



# 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
- performance
  standards that
  individuals must
  achieve when
  carrying out
  functions in the
  workplace,
  together with
  specifications of
  the underpinning
  knowledge and
  understanding

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# Introduction

# **Qualifications Pack - Wax Setter**

**SECTOR:** GEMS & JEWELLERY

**SUB-SECTOR:** Cast and Diamonds-Set Jewellery

**OCCUPATION:** Wax setting

**REFERENCE ID:** G&J/Q1701

**ALIGNED TO: NCO-2004/7313.30** 

Wax setter: Wax setter sets diamonds and gemstones in wax replica of the

jewellery piece for the purpose of casting.

**Brief Job Description:** The individual works with numerous hand tools to set diamonds and gemstones as per design. The individual is responsible for delivering: levelled, damage-free and secured setting of stones while maintaining its brilliance.

**Personal Attributes:** The job requires the individual to have: attention to details; good eyesight; steady hands and ability to work in a process driven team for long hours in sitting position. The individual is expected to have a high level of integrity in dealing with diamonds and gemstones.





| Qualifications Pack Code | G&J/Q1701                            |                  |            |
|--------------------------|--------------------------------------|------------------|------------|
| Job Role                 | Wax setter                           |                  |            |
| Credits (NSQF)           | TBD                                  | Version number   | 1.0        |
| Sector                   | Gems & Jewellery                     | Drafted on       | 28/08/2016 |
| Sub-sector               | Cast and Diamonds - set<br>Jewellery | Last reviewed on | 18/10/2016 |
| Occupation               | Wax setting                          | Next review date | 17/10/2019 |
| NSQC Clearance on*       | DD/MM/YYYY                           |                  |            |

| Job Role   | Wax setter  |  |  |
|--|---|--|--|
| Role Description                                 | Setting diamonds and gemstones of different size and shapes in wax replica of jewellery as per design requirement and without defects, for the purpose of casting                         |  |  |
| NSQF level                                       | 3   |  |  |
| Minimum Educational Qualifications*              | 10th Standard, preferably   |  |  |
| Maximum Educational Qualifications*              | Not applicable  |  |  |
| Training (Suggested but not mandatory)           | Not applicable  |  |  |
| Minimum job entry age                            | 18 years complete   |  |  |
| Experience                                       | Not applicable  |  |  |
| Applicable National Occupational Standards (NOS) | Compulsory:  1. G&J/N1701 Set diamonds and stones in the wax models  2. G&J/N9901 Coordinate with others  3. G&J/N9902 Maintain health and safety at workplace  Optional:  Not applicable |  |  |
| Performance Criteria                             | As described in the relevant OS units   |  |  |





| 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<br>Skills       | Core skills or generic skills are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles. |





Acronyms

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



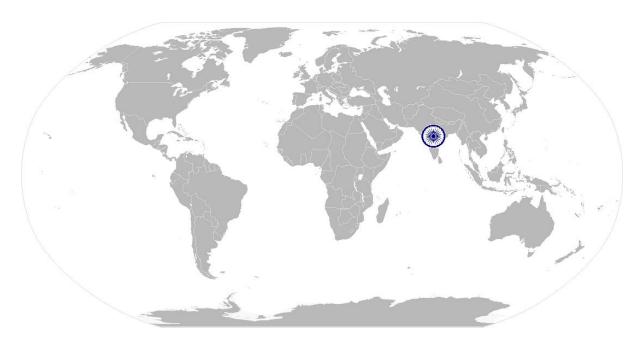




Set diamonds and stones in the wax models

.....

# National Occupational Standard



# **Overview**

This unit is a key pre-casting process of the cast and diamond-set jewellery manufacturing, in which diamonds and gemstones with hardness above 9 mohs are set into wax models using advance techniques, for the purpose of producing jewellery on mass scale through tree-making and casting.







