

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR GEMS AND JEWELLERY 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 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 - Laser Sawing Machine Operator- Diamond Processing

**SECTOR:** GEMS & JEWELLERY

**SUB-SECTOR:** Diamond processing

**OCCUPATION:** Rough cutting and sawing

**REFERENCE ID:** G&J/Q4404

**ALIGNED TO:** NCO-2015/NIL

**Brief Job Description:** The individual at work needs to cut the rough diamond along the marking by fixing it on a dop or cassette or holder, then slicing it using the laser machine. A laser sawing operator is responsible for delivering perfect cut of roughs in the stipulated time, while minimizing weight loss and breakage. Also known as Laser Cutter or Laser Operator or Laser Sawyer, the laser machine operator uses the laser machine to cut the diamond.

**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 multitask; ability to work for long hours in sitting position in front of a computer; and a lot of patience.

Job Details

Qualifications Pack Code	G&J/Q4404		
Job Role	Laser Sawing Machine Operator – Diamond Processing		
Credits (NSQF)	TBD	Version number	2.0
Sector	Gems & Jewellery	Drafted on	28/08/2016
Sub-sector	Diamond Processing	Last reviewed on	24/11/2017
Occupation	Rough Cutting and Sawing	Next review date	24/11/2021
NSQC Clearance on*	DD/MM/YYYY		

\* only after clearance from NSQC

Job Role	Laser Sawing Machine Operator – Diamond Processing
Role Description	Cutting the rough diamond using a laser sawing machine as per the markings, in order to remove inclusions and maximise yield, while ensuring minimum breakage
NSQF level	3
Minimum Educational Qualifications*	8th Standard
Maximum Educational Qualifications*	Not applicable
Training (Suggested but not mandatory)	Not Applicable
Minimum job entry age	18 years
Experience	Not applicable
Applicable National Occupational Standards (NOS)	<b>Compulsory:</b> <ol style="list-style-type: none"> <li><a href="#">G&amp;J/N4401 Fix rough diamond on dop or cassette or holder</a></li> <li><a href="#">G&amp;J/N4402 Cut rough diamond using laser sawing machine</a></li> <li><a href="#">G&amp;J/N9901 Coordinate with others</a></li> <li><a href="#">G&amp;J/N9902 Maintain health and safety at workplace</a></li> </ol>
Performance Criteria	As described in the relevant OS units

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.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
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 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/ 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 the context of the OS, these include communication related skills that are applicable to most job roles.

Acronyms

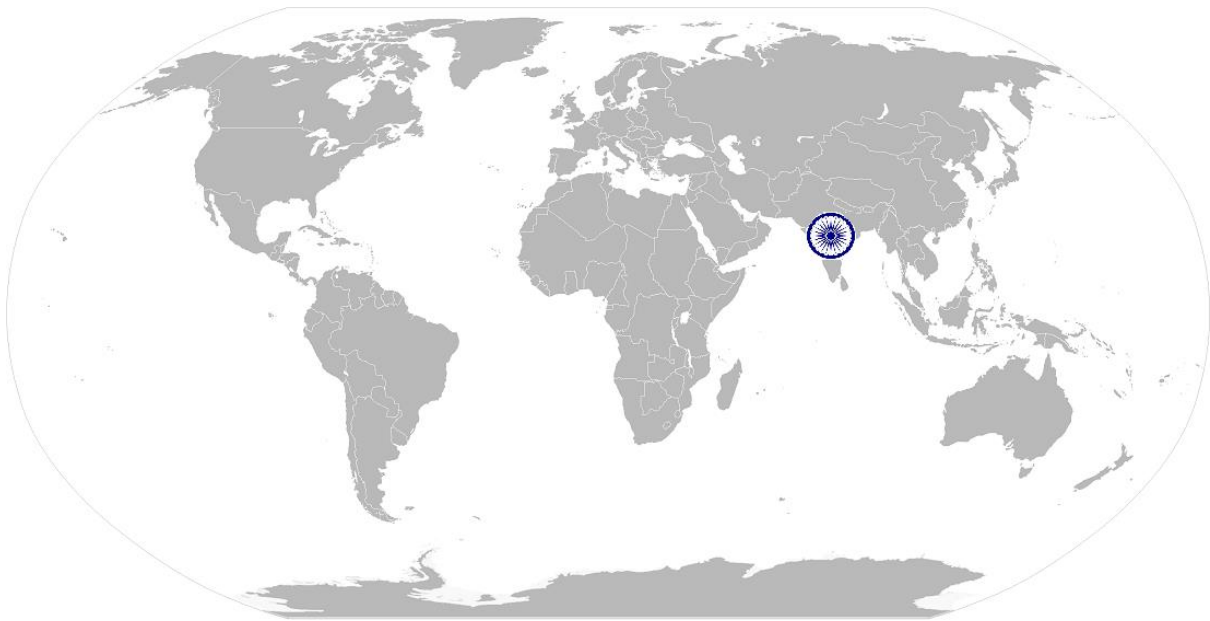
Keywords /Terms	Description
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack

**G&J/N4401**

**Fix rough diamond on a dop or holder or cassette**

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# National Occupational Standard



## Overview

This unit is a key pre-sawing stage in diamond processing. It involves fixing of rough diamonds securely onto dops or cassette of dops or a holder using adhesives such as white cement in such a way that each diamond is aligned as per the markings for the purpose of cutting by using laser beam or blade sawing.

