

## 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

#### Contact Us:

Gem and Jewellery Skill Council of India, 3<sup>rd</sup> floor, BFC building, SEEPZ, Andheri East, Mumbai - 400096

E-mail: [ceo@gjsci.org](mailto:ceo@gjsci.org)



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## Introduction

### Qualifications Pack - Pre-shaper – Gemstone Processing

**SECTOR:** GEMS & JEWELLERY

**SUB-SECTOR:** Gemstone Processing

**OCCUPATION:** Gemstone Pre-shaping

**REFERENCE ID:** G&J/Q6602

**ALIGNED TO:** NCO-2015/7313.1601

**Brief Job Description:** The individual works with high-speed rotating scaife machines with diamond or steel laps in order to give the rough cut gemstone the shape as per plan. Gemstone Pre-shaper is also called 'Pre-former', the Pre-shaper gives a base shape to the gemstone for further faceting and polishing as per the customer's requirement. Shaping, sizing and calibrating the rough cut gemstone are an essential part of pre-shaper's role.

**Personal Attributes:** The job requires the individual to have: attention to details; good eyesight; steady grip; ability to work in a process driven team, for prolonged hours in noisy environment and in seated position with patience. The individual must avert machine failures, errors and avoid safety hazards.

Job Details

Qualifications Pack Code	G&J/Q6602		
Job Role	Pre-shaper – Gemstone Processing		
Credits (NSQF)	TBD	Version number	2.0
Sector	Gems & Jewellery	Drafted on	28/08/2016
Sub-sector	Gemstone Processing	Last reviewed on	17/01/2018
Occupation	Gemstone Pre-shaping	Next review date	17/01/2022
NSQC Clearance on*	DD/MM/YYYY		

\* only after clearance from NSQC

Job Role	Pre-shaper – Gemstone Processing
Role Description	Grinding basic shape of the rough-cut gemstone as per plan, for further polishing or faceting
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/N6601 Dop the gemstone</a></li> <li><a href="#">G&amp;J/N6602 Pre-shape or pre-form gemstone</a></li> <li><a href="#">G&amp;J/N6605 Operate tumble shaping 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 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 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. In the context of the OS, these include communication related skills that are applicable to most job roles.

Acronyms

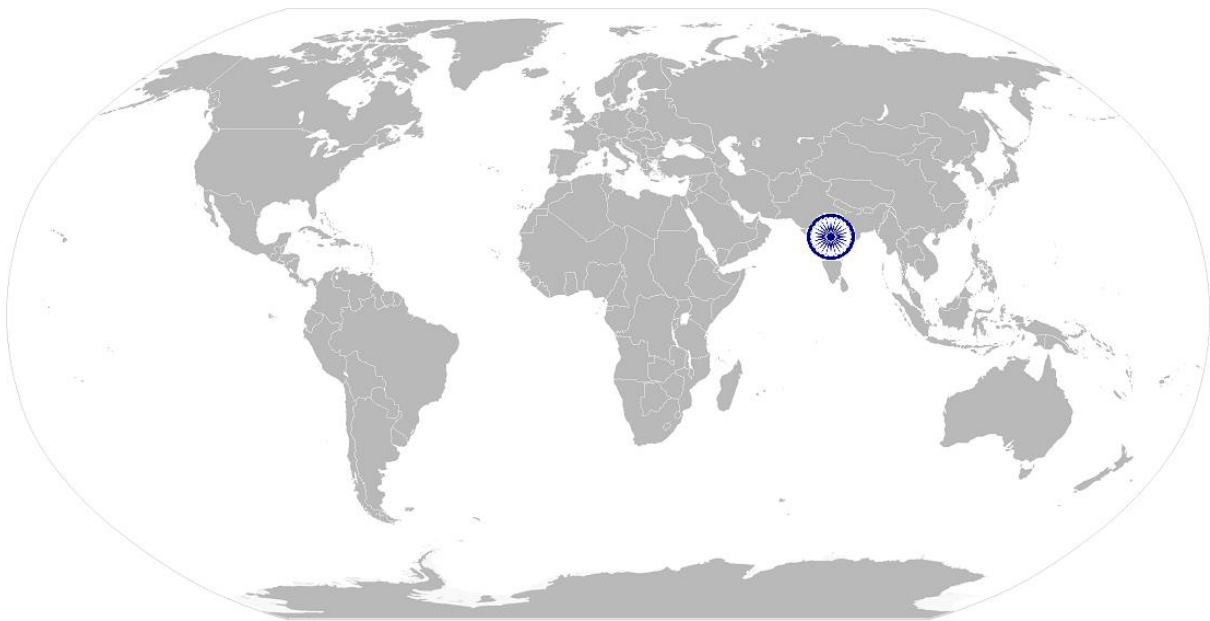
Keywords /Terms	Description
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack

**G&J/N6601**

**Dop the gemstone**

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# National Occupational Standard



## Overview

This unit is about fixing the stone securely on a dop stick, metal or wooden, in order to prepare it for pre-shaping, faceting or polishing.

