

## Qualification Pack



# Gemstone Processor

Electives: Gemstone Pre-shaper/ Gemstone Facet Polisher/ Gemstone Facet maker/ Girdle Polisher

QP Code: G&J/Q6707

Version: 2.0

NSQF Level: 3

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### G&J/Q6707: Gemstone Processor

#### Brief Job Description

The individual works with high-speed, high precision angle indexed rotating scaife machines with diamond or steel laps. He/she gives a base shape and size to the rough cut gemstone at the stage of pre-shaping. Then in the next stage of facet making facets are created, followed by girdle and final polishing to get smooth finish and lustre

#### Personal Attributes

The job requires the individual to have: the ability to work quickly and methodically, the ability to concentrate while doing repetitive tasks, the ability to follow instructions, good practical skills and attention to details, good eyesight, steady grip and ability to work for long hours in sitting posture, integrity in dealing with precious metal jewellery. The individual must be able to solve problems in order to avert machine failures, errors and avoid safety hazards

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [G&J/N6601: Dop the gemstone](#)
2. [G&J/N9902: Maintain health and safety at workplace](#)
3. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

##### Electives(*mandatory to select at least one*):

###### Elective 1: Gemstone Pre-shaper

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 is an essential part of the pre-shapers role.

1. [G&J/N6603: Operate tumble shaping machine](#)
2. [G&J/N6602: Pre-shape or pre-form gemstone](#)

###### Elective 2: Gemstone Facet Polisher

The Polisher polishes facets on stones created during facet making, giving a smooth finish, luster and shine to facets. A facet maker and a polisher may be two different role holders working on separate machines or the same role holder working with twin-set machines

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### 1. [G&J/N6701: Polish the faceted or cabochon gemstone](#)

#### Elective 3: Gemstone Facet maker

This unit is about grinding different numbers and shapes of facets on a transparent gemstone in order to enhance its luster and color, after pre-shaping it.

#### 1. [G&J/N6702: Make facets on gemstones](#)

#### Elective 4: Girdle Polisher

This OS unit is about providing the final finish to the girdle of by polishing

#### 1. [G&J/N6703: Polish the girdle of faceted gemstone](#)

## Qualification Pack (QP) Parameters

<b>Sector</b>	Gem & Jewellery
<b>Sub-Sector</b>	Gemstone Processing
<b>Occupation</b>	Shaping, Faceting and Polishing
<b>Country</b>	India
<b>NSQF Level</b>	3
<b>Credits</b>	15
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/ 7313.1404
<b>Minimum Educational Qualification &amp; Experience</b>	9th Class with NA of experience OR 8th Class with 1 Year of experience relevant experience OR Previous relevant Qualification of NSQF Level
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	NA

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<b>Next Review Date</b>	17/11/2025
<b>NSQC Approval Date</b>	17/11/2022
<b>Version</b>	2.0
<b>Reference code on NQR</b>	2022/GJ/GJSCI/06718
<b>NQR Version</b>	2

### Remarks:

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### G&J/N6601: Dop the gemstone

#### Description

This OS unit is about fixing the rough-cut or pre-shaped gemstone securely on the dop for pre-shaping, faceting or polishing.

#### Scope

The scope covers the following :

- This unit/task covers the following:
- Fixing the gemstone on dop
- Ensuring Productivity

#### Elements and Performance Criteria

##### *Fixing the gemstone on dop*

To be competent, the user/individual on the job must be able to:

- PC1.** match the stone type, weight and number as mentioned on the bag received from supervisor
- PC2.** check the assortment of stones for shape, size, softness
- PC3.** interpret the plan for the stone as per job sheet for stone to be aligned
- PC4.** align the stone with accuracy
- PC5.** make correct selection of appropriate dop and material for fixing
- PC6.** maintain appropriate level of heating so that stone does not change colour
- PC7.** achieve scratch-free doping
- PC8.** achieve secure setting

##### *Ensuring Productivity*

To be competent, the user/individual on the job must be able to:

- PC9.** ensure timely delivery to facet maker or shapers
- PC10.** achieve number of dops prepared per day as per target given
- PC11.** deliver damage-free output with minimum hazards

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** companys policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management
- KU2.** non-disclosure of confidential information provided by the company either orally or in writing marked as confidential
- KU3.** liability arising out of loss, theft or inadvertent disclosure of confidential information
- KU4.** work flow involved in gemstone processing of company
- KU5.** importance of the individuals role in the workflow

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- KU6.** reporting structure
- KU7.** the issuing and returning procedures followed by the company for rough gemstones
- KU8.** gemstone processing objective of the company, e.g. maximizing yield, maximizing clarity, etc.
- KU9.** different types of stones, the family of stone and their properties, particularly, with respect to heat and pressure sensitivity
- KU10.** the assortment of stones for shape, size, softness
- KU11.** how to fix the stone on dop as per job sheet
- KU12.** different types of dops used as per gemstone type
- KU13.** uses of different qualities of wax and lac for fixing, their merits and demerits
- KU14.** potential work hazards, particularly, when using heating lamps

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** document reports, and loss of gemstones
- GS2.** read the stone type, the family it belongs to and its properties
- GS3.** read notes, signs and instructions on job sheet
- GS4.** read company rules and compliance documents required to complete
- GS5.** receive instructions and materials from reporting supervisor
- GS6.** discuss task lists, schedules, and work-loads with co-workers
- GS7.** share work load when multiple deliverables are required
- GS8.** make decisions pertaining to the concerned area of work
- GS9.** make decisions on the use of type of dop, e.g., metal or wooden for the process involved
- GS10.** plan and organize the doping process
- GS11.** report about dops and tools shortage to supervisor
- GS12.** resolve problems about alignment and work process with facet maker, polisher or preshaper
- GS13.** visualize and map the final form of the stone
- GS14.** anticipate process disruption and reasons for delay