**G&J/N4401**

**Fix rough diamond on a dop or holder or cassette**

<b>Unit Code</b>	<b>G&amp;J/N4401</b>
<b>Unit Title (Task)</b>	<b>Fix rough diamond on a dop or holder or cassette</b>
<b>Description</b>	This OS unit is about fixing rough diamond on dop / holder / cassette using adhesives, levelling and aligning them as per the markings as a preparation for cutting on laser machine or blade sawing
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Setting rough in the holder</li> <li>Maintaining productivity</li> <li>Controlling defects</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Setting rough in the holder</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. achieve accurate match of the specifications of the roughs such as shape, size and quantity, as per those mentioned on the packet issued</p> <p>PC2. follow the markings in terms of the type of cut, and the number of cuts required</p> <p>PC3. select the holder /dop type for the size of the rough to be cut and the method by which it will be cut, e.g., one-sided for single rough and double-sided cassette for multiple roughs to be cut at a time</p> <p>PC4. ensure accurate and secured fixing of rough as per the planned cut</p> <p>PC5. ensure accurate alignment and level the rough as per marking</p>
<b>Maintaining Productivity</b>	<p>PC6. achieve the productivity in terms of carats or number of pieces as set by the company</p> <p>PC7. achieve timely delivery for further processing</p>
<b>Controlling defects</b>	PC8. ensure no damage to the rough during fixing process
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Company's policies on: acceptable limits of weight loss; incentives; delivery standards; safety practices and hazards; security and performance measurement</p> <p>KA2. Non-disclosure of "confidential information" provided by the company either orally or in writing marked as confidential</p> <p>KA3. Liability arising out of loss, theft, or inadvertent disclosure of confidential information</p> <p>KA4. Work flow involved in company's diamond processing process</p> <p>KA5. Importance of the individual's role in the workflow</p> <p>KA6. Reporting structure</p> <p>KA7. Issue return procedures followed by the company</p>

**G&J/N4401**

**Fix rough diamond on a dop or holder or cassette**

<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Basic characteristics of a diamond</p> <p>KB2. How to select the holder/dop type for the size of rough to be cut and the method by which it will be cut, e.g., one-sided for single rough and double-sided</p> <p>KB3. Accurate fixing of roughs on dop/holder/cassette as per planned cut</p> <p>KB4. Heat requirements such temperature, duration for different adhesives</p> <p>KB5. Cleaning techniques of the rough using different chemicals and ultrasonic cleaner</p> <p>KB6. Potential work hazards</p> <p>KB7. Various tools and machines to be used for the fixing process, its hazards and maintenance</p> <p>KB8. Use of magnifying camera with screen or an eye glass in order to check alignment</p>
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Fill requisition slip for ordering tools materials and consumables</p> <p>SA2. Document broken and lost diamonds as per company policy</p> <p>SA3. Document work done for status and performance appraisal</p>
	<b>Reading Skills</b>
	<p>SA4. Read descriptions on the diamond packets/ bags to match the specifications of the roughs such as shape, size and quantity, as per those mentioned on the packet issued</p>
	<p><b>Oral Communication (Listening and Speaking skills)</b></p> <p>SA5. Discuss task, schedules, and work-loads with co-workers and supervisors</p> <p>SA6. Understand instructions and report problems</p> <p>SA7. Share work load as required</p> <p>SA8. Assist others who require help</p> <p>SA9. Report problems to supervisor such as:</p> <ul style="list-style-type: none"> <li>• Mismatch in rough issued and received</li> <li>• Problem with the planned cut which may lead to breakage</li> <li>• Unclear marking</li> <li>• Defective or inadequate number of dops/ holders /cassettes</li> <li>• Inadequate quantity of consumable such as adhesives</li> <li>• Machine break down or wear and tear of tools, etc.</li> </ul>



**G&J/N4401**

**Fix rough diamond on a dop or holder or cassette**

<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand how to:
	SB1. Make decisions pertaining to the order of fixing roughs in the cassette/dop for cutting
	SB2. Make decisions on use different types of adhesives in different cases
	<b>Plan and Organize</b>
	SB3. Plan the work to improve productivity and quality of setting the rough
	SB4. Plan and organize maintenance of tools and machines used
	SB5. Plan for minimizing damage or loss of any diamond during the doping process
	<b>Customer Centricity</b>
	N.A.
	<b>Problem Solving</b>
	SB6. Identify the factors such as quality of the glue/white cement, tools and machines used, that contribute to the fixing of roughs
	SB7. Identify immediate or temporary solutions to avoid delays
	SB8. Resolve issues with the planned cut which may lead to breakage
	<b>Analytical Thinking</b>
	SB9. Plan the work to improve productivity and quality of setting the rough
	<b>Critical Thinking</b>
	SB10. spot process disruptions and delays

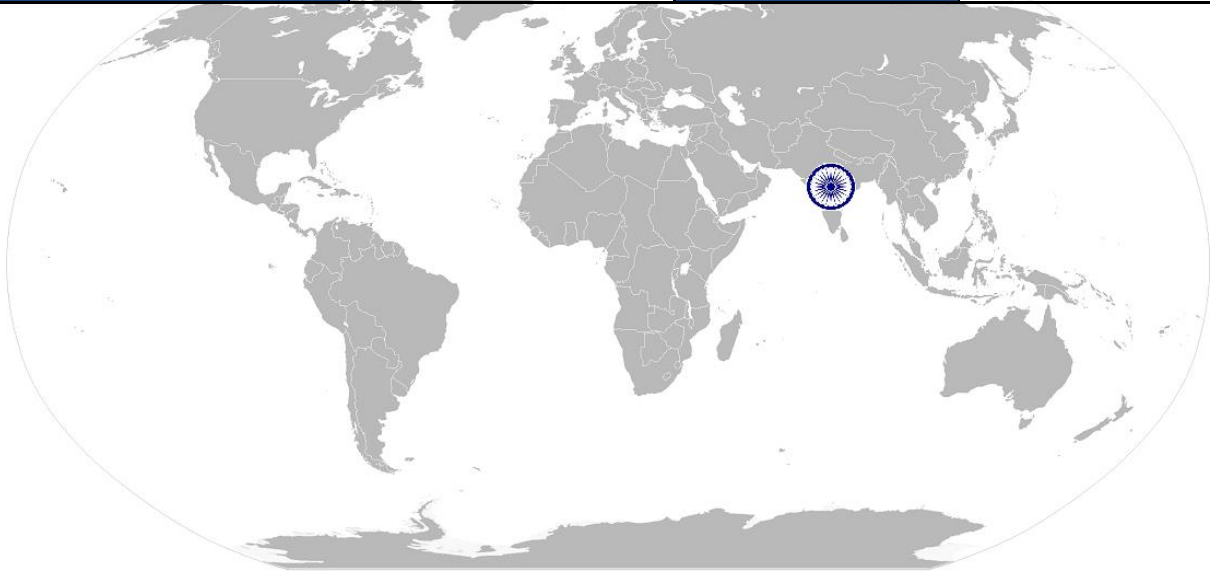


**G&J/N4401**

**Fix rough diamond on a dop or holder or cassette**

## **NOS Version Control**

NOS Code	G&J/N4401		
Credits (NSQF)	TBD	Version number	2.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Diamond Processing	Last reviewed on	24/11/2017
Occupation	Rough cutting and sawing	Next review date	24/11/2021