**G&J/N6601**

**Dop the gemstone**

<b>Unit Code</b>	<b>G&amp;J/N6601</b>
<b>Unit Title (Task)</b>	<b>Dop the gemstone</b>
<b>Description</b>	This OS unit is about fixing the rough-cut or pre-shaped gemstone securely on the dop for pre-shaping, faceting or polishing.
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Fixing the gemstone on dop</li> <li>• Ensuring Productivity</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Fixing the gemstone on dop</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. match the stone type, weight and number as mentioned on the bag received from supervisor</p> <p>PC2. check the assortment of stones for shape, size and softness</p> <p>PC3. interpret the plan for the stone as per job sheet for stone to be aligned</p> <p>PC4. align the stone with accuracy</p> <p>PC5. make correct selection of appropriate dop and material for fixing</p> <p>PC6. maintain appropriate level of heating so that stone does not change colour</p> <p>PC7. achieve scratch-free doping</p> <p>PC8. achieve secure setting</p>
<b>Ensuring Productivity</b>	<p>PC9. ensure timely delivery to facet maker or shaper</p> <p>PC10. achieve number of dops prepared per day as per target given</p> <p>PC11. deliver damage-free output with minimum hazards</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (knowledge of the company/organisation and its process)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management</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 gemstone processing of company</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> <p>KA8. gemstone processing objective of the company, e.g. maximizing yield, maximizing clarity, etc.</p>

**G&J/N6601**

**Dop the gemstone**

<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. different types of stones, the family of stone and their properties, particularly, with respect to heat and pressure sensitivity</p> <p>KB2. the assortment of stones for shape, size, softness</p> <p>KB3. how to fix the stone on dop as per job sheet</p> <p>KB4. different types of dops used to as per gemstone type</p> <p>KB5. uses of different qualities of wax and lac for fixing, their merits and demerits</p> <p>KB6. potential work hazards, particularly, when using heating lamps</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 reports, and loss of gemstones</p>
	<b>Reading Skills</b>
	<p>SA2. read the stone type, the family it belongs to and its properties</p> <p>SA3. read notes, signs and instructions on job sheet</p> <p>SA4. read company rules and compliance documents required to complete</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>SA5. receive instructions and materials from reporting supervisor</p> <p>SA6. discuss task lists, schedules, with co-workers</p> <p>SA7. share work load when multiple deliverables are required</p>
<b>B. Professional Skills</b>	<b>Decision Making</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SB1. make decisions pertaining to the concerned area of work</p> <p>SB2. make decisions on the use of type of dop, e.g., metal or wooden for the process involved</p>
	<b>Plan and Organize</b>
	<p>SB3. plan and organize the doping process</p>
	<b>Customer Centricity</b>
	<p>N.A.</p>
	<b>Problem Solving</b>
	<p>SB4. report about dops and tools shortage to supervisor</p> <p>SB5. resolve problems about alignment and work process with facet maker, polisher or pre-shaper</p>
	<b>Analytical Thinking</b>
	<p>SB6. visualize and map the final form of the stone</p>
	<b>Critical Thinking</b>
	<p>SB7. anticipate process disruption and reasons for delay</p>



**G&J/N6601**

**Dop the gemstone**

## **NOS Version Control**

<b>NOS Code</b>	<b>G&amp;J/N6601</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>Gemstone Processing</b>	<b>Last reviewed on</b>	<b>17/01/2018</b>
<b>Occupation</b>	<b>Gemstone Pre-shaping</b>	<b>Next review date</b>	<b>17/01/2022</b>



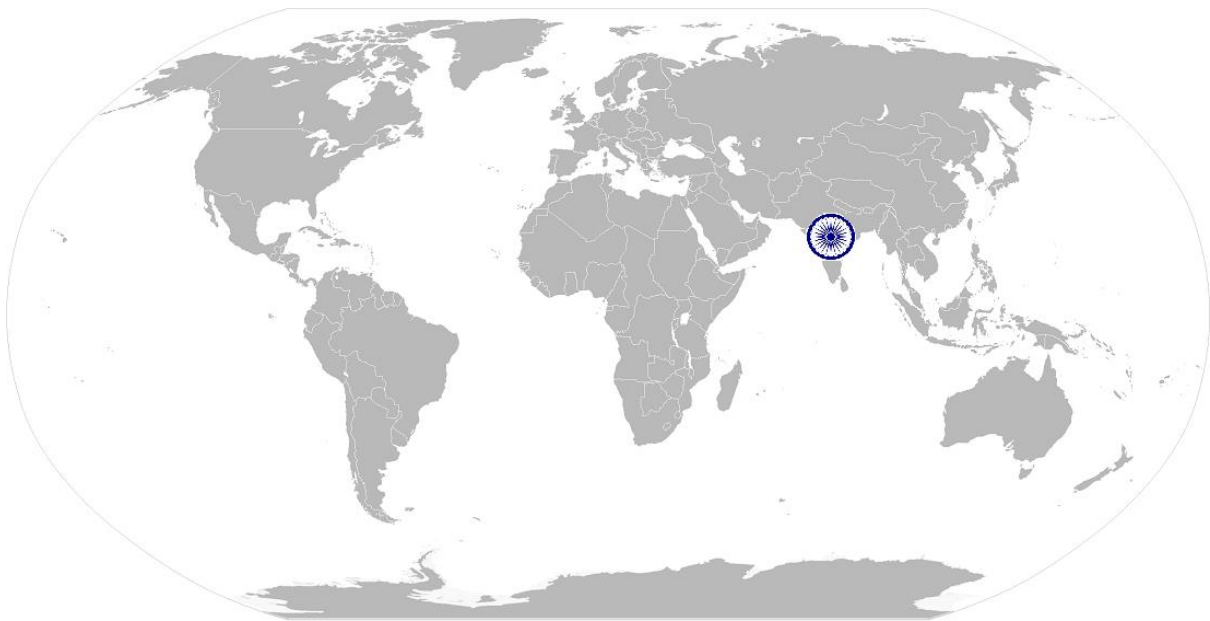


**G&J/N6602**

**Pre-shape or pre-form gemstone**

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# National Occupational Standard



## Overview

This unit is about grinding the basic shape of the gemstone as per plan to meet the base level shape, size and weight requirements of the stone. The pre-shaped or preformed and calibrated stone is either directly polished or faceted and then polished. Pre-shaping is important because it defines the final parameters of the stone that can be achieved.