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Fixing the gemstone on dop</i>	<b>3</b>	<b>13</b>	-	-
<b>PC1.</b> match the stone type, weight and number as mentioned on the bag received from supervisor	-	1	-	-
<b>PC2.</b> check the assortment of stones for shape, size, softness	-	2	-	-
<b>PC3.</b> interpret the plan for the stone as per job sheet for stone to be aligned	1	1	-	-
<b>PC4.</b> align the stone with accuracy	-	2	-	-
<b>PC5.</b> make correct selection of appropriate dop and material for fixing	-	2	-	-
<b>PC6.</b> maintain appropriate level of heating so that stone does not change colour	1	1	-	-
<b>PC7.</b> achieve scratch-free doping	1	2	-	-
<b>PC8.</b> achieve secure setting	-	2	-	-
<i>Ensuring Productivity</i>	<b>1</b>	<b>3</b>	-	-
<b>PC9.</b> ensure timely delivery to facet maker or shapers	-	1	-	-
<b>PC10.</b> achieve number of dops prepared per day as per target given	1	1	-	-
<b>PC11.</b> deliver damage-free output with minimum hazards	-	1	-	-
<b>NOS Total</b>	<b>4</b>	<b>16</b>	-	-



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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	G&J/N6601
<b>NOS Name</b>	Dop the gemstone
<b>Sector</b>	Gem & Jewellery
<b>Sub-Sector</b>	Gemstone Processing
<b>Occupation</b>	Gemstone shaping
<b>NSQF Level</b>	3
<b>Credits</b>	1
<b>Version</b>	5.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

### G&J/N9902: Maintain health and safety at workplace

#### Description

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.

#### Scope

The scope covers the following :

- This unit/task covers the following:
- Health and safety in work area
- Fire safety
- Emergencies, rescue and first aid procedures

#### Elements and Performance Criteria

##### *Health and safety in work area*

To be competent, the user/individual on the job must be able to:

- PC1.** identify and use appropriate protective clothing/equipment for specific tasks and work
- PC2.** identify hazardous job activities in his/her job and communicate the possible causes of risks or accidents in the workplace
- PC3.** carry out safe working practices while dealing with hazards to ensure safety of self and others
- PC4.** identify and avoid doing any tasks or activities in a wrong posture
- PC5.** practice appropriate working postures to minimise occupational health related issues

##### *Fire safety*

To be competent, the user/individual on the job must be able to:

- PC6.** use the appropriate fire extinguishers on different types of fire
- PC7.** demonstrate rescue techniques applied during fire hazard
- PC8.** demonstrate good housekeeping in order to prevent fire hazards
- PC9.** demonstrate the correct use of any fire extinguisher

##### *Emergencies, rescue and first aid procedures*

To be competent, the user/individual on the job must be able to:

- PC10.** administer appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.
- PC11.** respond promptly and appropriately to an accident or medical emergency
- PC12.** participate in emergency procedures such as raising alarm, safe evacuation, correct means of escape, correct assembly point etc.,

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1.** companys policies on: safety and hazards and personnel management
- KU2.** names and location of documents that refer to health and safety in work place
- KU3.** reporting structure
- KU4.** meaning of hazards and risks
- KU5.** health and safety hazards commonly present in the work place and related precautions
- KU6.** various dangers associated with use of electrical equipment
- KU7.** preventative and remedial actions to be taken in case of exposure to toxic material
- KU8.** methods of accident prevention
- KU9.** how different chemicals react and the related hazards
- KU10.** how to use machines and tools without causing any accident
- KU11.** importance of using protective clothing/ equipment while working
- KU12.** precautionary activities to prevent the fire accident
- KU13.** various causes of fire
- KU14.** techniques of using different fire extinguishers
- KU15.** different materials used for extinguishing fire
- KU16.** rescue techniques applied during a fire hazard
- KU17.** various types of safety signs and their meaning
- KU18.** appropriate basic first aid treatment relevant to different condition e.g. bleeding, minor burns, eye injuries etc.,
- KU19.** casualty lifting in case of an accident caused to a person

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** read and comprehend basic content to read labels, charts, signages
- GS2.** read and comprehend basic english to read manuals of operations
- GS3.** communicate effectively the risk of not following safety measures
- GS4.** respond to emergencies/accidents, by taking an appropriate and timely decision
- GS5.** organize work schedule, work area, tools, equipment and material to minimize health and safety risk
- GS6.** ensure appropriate action in case of any emergencies, accidents or fire at the work location
- GS7.** analyze untoward incidents from the past and implement correct use of machines, tools or hazardous chemicals
- GS8.** critically analyze the processes carried out by self and colleagues in the department to spot potential hazards and safety issues

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Health and safety in work area</i>	<b>1</b>	<b>7</b>	-	-
<b>PC1.</b> identify and use appropriate protective clothing/equipment for specific tasks and work	-	2	-	-
<b>PC2.</b> identify hazardous job activities in his/her job and communicate the possible causes of risks or accidents in the workplace	-	1	-	-
<b>PC3.</b> carry out safe working practices while dealing with hazards to ensure safety of self and others	-	1	-	-
<b>PC4.</b> identify and avoid doing any tasks or activities in a wrong posture	-	2	-	-
<b>PC5.</b> practice appropriate working postures to minimise occupational health related issues	1	1	-	-
<i>Fire safety</i>	-	<b>6</b>	-	-
<b>PC6.</b> use the appropriate fire extinguishers on different types of fire	-	1	-	-
<b>PC7.</b> demonstrate rescue techniques applied during fire hazard	-	2	-	-
<b>PC8.</b> demonstrate good housekeeping in order to prevent fire hazards	-	1	-	-
<b>PC9.</b> demonstrate the correct use of any fire extinguisher	-	2	-	-
<i>Emergencies, rescue and first aid procedures</i>	<b>2</b>	<b>4</b>	-	-
<b>PC10.</b> administer appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.	-	1	-	-
<b>PC11.</b> respond promptly and appropriately to an accident or medical emergency	1	2	-	-
<b>PC12.</b> participate in emergency procedures such as raising alarm, safe evacuation, correct means of escape, correct assembly point etc.,	1	1	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>NOS Total</b>	<b>3</b>	<b>17</b>	-	-