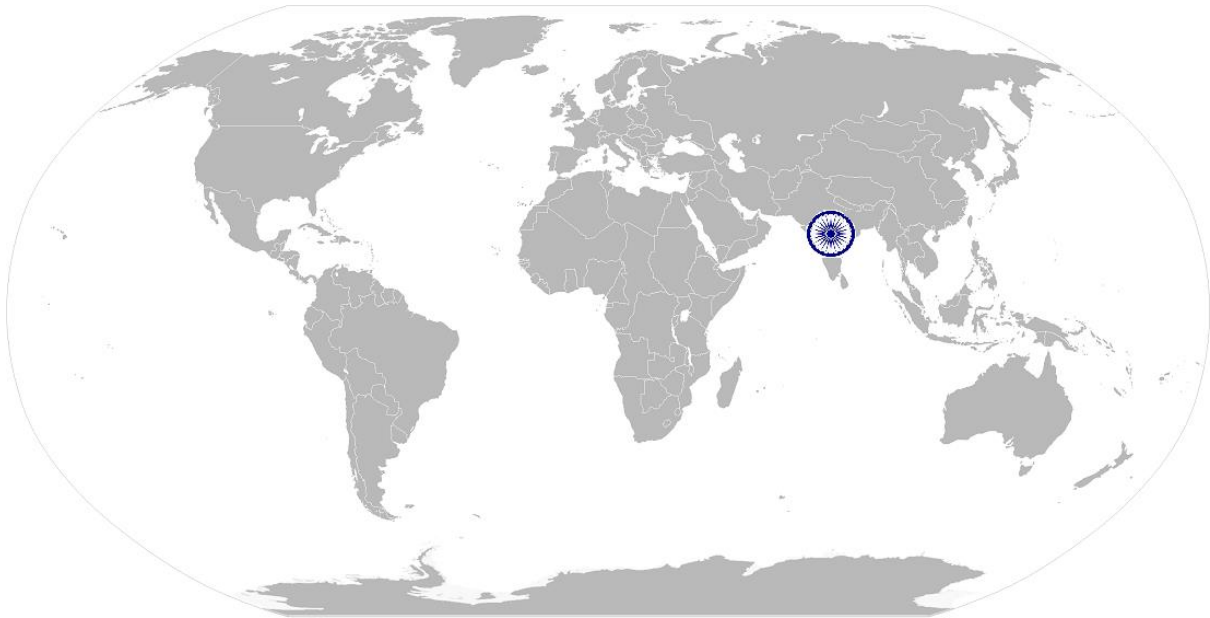


**G&J/N4402**

**Cut rough diamond using a laser sawing machine**

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# National Occupational Standard



## **Overview**

This unit is about operating the laser machine in order to cut the rough diamond into one or several pieces by passing a laser beam through it along the line of the marking without causing any other damage to the stone.

**G&J/N4402**

**Cut rough diamond using a laser sawing machine**

<b>Unit Code</b>	<b>G&amp;J/N4402</b>
<b>Unit Title (Task)</b>	<b>Cut rough diamond using a laser sawing machine</b>
<b>Description</b>	This OS unit is about cutting the rough diamond into smaller pieces as per the markings so that inclusions are removed and maximum yield is achieved as per the planned cut
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Operating the laser sawing machine</li> <li>• Maintaining Quality of cutting</li> <li>• Maintaining Productivity</li> <li>• Controlling Defects</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Operating laser sawing machine</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. ensure adequate match of specifications such as shape, size, dimensions, etc., and marking of the fixed rough received as per those mentioned on the bag</p> <p>PC2. ensure precise and secured placing of the dop / stage in the machine</p> <p>PC3. achieve adequate alignment of the laser cutting line with the marking for proper cut</p> <p>PC4. ensure apt parameters such as dimensions and other data are entered in the computer</p>
<b>Maintaining Quality of cutting</b>	<p>PC5. achieve proper cut of the roughs along the markings</p> <p>PC6. ensure accurate bagging and labelling of the roughs before returning</p>
<b>Maintaining Productivity</b>	<p>PC7. achieve the productivity in terms of carats or number of pieces as set by the company</p> <p>PC8. achieve timely delivery for further processing</p> <p>PC9. maintain cycle time</p> <p>PC10. work on multiple machines at the same time</p>
<b>Controlling defects</b>	<p>PC11. assess that the marking is correct for the cut required</p> <p>PC12. minimize damage, weight loss and breakage</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policies on: acceptable limits of weight loss; incentives; delivery standards; safety practices and hazards; security and performance measurement</p> <p>KA2. Non-disclosure of "confidential information" provided by the company either orally or in writing marked as confidential</p> <p>KA3. Liability arising out of loss, theft, or inadvertent disclosure of confidential information</p> <p>KA4. Work flow involved in company's diamond processing process</p> <p>KA5. Importance of the individual's role in the workflow</p>

**G&J/N4402**

**Cut rough diamond using a laser sawing machine**

	<p>KA6. Reporting structure</p> <p>KA7. Issue return procedures followed by the company</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Shape, cut, clarity, carat, and physical characteristics of the diamond</p> <p>KB2. Alignments and levelling for different cuts in a diamond</p> <p>KB3. Tension in a diamond</p> <p>KB4. Potential ways that may cause damage to a diamond</p> <p>KB5. Potential work hazards, particularly, when using laser sawing machine</p> <p>KB6. Computer and laser machine operations</p> <p>KB7. Use of the tension machine</p> <p>KB8. Types of inclusions in a diamond</p> <p>KB9. Other techniques of cutting</p> <p>KB10. Use of various scopes in diamond processing</p> <p>KB11. Geometry to understand the angles and symmetry</p> <p>KB12. Repair work</p> <p>KB13. Uses of different types of tools and materials for different purposes and end results</p> <p>KB14. How to maintain and prepare the tools as per job requirement</p>
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Document work done for status and performance appraisal</p> <p>SA2. Fill requisition slip for ordering tools materials and consumables</p> <p>SA3. Document broken and lost diamonds as per company policy</p>
	<b>Reading Skills</b>
	<p>SA4. Read descriptions on the diamond packets/ bags to match the specifications of the roughs such as shape, size and quantity, as per those mentioned on the packet issued</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>SA5. Discuss task, schedules, and work-loads with co-workers and supervisors</p> <p>SA6. Understand instructions and report problems</p> <p>SA7. Share work load as required</p> <p>SA8. Assist others who require help</p> <p>SA9. Report problems to supervisor such as impractical marking, machine failures</p>