**G&J/N6602**

**Pre-shape or pre-form gemstone**

<b>Unit Code</b>	<b>G&amp;J/N6602</b>
<b>Unit Title (Task)</b>	<b>Pre-shape or pre-form gemstone</b>
<b>Description</b>	This OS unit is about giving the base shape to the rough-cut gemstone and set the base shape, size and weight of the stone for further processing
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Preparing to preform and calibrate the rough cut gemstone</li> <li>Pre-shaping and calibrating</li> <li>Achieving Productivity</li> <li>Handling problem</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Preparing to preform and calibrate the rough cut gemstone</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor</p> <p>PC2. understand pre-shaping requirement as per plan</p> <p>PC3. level the scaife or grinding mill or fix vertical laps securely for vibrations-free rotation</p> <p>PC4. use correct pressure on water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage</p>
<b>Pre-shaping and calibrating</b>	<p>PC5. pre-shape number of preforms generated with shape as planned</p> <p>PC6. calibrate; size, dimensions and weight as per plan</p> <p>PC7. identify correct lap and powder to use</p> <p>PC8. achieve maximum number of QC approved stones</p> <p>PC9. deliver hazard-free output</p>
<b>Achieving Productivity</b>	<p>PC10. deliver the number and carats of stones preformed per day against target given</p> <p>PC11. maintain stone loss within prescribed limits, particularly, in precious stones</p>
<b>Handling problems</b>	<p>PC12. deliver pre-shaped stone in time by reporting problems faced or anticipated well in advanced</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (knowledge of the company/organisation and its process)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management</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 gemstone processing of company</p> <p>KA5. importance of the individual's role in the workflow</p>

**G&J/N6602**

**Pre-shape or pre-form gemstone**

	<p>KA6. reporting structure</p> <p>KA7. Issuing and returning procedures followed by the company for rough gemstones</p> <p>KA8. gemstone processing objective of the company, e.g. maximizing yield, maximizing clarity, etc.</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. basic gemology and properties of different types of stones, the families they belong to</p> <p>KB2. different types of gemstones such as precious, semi-precious, synthetic</p> <p>KB3. market value of stone to understand the rationale for different acceptable levels of stone loss</p> <p>KB4. origin of the stone, i.e., which mine, particularly, precious stones to read the softness/ hardness as developed from precedence of use</p> <p>KB5. use of vernier calipers and other measuring instruments</p> <p>KB6. how to pre-shape stones using scaifes and laps</p> <p>KB7. different types of laps that are available in terms of material such as diamond or steel or the grits</p> <p>KB8. how the faceting mill works</p> <p>KB9. how to use water jet and keep the stone cool</p> <p>KB10. how use calibrating machines with master preforms to calibrate semiprecious and synthetic gemstones</p> <p>KB11. how to work in a safe environment, i.e., without injuries</p> <p>KB12. market demand, i.e., popular shapes in demand</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 the feedback form and send it to the supervisor</p> <p>SA2. report stone losses via documentation as per company policy</p>
	<b>Reading Skills</b>
	<p>SA3. read height, weight, dimensions of the stones to pre-shape as given on job sheets</p> <p>SA4. read company rules and compliance documents required to complete the work</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>SA5. receive instructions and materials from reporting supervisor</p> <p>SA6. give feedback to supervisor or polisher on any specific stone handling requirement</p> <p>SA7. rework based on feedback from quality control department</p> <p>SA8. share work load when multiple deliverables are required</p>

**G&J/N6602**

**Pre-shape or pre-form gemstone**

<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand how to:
	SB1. decide on the correct use of lap and polishing powder
	<b>Plan and Organize</b>
	SB2. plan and organize the work bench for efficient work management.
	<b>Customer Centricity</b>
	SB3. adhere to specification, as required by the customer
	<b>Problem Solving</b>
	SB4. resolve difficulties with respect to practicality of plan or shape to be created SB5. refer shortage of dops, powder or lap to the supervisor SB6. minimize stone loss below the prescribed limits
	<b>Analytical Thinking</b>
	SB7. how to assess the angle for pre-shaping SB8. spot difficulties with respect to practicality of plan or shape to be created
	<b>Critical Thinking</b>
	SB9. spot process disruption and reasons for delay

**G&J/N6602**

**Pre-shape or pre-form gemstone**

## **NOS Version Control**

<b>NOS Code</b>	<b>G&amp;J/N6602</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>Gemstone Processing</b>	<b>Last reviewed on</b>	<b>17/01/2018</b>
<b>Occupation</b>	<b>Gemstone Pre-shaping</b>	<b>Next review date</b>	<b>17/01/2022</b>