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	G&J/N9902
<b>NOS Name</b>	Maintain health and safety at workplace
<b>Sector</b>	Gem & Jewellery
<b>Sub-Sector</b>	Jewellery Retail, Cast and diamonds-set jewellery
<b>Occupation</b>	Generic
<b>NSQF Level</b>	3
<b>Credits</b>	1
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	31/08/2023
<b>Next Review Date</b>	31/08/2026
<b>NSQF Clearance Date</b>	31/08/2023

## Qualification Pack

### DGT/VSQ/N0101: Employability Skills (30 Hours)

#### Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

#### Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

#### Elements and Performance Criteria

##### *Introduction to Employability Skills*

To be competent, the user/individual on the job must be able to:

**PC1.** understand the significance of employability skills in meeting the job requirements

##### *Constitutional values - Citizenship*

To be competent, the user/individual on the job must be able to:

**PC2.** identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

##### *Becoming a Professional in the 21st Century*

To be competent, the user/individual on the job must be able to:

**PC3.** explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

##### *Basic English Skills*

To be competent, the user/individual on the job must be able to:

**PC4.** speak with others using some basic English phrases or sentences

##### *Communication Skills*

To be competent, the user/individual on the job must be able to:

**PC5.** follow good manners while communicating with others

**PC6.** work with others in a team

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### *Diversity & Inclusion*

To be competent, the user/individual on the job must be able to:

**PC7.** communicate and behave appropriately with all genders and PwD

**PC8.** report any issues related to sexual harassment

### *Financial and Legal Literacy*

To be competent, the user/individual on the job must be able to:

**PC9.** use various financial products and services safely and securely

**PC10.** calculate income, expenses, savings etc.

**PC11.** approach the concerned authorities for any exploitation as per legal rights and laws

### *Essential Digital Skills*

To be competent, the user/individual on the job must be able to:

**PC12.** operate digital devices and use its features and applications securely and safely

**PC13.** use internet and social media platforms securely and safely

### *Entrepreneurship*

To be competent, the user/individual on the job must be able to:

**PC14.** identify and assess opportunities for potential business

**PC15.** identify sources for arranging money and associated financial and legal challenges

### *Customer Service*

To be competent, the user/individual on the job must be able to:

**PC16.** identify different types of customers

**PC17.** identify customer needs and address them appropriately

**PC18.** follow appropriate hygiene and grooming standards

### *Getting ready for apprenticeship & Jobs*

To be competent, the user/individual on the job must be able to:

**PC19.** create a basic biodata

**PC20.** search for suitable jobs and apply

**PC21.** identify and register apprenticeship opportunities as per requirement

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** need for employability skills

**KU2.** various constitutional and personal values

**KU3.** different environmentally sustainable practices and their importance

**KU4.** Twenty first (21st) century skills and their importance

**KU5.** how to use basic spoken English language

**KU6.** Do and dont of effective communication

**KU7.** inclusivity and its importance

**KU8.** different types of disabilities and appropriate communication and behaviour towards PwD

**KU9.** different types of financial products and services



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- KU10.** how to compute income and expenses
- KU11.** importance of maintaining safety and security in financial transactions
- KU12.** different legal rights and laws
- KU13.** how to operate digital devices and applications safely and securely
- KU14.** ways to identify business opportunities
- KU15.** types of customers and their needs
- KU16.** how to apply for a job and prepare for an interview
- KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** communicate effectively using appropriate language
- GS2.** behave politely and appropriately with all
- GS3.** perform basic calculations
- GS4.** solve problems effectively
- GS5.** be careful and attentive at work
- GS6.** use time effectively
- GS7.** maintain hygiene and sanitisation to avoid infection

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>1</b>	<b>3</b>	-	-
<b>PC3.</b> explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
<i>Basic English Skills</i>	<b>2</b>	<b>3</b>	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
<b>PC6.</b> work with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>1</b>	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC8.</b> report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>3</b>	<b>4</b>	-	-
<b>PC9.</b> use various financial products and services safely and securely	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> calculate income, expenses, savings etc.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
<i>Essential Digital Skills</i>	<b>4</b>	<b>6</b>	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
<i>Entrepreneurship</i>	<b>3</b>	<b>5</b>	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	<b>2</b>	<b>2</b>	-	-
<b>PC16.</b> identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>1</b>	<b>3</b>	-	-
<b>PC19.</b> create a basic biodata	-	-	-	-
<b>PC20.</b> search for suitable jobs and apply	-	-	-	-
<b>PC21.</b> identify and register apprenticeship opportunities as per requirement	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0101
<b>NOS Name</b>	Employability Skills (30 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	2
<b>Credits</b>	1
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	29/03/2021
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2021

## Qualification Pack

### G&J/N6603: Operate tumble shaping machine

#### Description

This OS unit is about giving the base shape to the rough-cut gemstone by using the tumble machine, for further processing

#### Scope

The scope covers the following :

- This unit/task covers the following:
- Operating the tumble machine
- Handling problems

#### Elements and Performance Criteria

##### *Operating the tumble machine*

To be competent, the user/individual on the job must be able to:

- PC1.** match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor
- PC2.** run target number of tumble cycles
- PC3.** maintain quality of stones using appropriate quantity and types of abrasives

##### *Handling problems*

To be competent, the user/individual on the job must be able to:

- PC4.** deliver pre-shaped stone in time by reporting problems faced or anticipated

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** companys policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management
- KU2.** non-disclosure of confidential information provided by the company either orally or in writing marked as confidential
- KU3.** liability arising out of loss, theft, or inadvertent disclosure of confidential information
- KU4.** work flow involved in gemstone processing of company
- KU5.** importance of the individuals role in the workflow
- KU6.** reporting structure
- KU7.** issue return procedures followed by the company
- KU8.** gemstone processing objective of the company, e.g. maximizing yield, maximizing clarity, etc.
- KU9.** basic gemology and properties of different types of stones, the families they belong to
- KU10.** different types of gemstones such as precious, semi-precious, synthetic etc.,

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**KU11.** tumble machine operation technique and consumables required

### Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** fill the feedback form give it to the supervisor
- GS2.** report stone losses via documentation as per company policy
- GS3.** report any incidents of high stone loss via documentation as per company policy
- GS4.** fill requisition slip to order consumables
- GS5.** read machine manual and job sheets
- GS6.** read company rules and compliance documents required to complete the work
- GS7.** receive instructions from reporting supervisor
- GS8.** give feedback to supervisor or polisher on any specific stone handling requirement
- GS9.** rework based on feedback from quality control department
- GS10.** share work load when multiple deliverables are required
- GS11.** decide number of tumble cycles required based on type of gemstones.
- GS12.** plan and organize the maintenance schedule of the machine
- GS13.** improve work process for greater productivity
- GS14.** spot process disruption and reasons for delay

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Operating the tumble machine</i>	2	6	-	-
<b>PC1.</b> match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor	1	2	-	-
<b>PC2.</b> run target number of tumble cycles	-	2	-	-
<b>PC3.</b> maintain quality of stones using appropriate quantity and types of abrasives	1	2	-	-
<i>Handling problems</i>	-	2	-	-
<b>PC4.</b> deliver pre-shaped stone in time by reporting problems faced or anticipated	-	2	-	-
<b>NOS Total</b>	<b>2</b>	<b>8</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	G&J/N6603
<b>NOS Name</b>	Operate tumble shaping machine
<b>Sector</b>	Gem & Jewellery
<b>Sub-Sector</b>	Gemstone Processing
<b>Occupation</b>	Shaping, Faceting and Polishing
<b>NSQF Level</b>	3
<b>Credits</b>	2
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQF Clearance Date</b>	17/11/2022



## Qualification Pack

### G&J/N6602: Pre-shape or pre-form gemstone

#### Description

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

#### Scope

The scope covers the following :

- This unit/task covers the following:
- Preparing to preform and calibrate the rough-cut gemstone
- Pre-shaping and calibrating
- Achieving Productivity
- Handling problem

#### Elements and Performance Criteria

##### *Preparing to preform and calibrate the rough cut gemstone*

To be competent, the user/individual on the job must be able to:

- PC1.** match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor
- PC2.** understand pre-shaping requirement as per plan
- PC3.** level the scaife or grinding mill or fix vertical laps securely for vibrations-free rotation
- PC4.** use correct pressure on water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage

##### *Pre-shaping and calibrating*

To be competent, the user/individual on the job must be able to:

- PC5.** Pre-shape number of preforms generated with shape as planned
- PC6.** calibrate: size, dimensions and weight as per plan
- PC7.** identify correct lap and powder to use
- PC8.** achieve maximum number of QC approved stones
- PC9.** deliver hazard-free output

##### *Achieving productivity*

To be competent, the user/individual on the job must be able to:

- PC10.** deliver the number and carats of stones preformed per day against target given
- PC11.** maintain stone loss within prescribed limits, particularly, in precious stones

##### *Handling problems*

To be competent, the user/individual on the job must be able to:

- PC12.** deliver pre-shaped stone in time by reporting problems faced or anticipated well in advance

#### Knowledge and Understanding (KU)

## Qualification Pack

The individual on the job needs to know and understand:

- KU1.** companys policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management
- KU2.** non-disclosure of confidential information provided by the company either orally or in writing marked as confidential
- KU3.** liability arising out of loss, theft or inadvertent disclosure of confidential information
- KU4.** work flow involved in gemstone processing of company
- KU5.** importance of the individuals role in the workflow
- KU6.** reporting structure
- KU7.** issue return procedures followed by the company for rough gemstones
- KU8.** gemstone processing objective of the company, e.g. maximizing yield, maximizing clarity, etc.
- KU9.** basic Gemology and properties of different types of stones, the families they belong to
- KU10.** different types of gemstones such as precious, semi-precious, synthetic etc.,
- KU11.** market value of stone to understand the rationale for different acceptable levels of stone loss
- KU12.** origin of the stone, i.e., which mine, particularly, precious stones to read the softness/hardness as developed from precedence of use
- KU13.** use of vernier calipers and other measuring instruments
- KU14.** how to pre-shape stones using scaifes and laps
- KU15.** different types of laps that are available in terms of material such as diamond or steel or the grits
- KU16.** how the faceting mill works
- KU17.** how to use water jet and keep the stone cool
- KU18.** how to use calibrating machines with master preforms to calibrate semiprecious and synthetic gemstones
- KU19.** how to work in a safe environment, i.e., without injuries
- KU20.** market demand, i.e., popular shapes in demand

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** fill the feedback form and give it to supervisor
- GS2.** report stone losses via documentation as per company policy
- GS3.** report any incidents of high stone loss via documentation as per company policy
- GS4.** read height, weight, dimensions of the stones to pre-shape as given on job sheets
- GS5.** read company rules and compliance documents required to complete the work
- GS6.** receive instructions and materials from reporting supervisor
- GS7.** give feedback to the supervisor or polisher on any specific stone handling requirement
- GS8.** rework based on feedback from Quality Control department
- GS9.** share work load when multiple deliverables are required