**G&J/N4402**

**Cut rough diamond using a laser sawing machine**

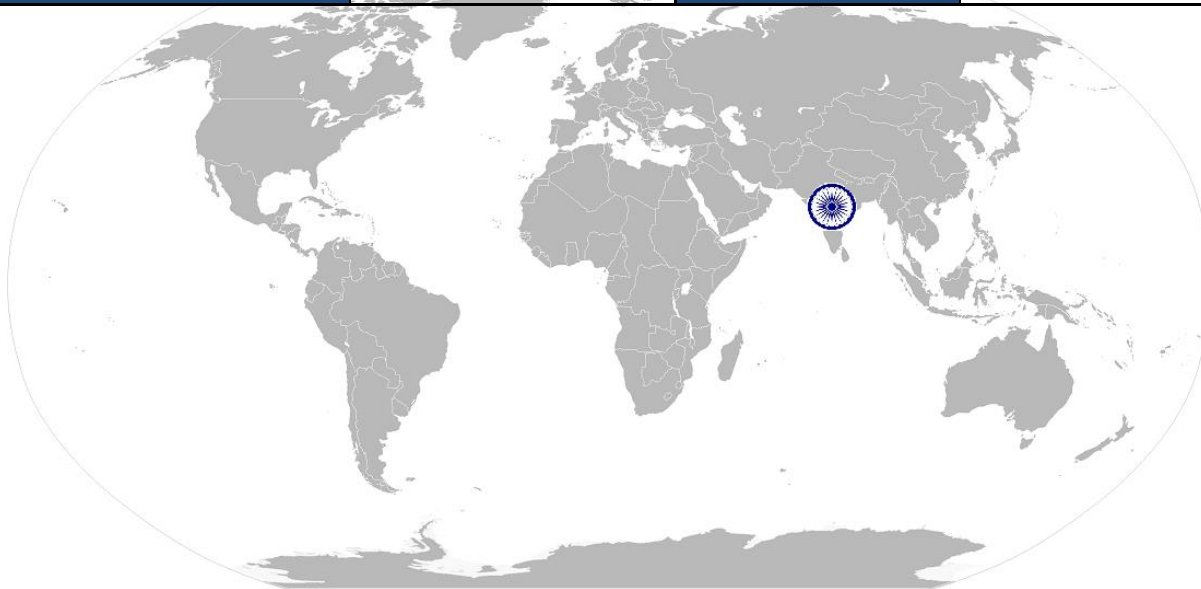
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand how to: SB1. To decide if a particular rough must be cut along the marking provided SB2. To determine what should be the order of the cut and which marking should be cut first to avoid breakage
	<b>Plan and Organize</b>
	SB3. How to plan and organize the machinery maintenance schedule to achieve break down free operations SB4. How to plan work for maximum productivity
	<b>Customer Centricity</b>
	N.A.
	<b>Problem Solving</b>
	SB5. Rectify defects occurred in sawing
	<b>Analytical Thinking</b>
	SB6. Devise new means of working to improve productivity SB7. Suggest different or innovative plans, which may yield higher returns for the company
	<b>Critical Thinking</b>
	SB8. To spot process disruptions and delays

**G&J/N4402**

**Cut rough diamond using a laser sawing machine**

## **NOS Version Control**

NOS Code	G&J/N4402		
Credits (NSQF)	TBD	Version number	2.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Diamond Processing	Last reviewed on	24/11/2017
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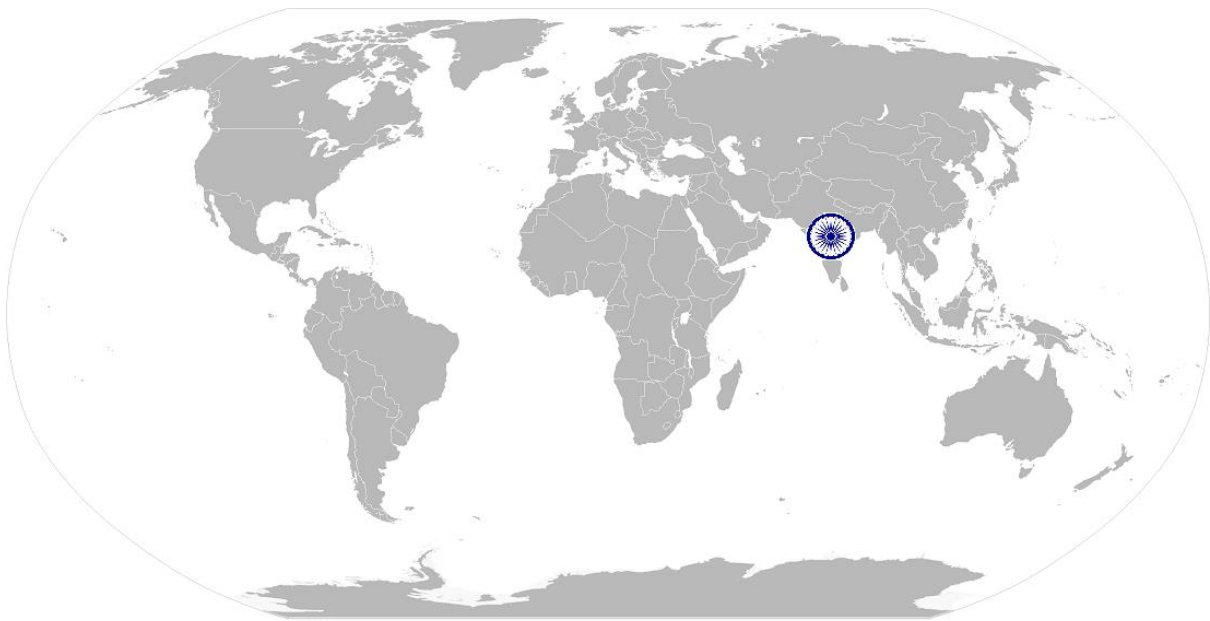


**G&J/N9901**

**Coordinate with others**

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# National Occupational Standard



## Overview

This unit is about team work and communication with colleagues or clients. It determines the coordination capability of an individual to work as a team member, share work and multi-task in order to achieve the deliverables on schedule.