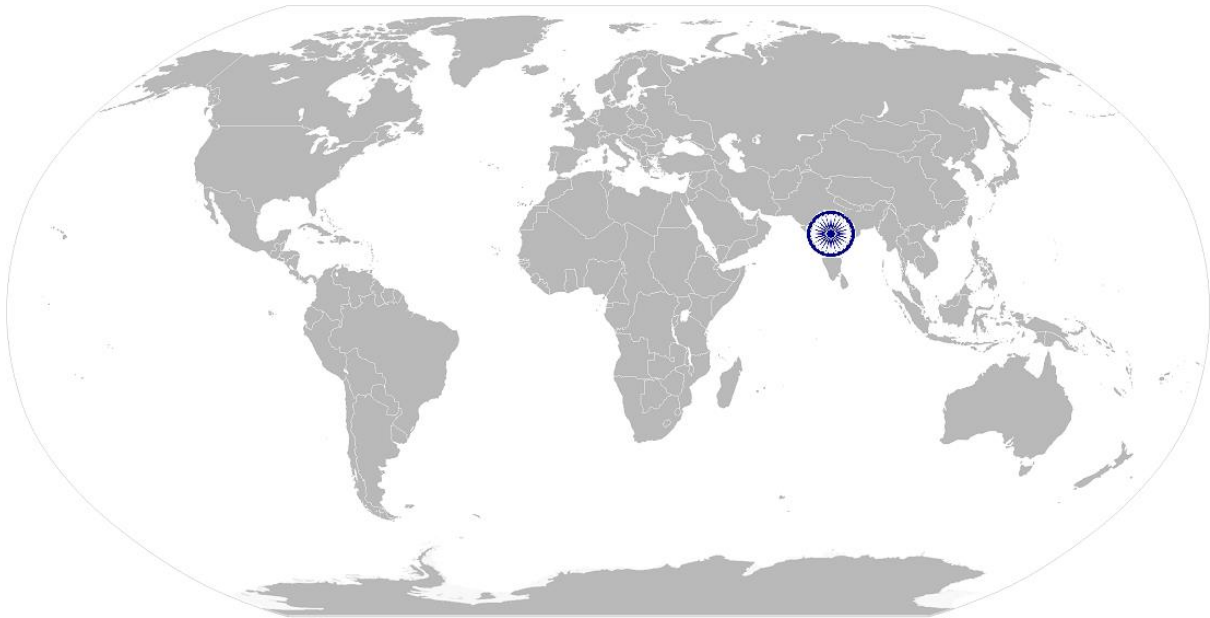


**G&J/N6605**

**Operate tumble shaping machine**

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# National Occupational Standard



## Overview

This unit is about giving pre-shapes to gemstone using the tumble shaping machine. It is useful for grinding low value semi-precious gemstones in mass volume, although it is less precise than manual pre-shaping



**G&J/N6605**

**Operate tumble shaping machine**

<b>Unit Code</b>	<b>G&amp;J /N6605</b>
<b>Unit Title (Task)</b>	<b>Operate tumble shaping machine</b>
<b>Description</b>	This OS unit is about giving the base shape to the rough-cut gemstone by using the tumble machine, for further processing
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Operating the tumble machine</li> <li>Handling problems</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Operating the tumble machine</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor</p> <p>PC2. run target number of tumble cycles</p> <p>PC3. maintain quality of stones using appropriate quantity and types of abrasives</p>
<b>Handling problems</b>	<p>PC4. deliver pre-shaped stone in time by reporting problems faced or anticipated</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (knowledge of the company/organisation and its process)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management</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 gemstone processing of company</p> <p>KA5. importance of the individual's role in the workflow</p> <p>KA6. reporting structure</p> <p>KA7. the issuing and returning procedures of the gemstones, followed by the company</p> <p>KA8. gemstone processing objective of the company, e.g. maximizing yield, maximizing clarity, etc.</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. basic gemology and properties of different types of stones, the families they belong to</p> <p>KB2. different types of gemstones such as precious, semi-precious, synthetic</p> <p>KB3. tumble machine operation technique and consumables required</p>



**G&J/N6605**

**Operate tumble shaping machine**

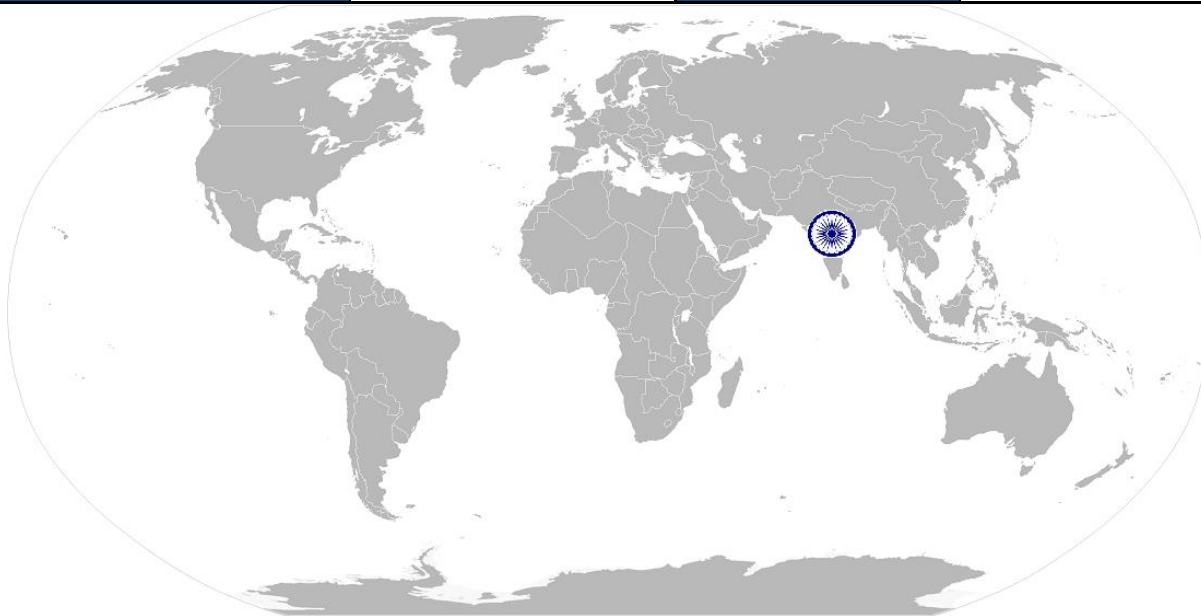
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand how to: SA1. fill the feedback form and send it to the supervisor SA2. report stone losses via documentation as per company policy SA3. fill requisition slip to order consumables
	<b>Reading Skills</b>
	SA4. read machine manual and job sheets SA5. read company rules and compliance documents required to complete the work
	<b>Oral Communication (Listening and Speaking skills)</b>
	SA6. receive instructions from reporting supervisor SA7. give feedback to supervisor or polisher on any specific stone handling requirement SA8. rework based on feedback from quality control department SA9. share work load when multiple deliverables are required
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand how to: SB1. decide number of tumble cycles required based on type of gemstones.
	<b>Plan and Organize</b>
	SB2. plan and organize the maintenance schedule of the machine
	<b>Customer Centricity</b>
	N.A.
	<b>Problem Solving</b>
	SB3. improve work process for greater productivity
	<b>Analytical Thinking</b>
	N.A.
	<b>Critical Thinking</b>
	SB4. spot process disruption and reasons for delay