## Qualification Pack

- GS10.** decide on the correct use of lap and polishing powder
- GS11.** plan and organize the work bench for efficient work management.
- GS12.** adhere to specification, as required by the customer
- GS13.** resolve difficulties with respect to practicality of plan or shape to be created
- GS14.** refer shortage of dops, powder or lap to the supervisor
- GS15.** minimize stone loss below the prescribed limits
- GS16.** how to assess the angle for pre-shaping
- GS17.** spot difficulties with respect to practicality of plan or shape to be created
- GS18.** spot process disruption and reasons for delay

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Preparing to preform and calibrate the rough cut gemstone</i>	<b>3</b>	<b>6</b>	-	-
<b>PC1.</b> match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor	1	1	-	-
<b>PC2.</b> understand pre-shaping requirement as per plan	1	1	-	-
<b>PC3.</b> level the scaife or grinding mill or fix vertical laps securely for vibrations-free rotation	1	2	-	-
<b>PC4.</b> use correct pressure on water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage	-	2	-	-
<i>Pre-shaping and calibrating</i>	<b>5</b>	<b>11</b>	-	-
<b>PC5.</b> Pre-shape number of preforms generated with shape as planned	1	2	-	-
<b>PC6.</b> calibrate: size, dimensions and weight as per plan	2	3	-	-
<b>PC7.</b> identify correct lap and powder to use	-	4	-	-
<b>PC8.</b> achieve maximum number of QC approved stones	1	1	-	-
<b>PC9.</b> deliver hazard-free output	1	1	-	-
<i>Achieving productivity</i>	-	<b>3</b>	-	-
<b>PC10.</b> deliver the number and carats of stones preformed per day against target given	-	1	-	-
<b>PC11.</b> maintain stone loss within prescribed limits, particularly, in precious stones	-	2	-	-
<i>Handling problems</i>	-	<b>2</b>	-	-
<b>PC12.</b> deliver pre-shaped stone in time by reporting problems faced or anticipated well in advance	-	2	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>NOS Total</b>	<b>8</b>	<b>22</b>	<b>-</b>	<b>-</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	G&J/N6602
<b>NOS Name</b>	Pre-shape or pre-form gemstone
<b>Sector</b>	Gem & Jewellery
<b>Sub-Sector</b>	Gemstone Processing
<b>Occupation</b>	Shaping, Faceting and Polishing
<b>NSQF Level</b>	3
<b>Credits</b>	1
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQF Clearance Date</b>	17/11/2022

## Qualification Pack

### G&J/N6701: Polish the faceted or cabochon gemstone

#### Description

This OS unit is about providing final finish to the pre-shaped, cabochon or faceted gemstone by polishing

#### Scope

The scope covers the following :

- This unit/task covers the following:
- Preparing to polish gemstone
- Polishing gemstone
- Maintaining productivity
- Handling problems

#### Elements and Performance Criteria

##### *Preparing to polish gemstone*

To be competent, the user/individual on the job must be able to:

- PC1.** match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor
- PC2.** check shape, size and facet or cabochon of stone for polishing as per job sheet for symmetry and colour defects and potential problems in polishing process
- PC3.** understand the type of stone to be polished such as soft or hard, transparent or translucent or opaque
- PC4.** level the scaife or faceting mill
- PC5.** set the correct pressure on water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage

##### *Polishing gemstone*

To be competent, the user/individual on the job must be able to:

- PC6.** ensure that no window is seen on the surface of the stone and facets are polished completely
- PC7.** achieve appropriate angle- indexing
- PC8.** use correct lap, powder and buff
- PC9.** calibrate the gemstone
- PC10.** achieve maximum number of qc approved polished gemstones

##### *Maintaining productivity*

To be competent, the user/individual on the job must be able to:

- PC11.** deliver the number of stones polished per day against target given
- PC12.** achieve scratch-less facets or cabochon with brilliance level as per job sheet
- PC13.** maintain stone loss within prescribed limits, particularly, in precious stones

##### *Handling problems*

To be competent, the user/individual on the job must be able to:

- PC14.** deliver polished stone in time by reporting problems faced or anticipated well in advance

## Qualification Pack

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** company's policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management
- KU2.** non-disclosure of confidential information provided by the company either orally or in writing marked as confidential
- KU3.** liability arising out of loss, theft or inadvertent disclosure of confidential information
- KU4.** work flow involved in gemstone processing of company
- KU5.** importance of the individual's role in the workflow
- KU6.** reporting structure
- KU7.** the process of faceting
- KU8.** the machines and tools used in the faceting operation such as faceting mill, various types of suitable scaife, angle indexing tool to polish the stone
- KU9.** how to level the scaife or faceting mill
- KU10.** permitted level of stone loss
- KU11.** basic gemology and properties of different types of stones
- KU12.** different types of stones such as precious, semi-precious, synthetic etc.,
- KU13.** market value of stone to understand the rationale for different acceptable levels of stone loss
- KU14.** origin of the stone, i.e., which mine, particularly, precious stones to read the softness/hardness as developed from precedence of use
- KU15.** assess the angle indexing required
- KU16.** maintain symmetry of facets while polishing the stone
- KU17.** angle-indexing on polishing machine for achieving maximum clarity and brilliance in polished stone

### Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** prepare status and progress reports
- GS2.** fill the requisition slip for ordering tools and consumables
- GS3.** report stone losses via documentation as per company policy
- GS4.** read height, weight, dimensions of the stones facets as given on job sheets
- GS5.** read company rules and compliance documents required to complete the work
- GS6.** receive instructions and materials from reporting supervisor
- GS7.** give feedback to supervisor or facet maker on any specific stone handling requirement
- GS8.** discuss task lists, schedules, and work-loads with co-workers
- GS9.** share work load when multiple deliverables are required
- GS10.** decide the selection of buffing plate to be used for the stone type such as cloth, wool and wood according to the stone hardness and color changing properties



## Qualification Pack

- GS11.** plan and organize required toolkit at the work bench for required for effective work management
- GS12.** improve work process for greater productivity
- GS13.** improve work processes for greater productivity
- GS14.** assess the angles at which the doped stones have to be polished to achieve the brilliance and colour
- GS15.** anticipate process disruption and reasons for delay

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Preparing to polish gemstone</i>	<b>6</b>	<b>8</b>	-	-
<b>PC1.</b> match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor	1	1	-	-
<b>PC2.</b> check shape, size and facet or cabochon of stone for polishing as per job sheet for symmetry and colour defects and potential problems in polishing process	1	2	-	-
<b>PC3.</b> understand the type of stone to be polished such as soft or hard, transparent or translucent or opaque	2	1	-	-
<b>PC4.</b> level the scaife or faceting mill	1	2	-	-
<b>PC5.</b> set the correct pressure on water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage	1	2	-	-
<i>Polishing gemstone</i>	<b>3</b>	<b>14</b>	-	-
<b>PC6.</b> ensure that no window is seen on the surface of the stone and facets are polished completely	1	3	-	-
<b>PC7.</b> achieve appropriate angle- indexing	1	3	-	-
<b>PC8.</b> use correct lap, powder and buff	1	2	-	-
<b>PC9.</b> calibrate the gemstone	-	4	-	-
<b>PC10.</b> achieve maximum number of qc approved polished gemstones	-	2	-	-
<i>Maintaining productivity</i>	<b>1</b>	<b>7</b>	-	-
<b>PC11.</b> deliver the number of stones polished per day against target given	-	2	-	-
<b>PC12.</b> achieve scratch-less facets or cabochon with brilliance level as per job sheet	1	3	-	-
<b>PC13.</b> maintain stone loss within prescribed limits, particularly, in precious stones	-	2	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Handling problems</i>	-	1	-	-
<b>PC14.</b> deliver polished stone in time by reporting problems faced or anticipated well in advance	-	1	-	-
<b>NOS Total</b>	<b>10</b>	<b>30</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	G&J/N6701
<b>NOS Name</b>	Polish the faceted or cabochon gemstone
<b>Sector</b>	Gem & Jewellery
<b>Sub-Sector</b>	Gemstone Processing
<b>Occupation</b>	Shaping, Faceting and Polishing
<b>NSQF Level</b>	3
<b>Credits</b>	3
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQF Clearance Date</b>	17/11/2022

## Qualification Pack

### G&J/N6702: Make facets on gemstones

#### Description

This unit is about grinding different numbers and shapes of facets on a transparent gemstone in order to enhance its lustre and colour, after pre-shaping it.

#### Scope

The scope covers the following :

- This unit/task covers the following:
- Making facets on the gemstones
- Maintaining productivity
- Handling problems

#### Elements and Performance Criteria

##### *Making facets on the gemstones*

To be competent, the user/individual on the job must be able to:

- PC1.** match the stone type, weight, number as mentioned on the bag with gemstones received from supervisor
- PC2.** identify faceting requirement as per plan such as how many facets and shape of facet to be created
- PC3.** achieve maximum number of facets to be created per stone
- PC4.** cut facets according to the shape, colour, brilliance and metered edges
- PC5.** make accurate use of angle-indexing
- PC6.** use correct lap and powder for the stone
- PC7.** ensure there is no window in facets
- PC8.** achieve accurate calibration
- PC9.** achieve maximum number of qc approved stones

##### *Maintaining productivity*

To be competent, the user/individual on the job must be able to:

- PC10.** achieve number and carats of stones faceted per day against target given
- PC11.** achieve scratch-less facets
- PC12.** maintain stone loss within prescribed limits, particularly, in precious stones

##### *Handling problems*

To be competent, the user/individual on the job must be able to:

- PC13.** deliver faceted stone in time by reporting problems faced or anticipated well in advance

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

## Qualification Pack

- KU1.** companys policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management
- KU2.** non-disclosure of confidential information provided by the company either orally or in writing marked as confidential
- KU3.** liability arising out of loss, theft, or inadvertent disclosure of confidential information
- KU4.** work flow involved in gemstone processing of company
- KU5.** importance of the individuals role in the process flow of the company
- KU6.** reporting structure
- KU7.** basic gemology and properties of different types of stones
- KU8.** different types of stones such as precious, semi-precious, synthetic etc.,
- KU9.** market value of the stone to understand the rationale for different acceptable levels of stone loss
- KU10.** origin of the stone, i.e., which mine, particularly, precious stones to read the softness/hardness as developed from precedence of use
- KU11.** maximum number of facets that can be created on a stone, e.g., garnet becomes dark with more number of facets, which is not desirable; the more transparent the stone, the more facets needs to be created
- KU12.** treatment of inclusions depending on the value of stone
- KU13.** use of tools and machines like faceting mill, scaifes, different types of laps that are available in terms of material such as diamond or steel or the grits
- KU14.** how to level the scaife or faceting mill
- KU15.** how to select the scaife i.e. steel or diamond, and powdered lap to be used for the stone type
- KU16.** the angles at which the doped stones have to be faceted to achieve the type of shape such as round brilliant, marquise, square, princess oval, heart, baguette, emerald, briolette, pear, trilliant, octagon etc.,
- KU17.** use angle indexing to cut a facet on the stone
- KU18.** to use water jet and keep the stone cool
- KU19.** control of losses during operations
- KU20.** how to work in a safe environment, i.e., without injuries