## Set diamonds and stones in the wax models

| Unit Code                                 | G&J/ N 1701   |  |
|---|---|--|
| Unit Title<br>(Task)                      | Set diamonds and stones in the wax models   |  |
| Description                               | This OS unit is about setting diamonds and gemstones with hardness above 9 on mohs in the wax pieces by using hand tools, wax soldering iron and advance techniques   |  |
| Scope                                     | <ul> <li>This unit/task covers the following:</li> <li>Reading the job sheet and identifying raw materials</li> <li>Cleaning and checking each wax piece</li> <li>Setting the diamonds and gemstones in the wax piece</li> <li>Controlling damage to stones</li> <li>Achieving productivity</li> <li>Achieving quality standards</li> </ul> |  |
| Performance Criteria(PC) w.r.t. the Scope |   |  |
| Element                                   | Performance Criteria  |  |
| Reading job sheet and                     | To be competent, the user/individual on the job must be able to:  |  |

| Element                   | Performance Criteria   |  |  |
|---------------------------|--|--|--|
| Reading job sheet and     | To be competent, the user/individual on the job must be able to:   |  |  |
| identifying raw materials | PC1. Follow design specifications in terms of type of jewellery as well as number, weight and size of diamonds and gemstones required PC2. Follow and apply the working procedures desired for the type of waxes   |  |  |
|                           | as per standard operating procedures   |  |  |
|                           | PC3. Match the size of diamonds and gemstones received against the   |  |  |
|                           | requirement mentioned in the job sheet   |  |  |
| Cleaning and checking     | PC4. Inspect all wax patterns for signs of defects or blemishes that will be   |  |  |
| each wax piece            | transported into the metal cast jewellery  |  |  |
| ·                         | PC5. Clean and smooth all wax patterns in preparation for setting the  |  |  |
|                           | diamond and stones into the wax  |  |  |
|                           | PC6. In case of wax pieces which are defective bring it to supervisors' notice   |  |  |
| Setting the diamonds and  | PC7. Select tools, materials and equipment in accordance with the job  |  |  |
| gemstones in the wax      | specifications and type of setting   |  |  |
| piece                     | PC8. Use the advanced techniques for setting such as prong, channel, bead, flush, bezel, pave, micro-pave, invisible, etc. for setting small and tiny diamonds and gemstones (less than 1 mm size) use Pave and Micro Pave setting technique, where a bead is raised and created in between predrilled holes. Create these beads in such a way to hold the stones together in a very close and uniform way |  |  |
|                           | PC9. Press the diamond and gemstones at the required levels using hand tools PC10. Use the specified soldering/locking technique required for the design of jewellery  |  |  |
|                           | PC11. Finish the wax pieces by correcting the surface for defects  |  |  |
|                           | PC12. Secure setting of diamonds and gemstones   |  |  |







# G&J/N1701 Set diamonds and stones in the wax models

|                                 | PC13. Provide finishing to wax pieces as per design requirement and laid down standards |  |
|---------------------------------|---|--|
| Controlling domage to           | DC14 Handle diamonds and precious stones with sare                                      |  |
| Controlling damage to           | PC14. Handle diamonds and precious stones with care                                     |  |
| stones                          | PC15. Minimise or avoid damage to diamonds and precious stones during                   |  |
|                                 | setting process   |  |
|                                 | PC16. Maintain zero defect wax pieces in the process before setting                     |  |
|                                 | PC17. Select right size of diamonds and gemstone for setting in the wax piece           |  |
| Achieving productivity          | PC18. Deliver in time the product to tree-making and casting processes                  |  |
|                                 | PC19. Set number of stones or carat per day against target given                        |  |
| Achieving quality               | PC20. Rework as per QC suggestions on the defective wax pieces                          |  |
| standards                       |   |  |
| standards                       | PC21. Return completed wax piece to supervisor  |  |
|                                 | PC22. Ensure timely delivery  |  |
|                                 | PC23. Maintain accurate level of the stones in the wax piece                            |  |
|                                 | PC24. Produce number of Quality Control approved wax pieces' set                        |  |
|                                 | PC25. Keep the work station, machine and tools clean                                    |  |
|                                 | PC26. Keep all the tools in an organised manner   |  |
| Knowledge and Understanding (K) |   |  |
| A. Organizational Context       | The user/individual on the job needs to know and understand:                            |  |
|                                 | KA1. Company's policies on: quality and delivery standards, safety and                  |  |
|                                 | hazards, integrity and personnel management   |  |
|                                 | KA2. Non–disclosure of "confidential information" provided by the company               |  |
|                                 | either orally or in writing marked as confidential                                      |  |
|                                 | KA3. Liability arising out of loss, theft, or inadvertent disclosure of confidential    |  |
|                                 | information   |  |
|                                 | KA4. Work flow involved in jewellery manufacturing process of the company               |  |
|                                 | KA5. Importance of the individual's role in the workflow                                |  |
|                                 | KA6. Reporting structure  |  |
| B. Technical Knowledge          | KB1. Different types of basic and advance setting techniques for diamond and            |  |
|                                 | gemstones such as pave, micro pave, invisible, etc.                                     |  |
|                                 | KB2. How to Solder accurately in order to fix the stones securely without               |  |
|                                 | damaging the wax  |  |
|                                 | KB3. Quality standards as per design or company guidelines                              |  |
|                                 | KB4. Uses of different types of tools for different end results                         |  |
|                                 | KB5. Use of 10X loupe or 5X optivisor   |  |
|                                 | KB6. Use and maintain tools   |  |
|                                 | KB7. Potential work hazards, particularly, when using wax soldering iron and            |  |
|                                 | hand tools  |  |
|                                 | KB8. Types of wax and their properties  |  |
|                                 | KB9. Mismatch of diamond colour, size & weight with respect to job sheet                |  |
| Skills (S) [Optional]           |   |  |
| A. Core Skills/ Generic         | Writing Skills  |  |
|                                 |   |  |