**G&J/N6605**

**Operate tumble shaping machine**

## **NOS Version Control**

NOS Code	G&J/N6605		
Credits (NSQF)	TBD	Version number	2.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Gemstone Processing	Last reviewed on	17/01/2018
Occupation	Gemstone Pre-shaping	Next review date	17/01/2022

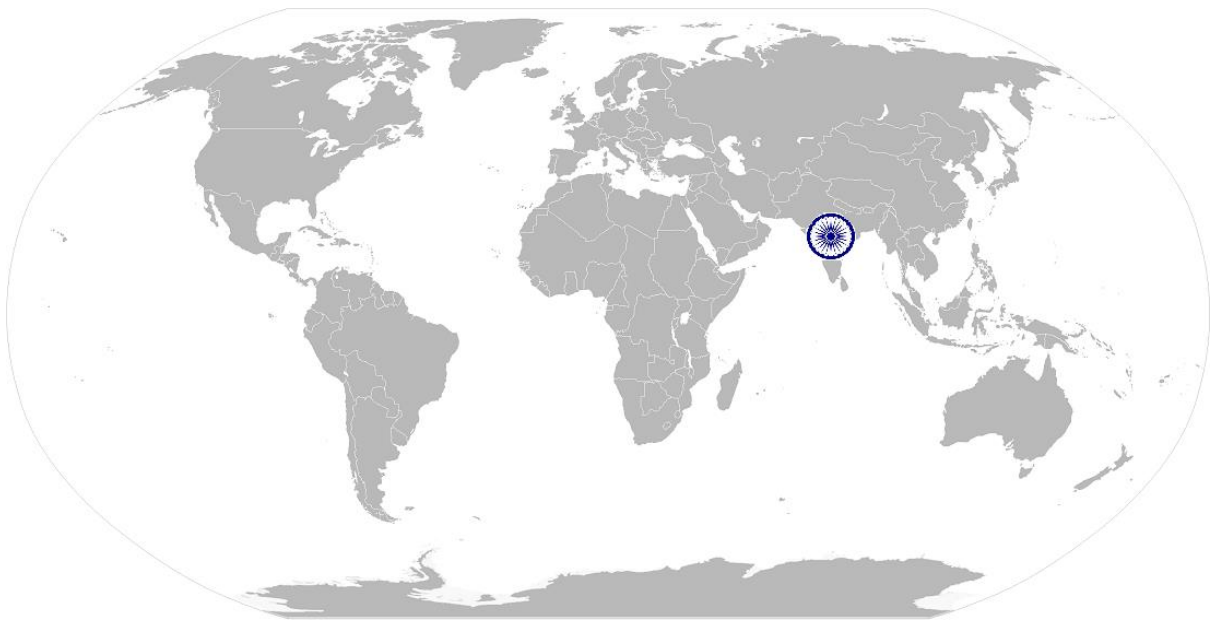


**G&J/N9901**

**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 as per 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 in order to achieve team goals</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. resolve conflicts by communicating with colleagues and other departments</p> <p>PC9. coordinate with colleagues regarding multitasking in other departments as per requirements</p>
<b>Interacting with outside parties</b>	PC10. adhere to nondisclosure policy of the company in all outside coordination
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (knowledge of the company/organisation and its process)	<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**

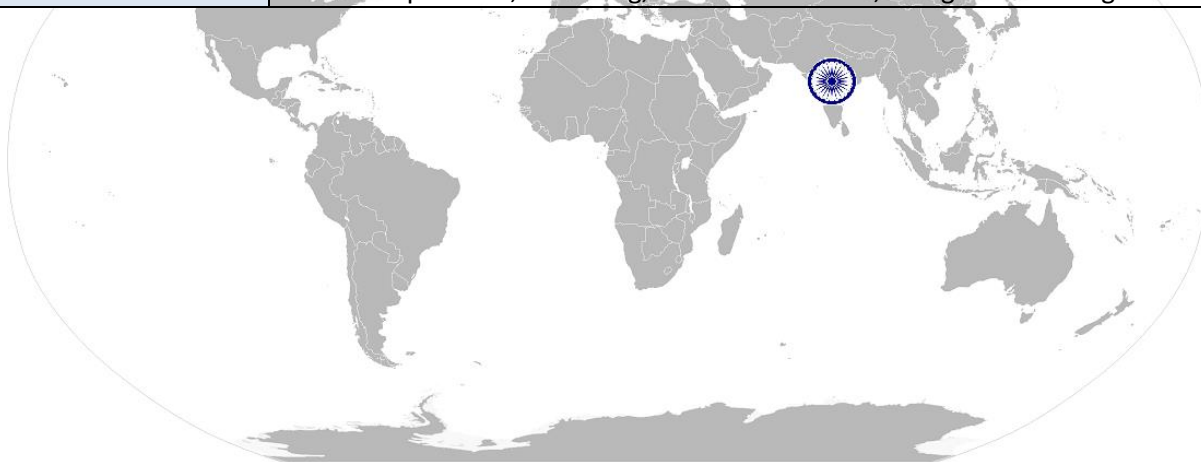
**Coordinate with others**

<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <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 like expressing and addressing grievances appropriately and effectively</p> <p>KB3. importance of teamwork in organization and individual success</p> <p>KB4. various components of effective communication</p> <p>KB5. barriers to effective communication</p> <p>KB6. common reasons for interpersonal conflict</p> <p>KB7. 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>The user/ individual on the job needs to know and understand how to:</p> <p>SB1. spot and communicate potential areas of disruptions to work process and report the same</p> <p>SB2. report to supervisor or deal with a colleague individually, depending on the type of concern</p>
	<b>Plan and Organize</b>
	<p>SB3. to plan work for maximum productivity</p> <p>SB4. to plan and organize the schedule for maintenance of tools and machines</p>
	<b>Customer Centricity</b>
	<p>SB5. convey accurate information to relevant internal as well as external customers</p>
	<b>Problem Solving</b>