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** to report stone losses via documentation as per company policy
- GS2.** fill the requisition slip for ordering tools and consumables
- GS3.** read height, weight, dimensions of the stones facets as given on job sheets
- GS4.** convert shape on paper into faceted stone
- GS5.** read company rules and compliance documents required to complete the work
- GS6.** receive instructions and materials from reporting supervisor
- GS7.** give feedback to supervisor or polisher on any specific stone handling requirement
- GS8.** share work load when multiple deliverables are required

## Qualification Pack

- GS9.** make decisions pertaining to the concerned area of work
- GS10.** plan and organize the process of facets on gemstones
- GS11.** resolve difficulties with respect to practicality of plan or facets to be created
- GS12.** assess the angles at which the doped stones have to be faceted to achieve the type of shape such as round brilliant, marquise, square, princess oval, heart, baguette, emerald, briolette, pear, trilliant, octagon
- GS13.** improve work processes for greater productivity by analyzing current working methods
- GS14.** spot process disruption and reasons for delay

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Making facets on the gemstones</i>	<b>10</b>	<b>19</b>	-	-
<b>PC1.</b> match the stone type, weight, number as mentioned on the bag with gemstones received from supervisor	1	1	-	-
<b>PC2.</b> identify faceting requirement as per plan such as how many facets and shape of facet to be created	1	1	-	-
<b>PC3.</b> achieve maximum number of facets to be created per stone	2	3	-	-
<b>PC4.</b> cut facets according to the shape, colour, brilliance and metered edges	2	3	-	-
<b>PC5.</b> make accurate use of angle-indexing	2	3	-	-
<b>PC6.</b> use correct lap and powder for the stone	1	2	-	-
<b>PC7.</b> ensure there is no window in facets	1	2	-	-
<b>PC8.</b> achieve accurate calibration	-	2	-	-
<b>PC9.</b> achieve maximum number of qc approved stones	-	2	-	-
<i>Maintaining productivity</i>	-	<b>9</b>	-	-
<b>PC10.</b> achieve number and carats of stones faceted per day against target given	-	4	-	-
<b>PC11.</b> achieve scratch-less facets	-	4	-	-
<b>PC12.</b> maintain stone loss within prescribed limits, particularly, in precious stones	-	1	-	-
<i>Handling problems</i>	-	<b>2</b>	-	-
<b>PC13.</b> deliver faceted stone in time by reporting problems faced or anticipated well in advance	-	2	-	-
<b>NOS Total</b>	<b>10</b>	<b>30</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	G&J/N6702
<b>NOS Name</b>	Make facets on gemstones
<b>Sector</b>	Gem & Jewellery
<b>Sub-Sector</b>	Gemstone Processing
<b>Occupation</b>	Shaping, Faceting and Polishing
<b>NSQF Level</b>	3
<b>Credits</b>	3
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQF Clearance Date</b>	17/11/2022

## Qualification Pack

### G&J/N6703: Polish the girdle of faceted gemstone

#### Description

This OS unit is about providing the final finish to the girdle of by polishing

#### Scope

The scope covers the following :

- This unit/task covers the following:
- Preparing for girdle polishing of gemstone
- Polishing girdle of gemstone
- Maintaining productivity
- Handling problems

#### Elements and Performance Criteria

##### *Preparing for girdle polishing of gemstone*

To be competent, the user/individual on the job must be able to:

- PC1.** receive bag of faceted gemstones and instructions from supervisor
- PC2.** match the stone type, weight and number as mentioned on the bag
- PC3.** check shape, size and facet of stone for polishing as per job sheet for symmetry and colour defects and potential problems in polishing process
- PC4.** understand the type of stone to be polished such as soft or hard, transparent or translucent or opaque
- PC5.** carry out the polishing within the permitted level of stone loss
- PC6.** use water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage

##### *Polishing girdle of gemstone*

To be competent, the user/individual on the job must be able to:

- PC7.** bring out sharpness of edges of girdle clearly
- PC8.** maintain shape and size of the faceted stone
- PC9.** calibrate the shape and size of girdle to be achieved
- PC10.** avoid damage to facets that were previously created
- PC11.** select correct angle for girdle polishing
- PC12.** achieve sparkle or shine or finish as per job sheet or plan
- PC13.** ensure accurate use of angle-indexing
- PC14.** use correct lap, powder and buff
- PC15.** achieve accurate calibration
- PC16.** achieve maximum number of qc approved girdle polished gemstones

##### *Maintaining productivity*

To be competent, the user/individual on the job must be able to:

## Qualification Pack

**PC17.** achieve the number of girdles polished per day against target given

**PC18.** deliver scratch-less facets with brilliance level as per job sheet

**PC19.** maintain, stone loss within prescribed limits, particularly, in precious stones

### *Handling problems*

To be competent, the user/individual on the job must be able to:

**PC20.** deliver polished stone in time by reporting problems faced or anticipated well in advanced

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** companys policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management

**KU2.** non-disclosure of confidential information provided by the company either orally or in writing marked as confidential

**KU3.** liability arising out of loss, theft, or inadvertent disclosure of confidential information

**KU4.** work flow involved in gemstone processing of company

**KU5.** importance of the individuals role in the workflow

**KU6.** reporting structure

**KU7.** the process of girdle faceting

**KU8.** angle-indexing on polishing machine for achieving maximum clarity and brilliance in girdle of stone

**KU9.** how the polishing mill works

**KU10.** different types of laps available in terms of material such as diamond or steel or the grits

**KU11.** use of different types of buff for different stone types such as wool, wood and leather and buffing powders such as chrome oxide