## G&J/N9901

## Coordinate with others

<b>Unit Code</b>	<b>G&amp;J/N9901</b>
<b>Unit Title (Task)</b>	<b>Coordinate with others</b>
<b>Description</b>	This OS unit is about communicating with colleagues, seniors and outside parties in order to achieve the deliverables on schedule
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Interacting with supervisor</li> <li>• Interacting with colleagues within and outside the department</li> <li>• Interacting with outside parties</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Interacting with supervisor</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. coordinate for receiving work instructions and raw materials from reporting supervisor</p> <p>PC2. communicate to the reporting supervisor about process flow improvements, product defects received from previous process, repairs and maintenance of tools and machinery as required</p> <p>PC3. communicate to reporting supervisor about operation details and hazards</p> <p>PC4. Interact with supervisor regarding compliance of company policy and rules</p>
<b>Interacting with colleagues within and outside the department</b>	<p>PC5. coordinate with colleagues to share work, as per the workload</p> <p>PC6. communicate and discuss work flow related difficulties in order to find solutions with mutual agreement</p> <p>PC7. coordinate and receive feedback from quality control department</p> <p>PC8. coordinate for putting team goals over individual goals</p> <p>PC9. resolve conflicts by communicating with colleagues and other departments</p> <p>PC10. coordinate with colleagues regarding multitasking in other departments with requirements</p>
<b>Interacting with outside parties</b>	PC11. adhere to nondisclosure policy of the company in all outside coordination
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Company's policies on: preferred language of communication, reporting and escalation policy, quality delivery standards, and personnel management</p> <p>KA2. Company's policies on non-disclosure of "confidential information" provided by the company either orally or in writing marked as confidential</p> <p>KA3. Liability arising out of loss, theft, or inadvertent disclosure of confidential information</p> <p>KA4. Reporting structure</p>

**G&J/N9901**

**Coordinate with others**

<b>B. Technical Knowledge</b>	<p>KB1. Various categories of people that one is required to communicate and coordinate within the organization</p> <p>KB2. Importance of effective communication in the workplace</p> <p>KB3. Importance of teamwork in organization and individual success</p> <p>KB4. Various components of effective communication</p> <p>KB5. Key elements of active listening</p> <p>KB6. Barriers to effective communication</p> <p>KB7. Importance of avoiding casual expletives and unpleasant terms while communicating professional circles</p> <p>KB8. Common reasons for interpersonal conflict</p> <p>KB9. Expressing and addressing grievances appropriately and effectively</p> <p>KB10. What constitutes disciplined behavior for a working professional</p>
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Write instructions, remarks, job sheets, basic information, technical details etc. in preferred local language of communication and English</p>
	<b>Reading Skills</b>
	<p>SA2. Read preferred language of communication as prescribed by the company</p> <p>SA3. Read job sheets and interpret technical details mentioned in the job sheet</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>SA4. Discuss task lists, schedules, and work-loads with co-workers</p> <p>SA5. Be a good listener</p> <p>SA6. Be effective in communicating the issues faced to the supervisor</p> <p>SA7. Avoid using jargon, slang or acronyms when communicating</p>
<b>B. Professional Skills</b>	<b>Decision Making</b>
	<p>SB1. Spot and communicate potential areas of disruptions to work process and report the same</p> <p>SB2. Report to supervisor and or to deal with a colleague individually, depending on the type of concern</p>
	<b>Plan and Organize</b>
	<p>SB3. Collate information and communicate in a manner that is clear and comprehensive to colleagues and supervisor</p>
	<b>Customer Centricity</b>
	<p>SB4. Convey accurate information to all internal as well as external customers (or right information to right person)</p>
	<b>Problem Solving</b>

**G&J/N9901**

**Coordinate with others**

	SB5. How to handle critical situations caused due to communication issues at workplace and solve problems without blaming others
	<b>Analytical Thinking</b>
	SB6. Analyse the work processes by interacting with others and adopting best practices
	SB7. Use prior experience to observe and reflect for development of ideas
	<b>Critical Thinking</b>
	SB8. Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
	SB9. Deal with clients lacking the technical background to solve the problem on their own
	SB10. Spot process disruptions and delays and report and communicate with solutions
	SB11. Identify immediate or temporary solutions to resolve delays
	SB12. Apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