**G&J/N9901**

**Coordinate with others**

	SB6. how to handle critical situations caused due to communication issues at workplace and solve problems without blaming others
	<b>Analytical Thinking</b>
	SB7. analyse the work processes by interacting with others and adopting best practices
	SB8. use prior experience to observe and reflect for development of ideas
	<b>Critical Thinking</b>
	SB9. think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
	SB10. deal with clients lacking the technical background to solve the problem on their own
	SB11. spot process disruptions and delays and report and communicate with solutions
	SB12. identify immediate or temporary solutions to resolve delays
	SB13. apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action



**G&J/N9901**

**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>Gemstone Processing</b>	<b>Last reviewed on</b>	<b>17/01/2018</b>
<b>Occupation</b>	<b>Gemstone Pre-shaping</b>	<b>Next review date</b>	<b>17/01/2022</b>



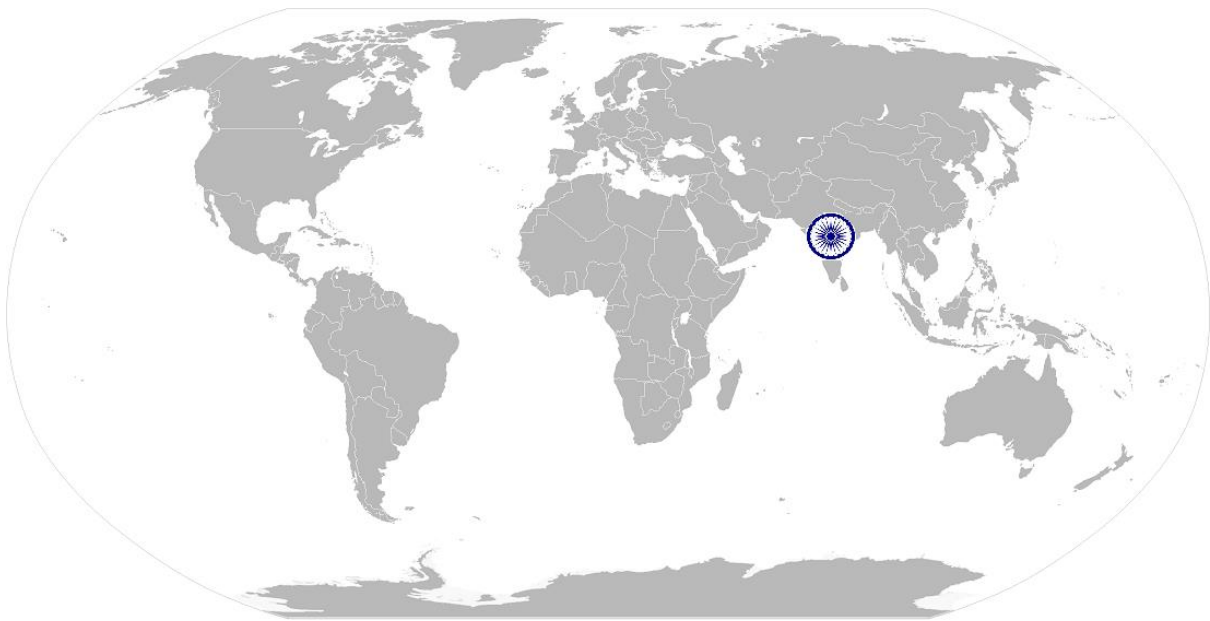


**G&J/N9902**

**Maintain health and safety at workplace**

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# National Occupational Standard



## Overview

This unit is about commitment towards reporting potential hazards, taking preventive measures to avoid accidents at work place, to maintain health and safety of self and colleagues.

**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 wrong posture</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. provide 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 or medical emergency</p> <p>PC12. participate in emergency procedures such as raising alarm, safe evacuation etc.,</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (knowledge of the company/organisation and its process)	<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>
<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</p>

