposal of harmful chemicals and materials KA2. work flow involved in company's diamond processing KA3. importance of the individual's role in the workflow KA4. reporting structure

G&J/N9933

Maintain safety

<p>B. Technical Knowledge</p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. how different chemicals react and what could be the danger from them</p> <p>KB2. how to use machines and tools without causing bodily harm</p> <p>KB3. fire safety education</p> <p>KB4. first aid execution</p> <p>KB5. disposal of hazardous chemicals, tools and materials by following prescribed environmental norms or as per company policy</p>
<p>Skills (S) [Optional]</p>	
<p>A. Core Skills/ Generic Skills</p>	<p>Communication skills</p> <p>The individual on the job needs to know and understand how:</p> <p>SA1. to effectively communicate the danger</p>
<p>B. Professional Skills</p>	<p>Decision making</p> <p>The individual on the job needs to know and understand:</p> <p>SB1. importance of reporting potential sources of danger</p> <p>SB2. appropriate actions to be taken in the event of an accident</p> <p>SB3. procedure for disposing of hazardous materials, safely and following environmental guidelines</p> <p>Reflective thinking</p> <p>The individual on the job needs to know and understand how:</p> <p>SB4. to learn from past mistakes regarding use of hazardous machines, tools or chemicals</p> <p>Critical thinking</p> <p>The individual on the job needs to know and understand:</p> <p>SB5. how to spot danger</p> <p>SB6. procedure to follow in the event of a fire or other hazard</p>

G&J/N9933

Maintain safety

NOS Version Control

NOS Code	G&J/N9933		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	05/06/13
Industry Sub-sector	Diamond Processing	Last reviewed on	30/07/13
		Next review date	15/07/15

Definitions

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar business 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 an 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.
Sub-function	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (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.
National Occupational Standards (OS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications 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.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding	Knowledge and understanding are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation 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

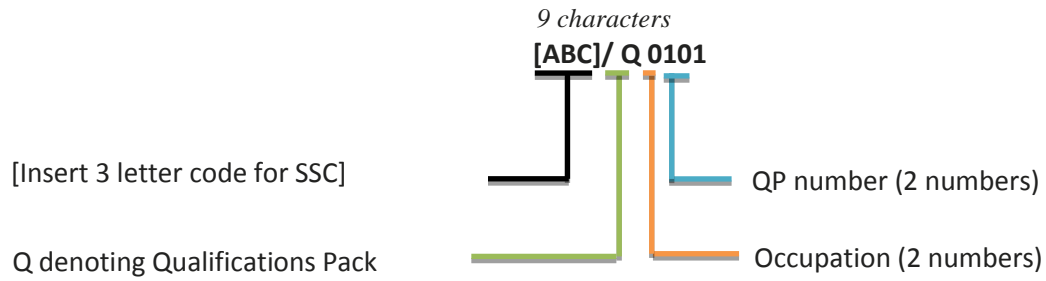
Acronyms

	specific designated responsibilities.
Core Skills/ Generic Skills	Core skills or generic skills are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment 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.
Keywords /Terms	Description
IPR	Intellectual Property Rights
NOS	National Occupational Standard(s)
NVQF	National Vocational Qualifications Framework
NSQF	National Qualifications Framework
NVEQF	National Vocational Education Qualifications Framework
QP	Qualifications Pack

Annexure

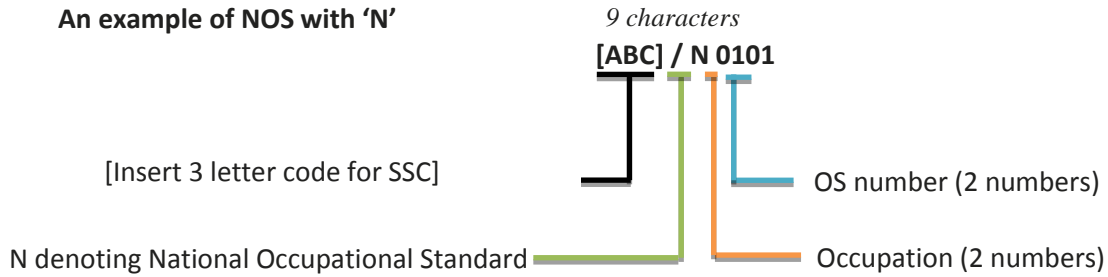
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



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The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
Handmade gold and gems-set jewellery	01-20
Cast and diamond-set jewellery	21-40
Diamond processing	41-60
Gemstone processing	61-80
Jewellery retailing	81-98

Sequence	Description	Example
Three letters	Industry name	G&J
Slash	/	/
Next letter	Whether QP or NOS	Q
Next two numbers	Occupation code	41
Next two numbers	OS number	01

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Window Opener

Qualification Pack Window Opener

Sector Skill Council
GEMS & JEWELLERY

Guidelines for Assessment:

1. To pass the Qualification Pack , every trainee should score a minimum of 50% in theory and 70% in practical assessments.

		Marks Allocation	
		Theory	Skills Practical
G&J/N4103 This OS unit is about creating a facet like opening on the rough diamond to be able to assess its internal features prior to planning or cutting	PC1. set up the bench/mill without vibration and level all its parts	1	9
	PC2. accurately fix the rough on the tang and level the tang	1	9
	PC3. accurately create a window as per requirement	1	9
	PC4. ensure re-windowing is not required	1	8
	PC5. ensure minimum weight loss	1	8
	PC6. achieve the productivity in terms of carats or number of pieces as set by the company	1	8

	PC7. deliver in time to next process	0	8
	PC8. detect and correct / repair a faulty window	1	8
	PC9. ensure no breakage or damage to the rough diamond	1	8
		8	75
G&J/N9930 This OS unit is about maintaining company's intellectual property	PC1. spot plagiarism and report	1	0
	PC2. understand rationale of patents and IPR	1	0
	PC3. avoid being involved in IPR violations	1	0
		3	0
G&J/N9931 This OS unit is about communicating with colleagues and seniors in order to maintain smooth and hazards free work flow	PC1. understand the work output requirements	1	0
	PC2. comply with company policy and rule	1	0
	PC3. deliver quality work on time as required by reporting any anticipated reasons for delays	0	2
	PC4. put team over individual goals	2	0
	PC5. conflicts resolution and multi-tasking	2	0
		6	2

G&J/N9933 This OS unit is about being aware of and communicating potential hazards and dangers of accidents on the job	PC1. spot and report potential hazards on time	1	0
	PC2. follow company policy and rules regarding hazardous materials	1	0
	PC3. deliver quality work on time as required by reporting any anticipated reasons for delays	1	0
	PC4. understand which safety gear must we used for a particular task	0	1
	PC5. understand and follow the evacuation procedure properly during a fire drill	0	1
	PC6. provide first aid to self or others in case of emergency	0	1
		3	3
	20	80	
	100		