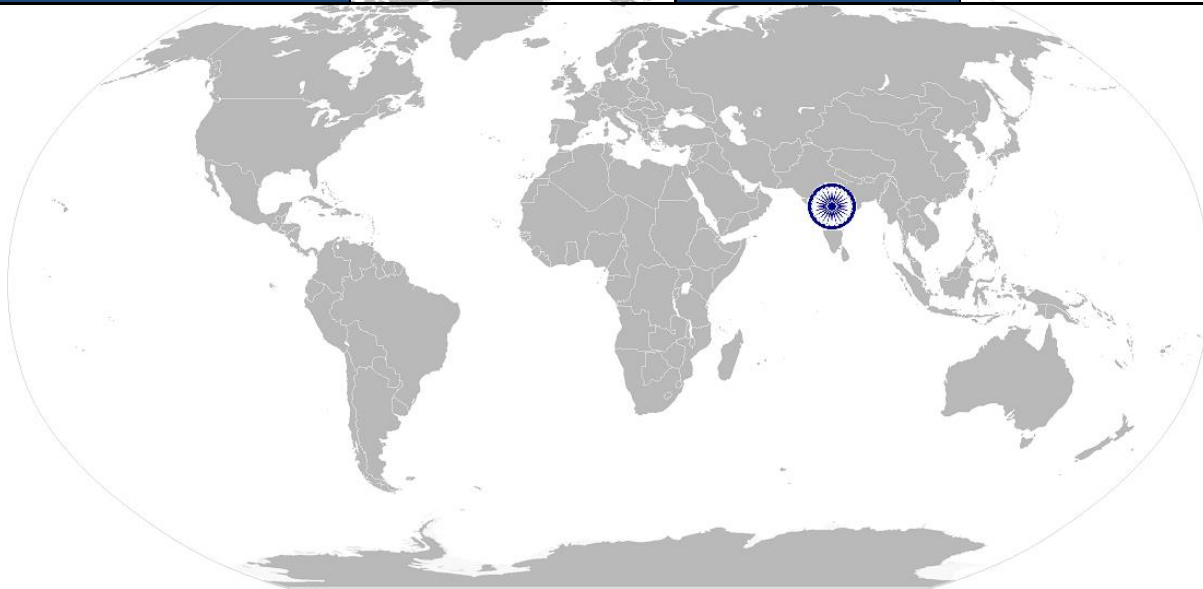


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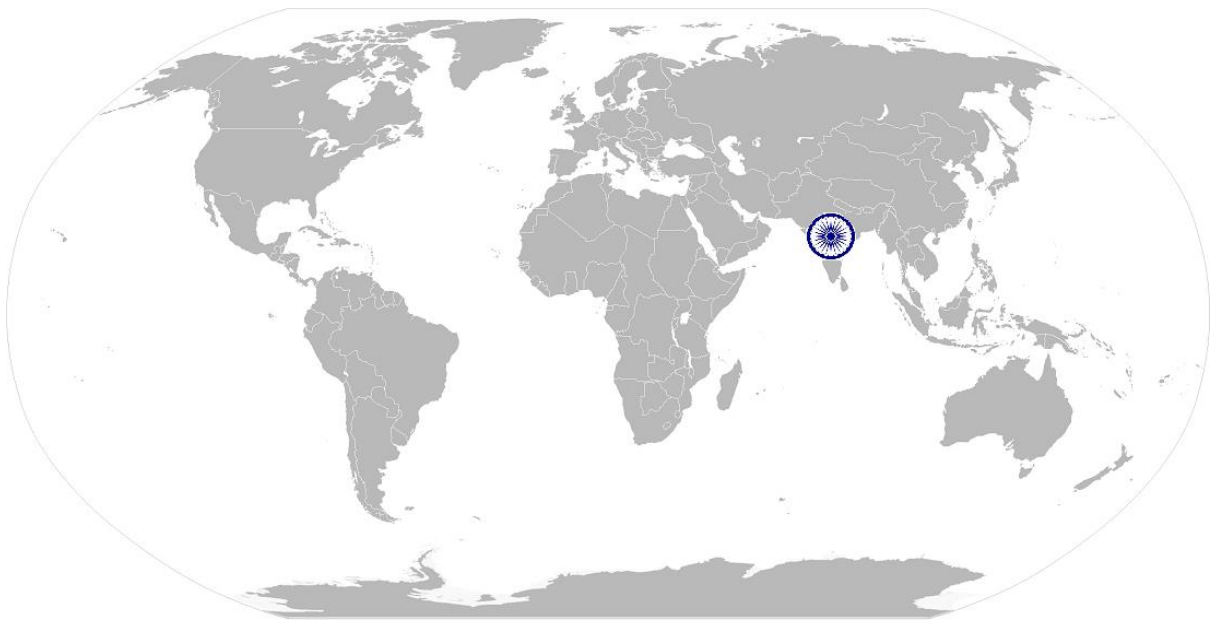
**Coordinate with others**

## **NOS Version Control**

<b>NOS Code</b>	<b>G&amp;J/N9901</b>		
<b>Credits (NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>2.0</b>
<b>Industry</b>	<b>Gems &amp; Jewellery</b>	<b>Drafted on</b>	<b>28/08/2016</b>
<b>Industry Sub-sector</b>	<b>Diamond Processing</b>	<b>Last reviewed on</b>	<b>24/11/2017</b>
<b>Occupation</b>	<b>Diamond Planning</b>	<b>Next review date</b>	<b>24/11/2021</b>



# National Occupational Standard



## Overview

This unit is about commitment towards reporting potential hazards, taking preventive measures to avoid accidents in order to make the work environment safe for self and colleagues and also helps in maintaining health and safety at workplace.

**G&J/N9902**

**Maintain health and safety at workplace**

<b>Unit Code</b>	<b>G&amp;J/N9902</b>
<b>Unit Title (Task)</b>	<b>Maintain health and safety at workplace</b>
<b>Description</b>	This OS unit is about being aware of, communicating and taking steps towards minimizing potential hazards and dangers of accidents on the job and maintaining health and safety at workplace
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Health and safety in work area</li> <li>• Fire safety</li> <li>• Emergencies, rescue and first aid procedures</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Health and safety in work area</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. identify and use appropriate protective clothing/equipment for specific tasks and work</p> <p>PC2. identify hazardous job activities in his/her job and communicate the possible causes of risks or accidents in the workplace</p> <p>PC3. carry out safe working practices while dealing with hazards to ensure safety of self and others</p> <p>PC4. identify and avoid doing any tasks or activities in a bad working position</p> <p>PC5. practice appropriate working postures to minimise occupational health related issues</p>
<b>Fire safety</b>	<p>PC6. use the appropriate fire extinguishers on different types of fire</p> <p>PC7. demonstrate rescue techniques applied during fire hazard</p> <p>PC8. demonstrate good housekeeping in order to prevent fire hazards</p> <p>PC9. demonstrate the correct use of any fire extinguisher</p>
<b>Emergencies, rescue and first aid procedures</b>	<p>PC10. administer appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.</p> <p>PC11. respond promptly and appropriately to an accident situation or medical emergency</p> <p>PC12. participate in emergency procedures such as raising alarm, safe evacuation, correct means of escape, correct assembly point etc.</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Company's policies on: safety and hazards and personnel management</p> <p>KA2. Names and location of documents that refer to health and safety in work place</p> <p>KA3. Reporting structure</p>