**G&J/N9902**

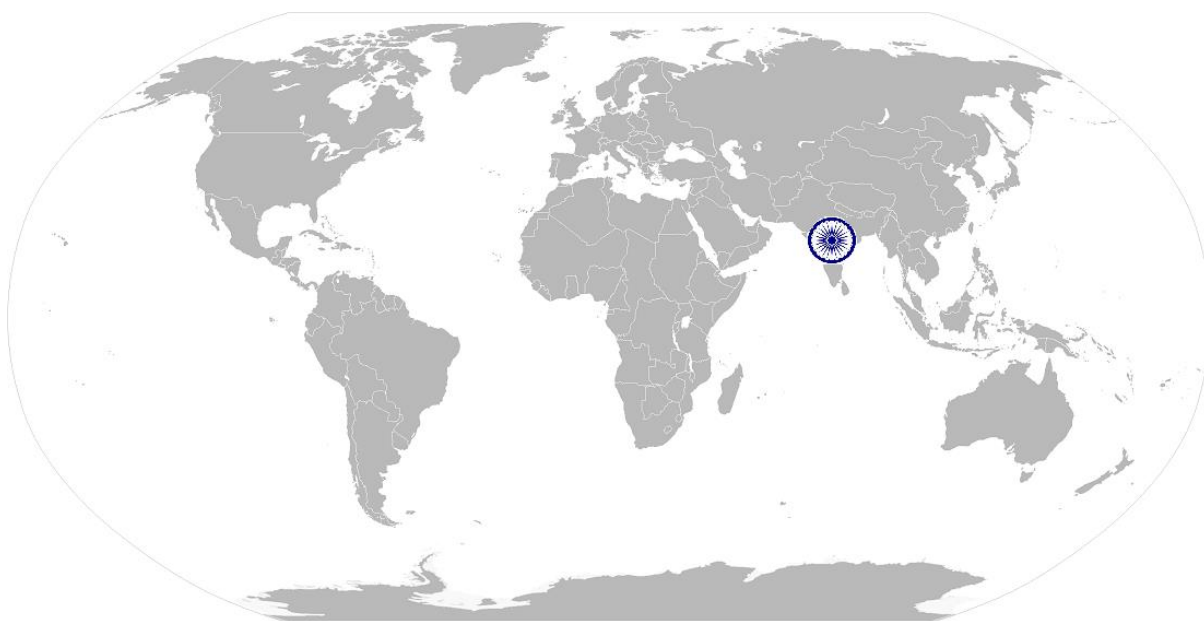
**Maintain health and safety at workplace**

	<p>precautions</p> <p>KB3. various dangers associated with the 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 the related hazards</p> <p>KB7. how to use machines and tools without causing any accident</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. casualty lifting in case of an accident caused to a person</p>
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	The individual on the job needs to know and understand how to: N.A.
	<b>Reading Skills</b>
	SA1. read and comprehend basic content to read labels, charts, signage SA2. read and comprehend basic English to read manuals of operations
	<b>Oral Communication (Listening and Speaking skills)</b>
	SA3. communicate effectively the risk of not following safety measures
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The individual on the job needs to know and understand how to: SB1. respond to emergencies/accidents, by taking an apt and timely decision
	<b>Plan and Organize</b>
	SB2. organize work schedule, work area, tools equipment and material to minimize health and safety risk
	<b>Customer Centricity</b>
	N. A.
	<b>Problem Solving</b>
	SB3. ensure apt action in case of any emergencies, accidents or fire at the work location
	<b>Analytical Thinking</b>

**G&J/N9902**

**Maintain health and safety at workplace**

	SB4. analyse untoward incidents from the past and implement correct use of machines, tools or hazardous chemicals
	<b>Critical Thinking</b>
	SB5. critically analyse the processes carried out by self and by colleagues in the department to spot potential hazards and safety issues

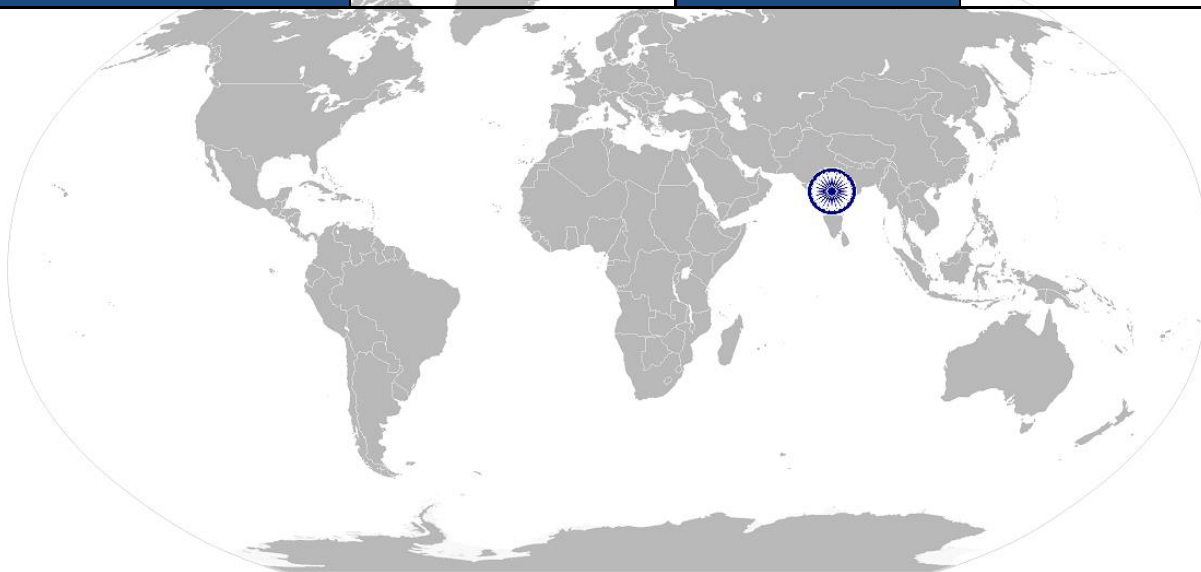


**G&J/N9902**

**Maintain health and safety at workplace**

## **NOS Version Control**

<b>NOS Code</b>	<b>G&amp;J/N9902</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>Gemstone Processing</b>	<b>Last reviewed on</b>	<b>17/01/2018</b>
<b>Occupation</b>	<b>Gemstone Pre-shaping</b>	<b>Next review date</b>	<b>17/01/2022</b>