**KU12.** use of water jet to keep the stone cool

**KU13.** basic gemology and properties of different stones

**KU14.** different types of stones such as precious, semi-precious, synthetic etc.,

**KU15.** market value of stone to understand the rationale for different acceptable levels of stone loss

**KU16.** origin of the stone, i.e., which mine, particularly, precious stones to read the softness/hardness as developed from precedence of use

**KU17.** to work in a safe environment, i.e., without injuries

## Generic Skills (GS)

User/individual on the job needs to know how to:

**GS1.** document the damage to the stone during polishing

**GS2.** report stone losses via documentation as per company policy

**GS3.** convert the stone plan on job sheet to a brilliant stone using polishing mill

**GS4.** spot difficulties with respect to practicality of plan or facets created

## Qualification Pack

- GS5.** receive instructions and materials from supervisor
- GS6.** give feedback to supervisor or facet maker on any specific stone handling requirement
- GS7.** report any incidents of high stone loss
- GS8.** discuss task lists, schedules, and work-loads with co-workers
- GS9.** share work load when multiple deliverables are required
- GS10.** make decisions pertaining to the selection of laps and the compounds to be used as per standard operating procedure
- GS11.** plan and organize the girdle polishing process to achieve fine polish
- GS12.** reduce stone loss within company limits
- GS13.** resolve issues in polishing to deliver polished stone as per schedule
- GS14.** assess the angles at which the girdle of doped stones has to be polished to achieve the brilliance and colour
- GS15.** improve work processes for greater productivity
- GS16.** spot process disruption and reasons for delay

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Preparing for girdle polishing of gemstone</i>	<b>2</b>	<b>8</b>	-	-
<b>PC1.</b> receive bag of faceted gemstones and instructions from supervisor	-	1	-	-
<b>PC2.</b> match the stone type, weight and number as mentioned on the bag	-	1	-	-
<b>PC3.</b> check shape, size and facet of stone for polishing as per job sheet for symmetry and colour defects and potential problems in polishing process	1	1	-	-
<b>PC4.</b> understand the type of stone to be polished such as soft or hard, transparent or translucent or opaque	1	1	-	-
<b>PC5.</b> carry out the polishing within the permitted level of stone loss	-	2	-	-
<b>PC6.</b> use water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage	-	2	-	-
<i>Polishing girdle of gemstone</i>	<b>6</b>	<b>19</b>	-	-
<b>PC7.</b> bring out sharpness of edges of girdle clearly	-	2	-	-
<b>PC8.</b> maintain shape and size of the faceted stone	1	1	-	-
<b>PC9.</b> calibrate the shape and size of girdle to be achieved	1	2	-	-
<b>PC10.</b> avoid damage to facets that were previously created	1	1	-	-
<b>PC11.</b> select correct angle for girdle polishing	1	2	-	-
<b>PC12.</b> achieve sparkle or shine or finish as per job sheet or plan	-	5	-	-
<b>PC13.</b> ensure accurate use of angle-indexing	1	1	-	-
<b>PC14.</b> use correct lap, powder and buff	-	3	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> achieve accurate calibration	1	1	-	-
<b>PC16.</b> achieve maximum number of qc approved girdle polished gemstones	-	1	-	-
<i>Maintaining productivity</i>	<b>2</b>	<b>2</b>	-	-
<b>PC17.</b> achieve the number of girdles polished per day against target given	-	1	-	-
<b>PC18.</b> deliver scratch-less facets with brilliance level as per job sheet	1	1	-	-
<b>PC19.</b> maintain, stone loss within prescribed limits, particularly, in precious stones	1	-	-	-
<i>Handling problems</i>	-	<b>1</b>	-	-
<b>PC20.</b> deliver polished stone in time by reporting problems faced or anticipated well in advanced	-	1	-	-
<b>NOS Total</b>	<b>10</b>	<b>30</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	G&J/N6703
<b>NOS Name</b>	Polish the girdle of faceted gemstone
<b>Sector</b>	Gem & Jewellery
<b>Sub-Sector</b>	Gemstone Processing
<b>Occupation</b>	Shaping, Faceting and Polishing
<b>NSQF Level</b>	3
<b>Credits</b>	3
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ 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 Element/ 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 these criteria.
6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

## Qualification Pack

**Minimum Aggregate Passing % at QP Level : 50**

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

### Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
G&J/N6601.Dop the gemstone	4	16	-	-	20	50
G&J/N9902.Maintain health and safety at workplace	3	17	-	-	20	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
<b>Total</b>	<b>27</b>	<b>63</b>	<b>-</b>	<b>-</b>	<b>90</b>	<b>70</b>

Elective: 1 Gemstone Pre-shaper

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
G&J/N6603.Operate tumble shaping machine	2	8	-	-	10	10
G&J/N6602.Pre-shape or pre-form gemstone	8	22	-	-	30	20
<b>Total</b>	<b>10</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>30</b>

Elective: 2 Gemstone Facet Polisher

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
G&J/N6701.Polish the faceted or cabochon gemstone	10	30	-	-	40	30



### Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
<b>Total</b>	<b>10</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>30</b>

Elective: 3 Gemstone Facet maker

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
G&J/N6702.Make facets on gemstones	10	30	-	-	40	30
<b>Total</b>	<b>10</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>30</b>

Elective: 4 Girdle Polisher

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
G&J/N6703.Polish the girdle of faceted gemstone	10	30	-	-	40	30
<b>Total</b>	<b>10</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>30</b>

## Qualification Pack

### Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training

## Qualification Pack

### Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.

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<b>Knowledge and Understanding (KU)</b>	Knowledge and Understanding (KU) 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.
<b>Organisational Context</b>	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.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	Core skills or Generic Skills (GS) 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.
<b>Electives</b>	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
<b>Options</b>	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.