**G&J/N9902**

**Maintain health and safety at workplace**

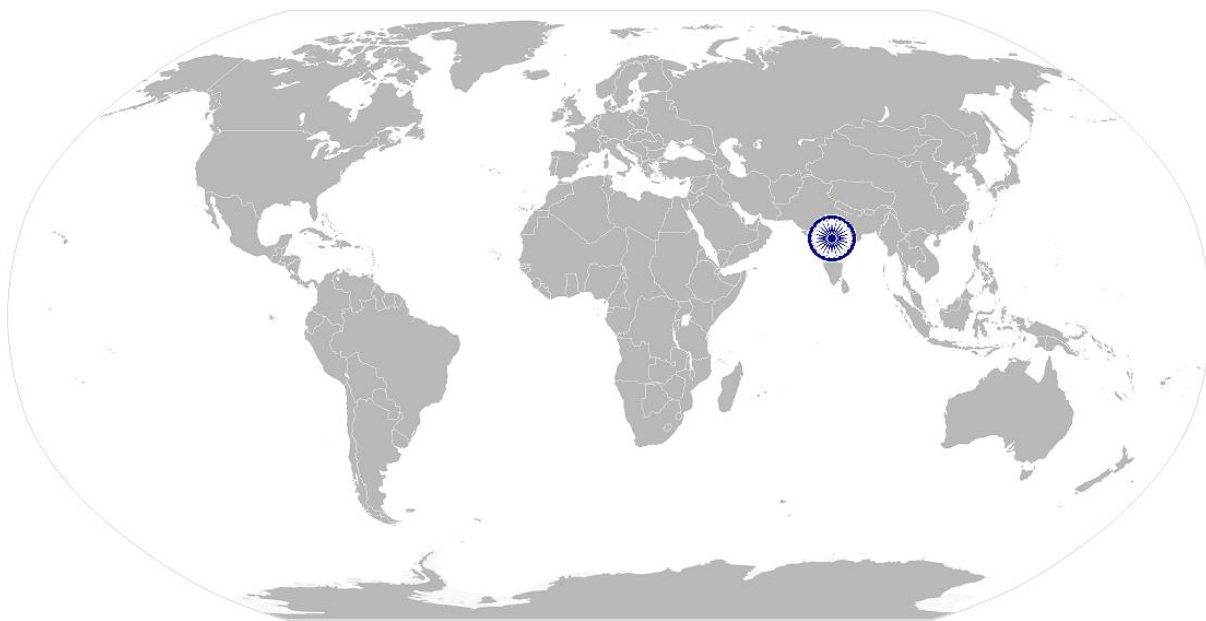
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Meaning of “hazards” and risks</p> <p>KB2. Health and safety hazards commonly present in the work place and related precautions</p> <p>KB3. Various dangers associate with use of electrical equipment</p> <p>KB4. Preventative and remedial actions to be taken in case of exposure to toxic material</p> <p>KB5. Methods of accident prevention</p> <p>KB6. How different chemicals react and what could be the danger from them</p> <p>KB7. How to use machines and tools without causing any harm to the body</p> <p>KB8. Importance of using protective clothing/ equipment while working</p> <p>KB9. Precautionary activities to prevent the fire accident</p> <p>KB10. Various causes of fire</p> <p>KB11. Techniques of using different fire extinguishers</p> <p>KB12. Different materials used for extinguishing fire</p> <p>KB13. Rescue techniques applied during a fire hazard</p> <p>KB14. Various types of safety signs and what they mean</p> <p>KB15. Appropriate basic first aid treatment relevant to condition e.g. bleeding, minor burns, eye injuries etc.</p> <p>KB16. Potential impact to a person who is moved incorrectly</p>
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The individual on the job needs to know and understand how to:</p> <p>N.A.</p>
	<b>Reading Skills</b>
	<p>SA1. Read and comprehend basic content to read labels, charts, signage's</p> <p>SA2. Read and comprehend basic English to read manuals of operations</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>SA3. Effectively communicate the risk of not following safety measures</p>
<b>B. Professional Skills</b>	<b>Decision Making</b>
	<p>The individual on the job needs to know and understand how to:</p> <p>SB1. Report potential sources of danger</p> <p>SB2. Follow the relevant prescribed procedure in the event of an accident</p> <p>SB3. Wear appropriate safety gear to avoid an accident</p>
	<b>Plan and Organize</b>
	<p>SB4. Learn from past mistakes regarding use of hazardous machines or chemicals</p>
	<b>Customer Centricity</b>



**G&J/N9902**

**Maintain health and safety at workplace**

	N. A.
	<b>Problem Solving</b>
	SB5. Adhere to and guide others to follow prescribed procedures related to health and safety at workplace
	<b>Analytical Thinking</b>
	SB6. Analyze untoward incidents from the past and implement correct use of machines, tools or hazardous chemicals
	<b>Critical Thinking</b>
	SB7. Critically analyze the processes carried out by self and by colleagues in the department to spot potential hazards and safety issues



**G&J/N9902**

**Maintain health and safety at workplace**

## **NOS Version Control**

NOS Code	G&J/N9902		
Credits (NSQF)	TBD	Version number	2.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Diamond Processing	Last reviewed on	24/11/2017
Occupation	Diamond Planning	Next review date	24/11/2021