# Set diamonds and stones in the wax models

| Skills                 | The user/ individual on the job needs to know and understand how to:  SA1. Fill the requisition slip for tools and materials required   |  |  |
|------------------------|---|--|--|
|                        | Reading Skills  |  |  |
|                        | SA2. Read job sheets SA3. Read company rules and compliance documents SA4. Read and understand nondisclosure policies of the company SA5. Read and measure millimeter size by gauge tool and ring size by specified ring size stick |  |  |
|                        | Oral Communication (Listening and Speaking skills)  |  |  |
|                        | SA6. Share work load as required SA7. Follow supervisor's instructions SA8. Report to supervisor about mismatch and shortage in diamonds  |  |  |
| B. Professional Skills | Decision Making   |  |  |
|                        | SB1. Decide on the proper size of the diamonds before carrying out setting  |  |  |
|                        | Plan and Organize   |  |  |
|                        | SB2. Organise required toolkit at the work bench for better time management   |  |  |
|                        | Customer Centricity   |  |  |
|                        | N. A.  Problem Solving  |  |  |
|                        | Problem Solving   |  |  |
|                        | SB3. Resolve issues in wax setting such as mismatch and sizes of diamonds   |  |  |
|                        | Analytical Thinking   |  |  |
|                        | SB4. Increase productivity  |  |  |
|                        | Critical thinking   |  |  |
|                        | SB5. Increase efficiency based on past work experience  |  |  |



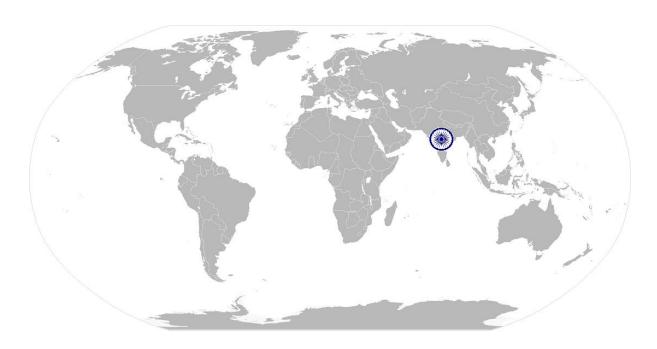




# Set diamonds and stones in the wax models

# **NOS Version Control**

| NOS Code            | G&J/N1701                            |                  |            |
|---------------------|--------------------------------------|------------------|------------|
| Credits (NSQF)      | TBD                                  | Version number   | 1.0        |
| Industry            | Gems & Jewellery                     | Drafted on       | 28/08/2016 |
| Industry Sub-sector | Cast and Diamonds - Set<br>Jewellery | Last reviewed on | 18/10/2016 |
| Occupation          | Wax setting                          | Next review date | 17/10/2019 |



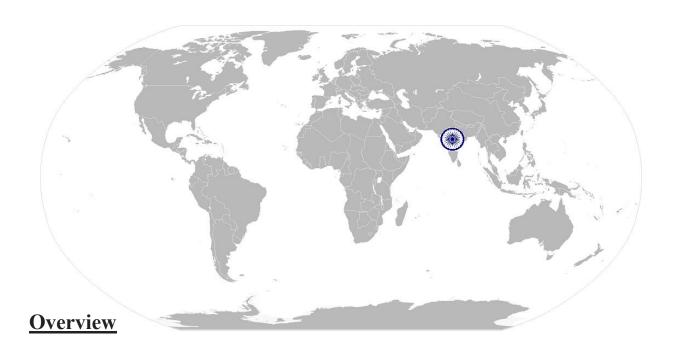






**Coordinate with others** 

# National Occupational Standard



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 multitask in order to achieve the deliverables on schedule.