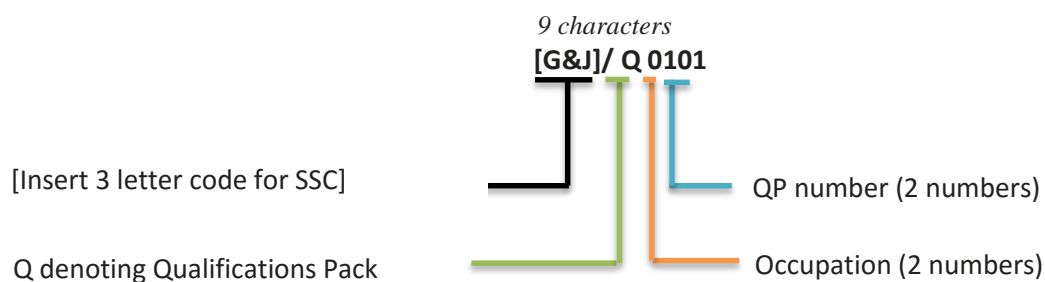
**G&J/Q6602**

*Qualifications Pack for Pre-shaper – Gemstone Processing*

## Annexure

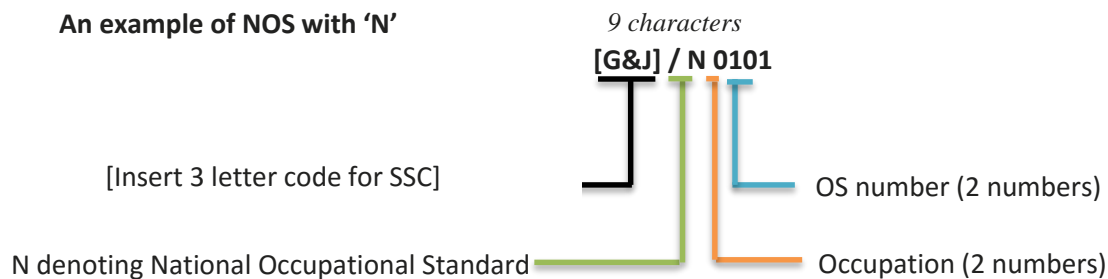
### Nomenclature for QP and NOS

#### Qualifications Pack



#### Occupational Standard

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



## G&J/Q6602

## Qualifications Pack for Pre-shaper – Gemstone 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** Pre-shaper – Gemstone Processing

**Qualification Pack** G&J/Q6602

**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 practical tests for skill evaluation for candidates at every examination/training centre. (As per assessment criteria below)
5. To pass the Qualification Pack, every candidate should score a minimum 50% of aggregate marks to successfully clear the assessment.
6. In case of successfully passing only certain number of NOSs, the candidate is eligible to take subsequent assessment to pass the Qualification Pack.
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/N6601 Dop the gemstone	PC1. match the stone type, weight and number as mentioned on the bag received from supervisor	20	1	0	1
	PC2. check the assortment of stones for shape, size, softness		2	0	2
	PC3. interpret the plan for the stone as per job sheet for stone to be aligned		2	1	1
	PC4. align the stone with accuracy		2	0	2
	PC5. make correct selection of appropriate dop and material for fixing		2	0	2
	PC6. maintain appropriate level of heating so that stone does not change colour		2	1	1
	PC7. achieve scratch-free doping		3	1	2
	PC8. achieve secure setting		2	0	2

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC9. ensure timely delivery to facet maker or shaper		1	0	1
	PC10. achieve number of dops prepared per day as per target given		2	1	1
	PC11. deliver damage-free output with minimum hazards		1	0	1
	Total		20	4	16

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
2. G&J/N6602 Pre-shape or pre-form gemstone	PC1. match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor	30	2	1	1
	PC2. understand pre-shaping requirement as per plan		2	1	1
	PC3. level the scaife or grinding mill or fix vertical laps securely for vibrations-free rotation		3	1	2
	PC4. use correct pressure on water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage		2	0	2
	PC5. Pre-shape number of preforms generated with shape as planned		3	1	2
	PC6. calibrate: size, dimensions and weight as per plan		5	2	3
	PC7. identify correct lap and powder to use		4	0	4
	PC8. achieve maximum number of QC approved stones		2	1	1
	PC9. deliver hazard-free output		2	1	1
	PC10. deliver the number and carats of stones preformed per day against target given		1	0	1
	PC11. maintain stone loss within prescribed limits, particularly, in		2	0	2

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	precious stones				
	PC12. deliver pre-shaped stone in time by reporting problems faced or anticipated well in advanced		2	0	2
	<b>Total</b>		<b>30</b>	<b>8</b>	<b>22</b>

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
3. G&J/N6605 Operate tumble shaping machine	PC1. match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor	<b>10</b>	3	1	2
	PC2. run target number of tumble cycles		2	0	2
	PC3. maintain quality of stones using appropriate quantity and types of abrasives		3	1	2
	PC4. deliver pre-shaped stone in time by reporting problems faced or anticipated		2	0	2
	<b>Total</b>		<b>10</b>	<b>2</b>	<b>8</b>

Compulsory NOS				Marks Allocation	
Total Marks:100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
4. G&J/N9901 Coordinate with others	PC1. coordinate for receiving work instructions and raw materials from reporting supervisor	<b>20</b>	1	0	1

Compulsory NOS				Marks Allocation	
Total Marks:100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	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		3	0	3
	PC5. coordinate with colleagues to share work, as per the workload in order to achieve team goals		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. resolve conflicts by communicating with colleagues and other departments		2	0	2
	PC9. communicate and discuss work Coordinate with colleagues regarding multitasking in other departments with requirements		3	1	2
	PC10. adhere to nondisclosure policy of the company in all outside coordination		2	1	1
	Total			20	3

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
5. G&J/N9902 Maintain health and safety at workplace	PC1. identify and use appropriate protective clothing/equipment for specific tasks and work	20	2	0	2

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	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 wrong posture		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
	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 or medical emergency		3	1	2
	PC12. participate in emergency procedures such as raising alarm, safe evacuation etc.,		2	1	1
	Total			20	3