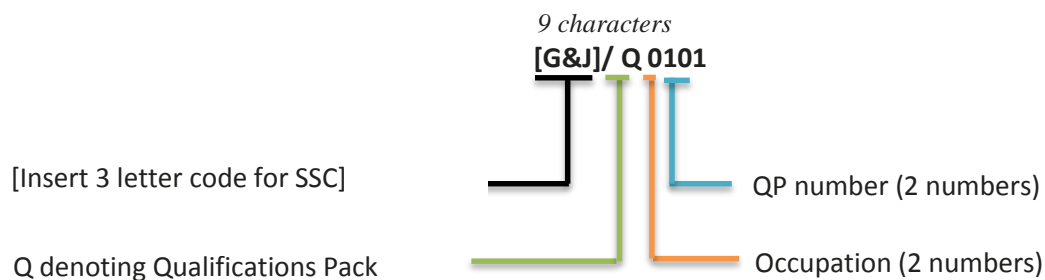


**G&J/Q4404** *Qualifications Pack for Laser Sawing Machine Operator - Diamond Processing*

## Annexure

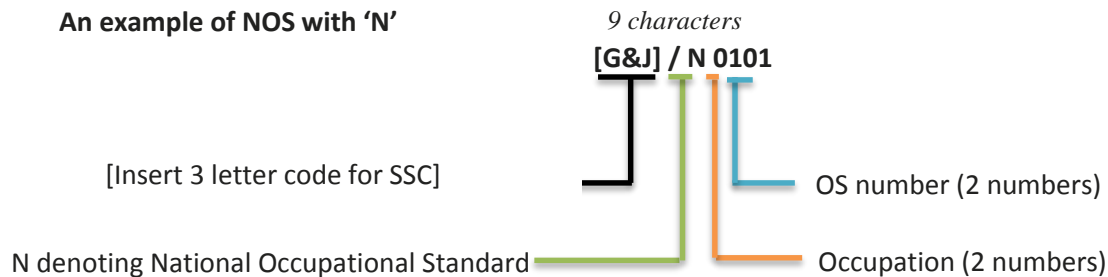
### Nomenclature for QP and NOS

#### Qualifications Pack



#### Occupational Standard

##### An example of NOS with 'N'



**G&J/Q4404** *Qualifications Pack for Laser Sawing Machine Operator - Diamond Processing*

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

Sub-sector	Range of Occupation numbers
Handmade gold and gems-set jewellery	01-11
Imitation Jewellery	12-20
Cast and diamond-set jewellery	21-40
Diamond processing	41-60
Gemstone processing	61-80
Jewellery retailing	81-90
Silver Smithing	91-98
Common	99

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

## Criteria For Assessment Of Trainees

**Job Role** Laser Sawing Machine Operator- Diamond Processing

**Qualification Pack** G&J/Q4404

**Sector Skill Council** Gem & Jewellery

### 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. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 50% of aggregate marks to successfully clear the assessment.
7. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
1. G&J/N4401 Fix rough diamond on a dop or holder or cassette	PC1. achieve accurate match of the specifications of the roughs such as shape, size and quantity, as per those mentioned on the packet issued	20	2	1	1
	PC2. follow the markings in terms of the type of cut, and the number of cuts required		3	1	2
	PC3. select the holder /dop type for the size of the rough to be cut and the method by which it will be cut, e.g., one-sided for single rough and double-sided cassette for multiple roughs to be cut at a time		4	1	3
	PC4. ensure accurate and secured fixing of rough as per the planned cut		4	1	3
	PC5. ensure accurate alignment and level the rough as per		2	1	1

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	marking				
	PC6. achieve the productivity in terms of carats or number of pieces as set by the company		2	0	2
	PC7. achieve timely delivery for further processing		1	0	1
	PC8. ensure no damage to the rough during fixing process		2	0	2
	<b>Total</b>		<b>20</b>	<b>5</b>	<b>15</b>

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
2. G&J/N4402 Cut rough diamond using a laser sawing machine	PC1. ensure adequate match of specifications such as shape, size, dimensions, etc., and marking of the fixed rough received as per those mentioned on the bag	40	3	1	2
	PC2. ensure precise and secured placing of the dop / stage in the machine		2	1	1
	PC3. achieve adequate alignment of the laser cutting line with the marking for proper cut		5	1	4
	PC4. ensure apt parameters such as dimensions and other data are entered in the computer		5	1	4
	PC5. achieve proper cut of the roughs along the markings		5	1	4
	PC6. ensure accurate bagging and labelling of the roughs before returning		2	1	1
	PC7. achieve the productivity in terms of carats or number of pieces as set by the company		2	0	2
	PC8. achieve timely delivery for further processing		3	0	3

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC9. maintain cycle time		2	0	2
	PC10. work on multiple machines at the same time		3	0	3
	PC11. assess that the marking is correct for the cut required		5	2	3
	PC12. minimize damage, weight loss and breakage		3	1	2
	Total		40	9	31

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
3. G&J/N9901 Coordinate with others	PC1. coordinate for receiving work instructions and raw materials from reporting supervisor	20	1	0	1
	PC2. communicate to the reporting supervisor about process flow improvements, product defects received from previous process, repairs and maintenance of tools and machinery as required		1	0	1
	PC3. communicate to reporting supervisor about operation details and hazards		1	0	1
	PC4. interact with supervisor regarding compliance of company policy and rules		2	0	2
	PC5. coordinate with colleagues to share work, as per the workload		3	0	3
	PC6. communicate and discuss work flow related difficulties in order to find solutions with mutual agreement		2	0	2
	PC7. coordinate and receive feedback from quality control department		2	1	1
	PC8. coordinate for putting team goals over individual goals		1	0	1
	PC9. resolve conflicts by		2	0	2



Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	communicating with colleagues and other departments				
	PC10. coordinate with colleagues regarding multitasking in other departments with requirements		3	1	2
	PC11. adhere to nondisclosure policy of the company in all outside coordination		2	1	1
	<b>Total</b>		<b>20</b>	<b>3</b>	<b>17</b>

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
4. G&J/N9902 Maintain health and safety at workplace	PC1. identify and use appropriate protective clothing/equipment for specific tasks and work	<b>20</b>	2	0	2
	PC2. identify hazardous job activities in his/her job and communicate the possible causes of risks or accidents in the workplace		1	0	1
	PC3. carry out safe working practices while dealing with hazards to ensure safety of self and others		1	0	1
	PC4. identify and avoid doing any tasks or activities in a bad working position		2	0	2
	PC5. practice appropriate working postures to minimise occupational health related issues		2	1	1
	PC6. use the appropriate fire extinguishers on different types of fire.		1	0	1
	PC7. demonstrate rescue techniques applied during fire hazard		2	0	2
	PC8. demonstrate good housekeeping in order to prevent fire hazards		1	0	1

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC9. demonstrate the correct use of any fire extinguisher		2	0	2
	PC10. administer appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.		1	0	1
	PC11. respond promptly and appropriately to an accident situation or medical emergency		3	1	2
	PC12. participate in emergency procedures such as raising alarm, safe evacuation, correct means of escape, correct assembly point etc.		2	1	1
	Total		20	3	17