## **Coordinate with others**

| Unit Code                        | G&J/ N9901  |  |  |
|----------------------------------|---|--|--|
| Unit Title                       |   |  |  |
| (Task)                           | Coordinate with others  |  |  |
| Description                      | This OS unit is about communicating with colleagues, seniors and outside parties in order to achieve the deliverables on schedule               |  |  |
| Scope                            | This unit/task covers the following:  |  |  |
|                                  | Interacting with supervisor   |  |  |
|                                  | Interacting with colleagues within and outside the department   |  |  |
|                                  | Interacting with outside parties  |  |  |
| Performance Criteria(I           | PC) w.r.t. the Scope  |  |  |
| Element                          | Performance Criteria  |  |  |
| Interacting with                 | To be competent, the user/individual on the job must be able to   |  |  |
| supervisor                       | PC1. Coordinate for receiving work instructions and raw materials from reporting supervisor   |  |  |
|                                  | 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   |  |  |
|                                  | PC3. Communicate to reporting supervisor about operation details and hazards  |  |  |
|                                  | PC4. Interact with supervisor regarding compliance of company policy and rules  |  |  |
| last a un attina a contala       |   |  |  |
| Interacting with                 | PC5. Coordinate with colleagues to share work, as per the workload PC6. Communicate and discuss work flow related difficulties in order to find |  |  |
| colleagues and other departments | PC6. Communicate and discuss work flow related difficulties in order to find solutions with mutual agreement                                    |  |  |
| departments                      | PC7. Coordinate and receive feedback from quality control department  |  |  |
|                                  | PC8. Coordinate and receive reedback from quality control department  |  |  |
|                                  | PC9. Resolve conflicts by communicating with colleagues and other departments   |  |  |
|                                  | PC10. Coordinate with colleagues regarding multitasking in other departments with   |  |  |
|                                  | requirements  |  |  |
| Interacting with                 | PC11. Adhere to nondisclosure policy of the company in all outside coordination   |  |  |
| outside parties                  |   |  |  |
| Knowledge and Under              | standing (K)  |  |  |
| A. Organizational                | The user/individual on the job needs to know and understand:  |  |  |
| Context                          | KA1. Company's policies on: preferred language of communication, reporting and  |  |  |
|                                  | escalation policy, quality delivery standards, and personnel management   |  |  |
|                                  | KA2. Company's policies on non-disclosure of "confidential information" provided  |  |  |
|                                  | by the company either orally or in writing marked as confidential   |  |  |
|                                  | KA3. Liability arising out of loss, theft or inadvertent disclosure of confidential   |  |  |
|                                  | information   |  |  |
|                                  | KA4. Reporting structure  |  |  |







# **Coordinate with others**

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







## **Coordinate with others**

| Problem Solving |   |
|-----------------|---|
| SB5.            | How to handle critical situations caused due to communication issues at workplace and solve problems without blaming others                       |
| Analyt          | ical Thinking   |
| SB6.            | Analyse the work processes by interacting with others and adopting best practices   |
| SB7.            | Use prior experience to observe and reflect for development of ideas  |
| Critical        | Thinking  |
| SB8.            | Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)                                    |
| SB9.            | Deal with clients lacking the technical background to solve the problem on their own  |
| SB10.           | Spot process disruptions and delays and report and communicate with solutions   |
| SB11.           | Identify immediate or temporary solutions to resolve delays   |
| PN 100 100      | Apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action |
|                 |   |





# **NOS Version Control**

| NOS Code            | G&J/N9901                            |                  |            |  |  |
|---------------------|--------------------------------------|------------------|------------|--|--|
| Credits (NSQF)      | TBD                                  | Version number   | 1.0        |  |  |
| Industry            | Gems & Jewellery                     | Drafted on       | 28/08/2016 |  |  |
| Industry Sub-sector | Cast and Diamonds - Set<br>Jewellery | Last reviewed on | 18/10/2016 |  |  |
| Occupation          | Wax setting                          | Next review date | 17/10/2019 |  |  |







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 contain accidents in order to make the work environment safe for self and colleagues and maintaining occupational health and safety.







# Maintain health and safety at workplace

| Unit Code  | G&J/N9902   |
|--|---|
| Unit Title<br>(Task)                               | 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 occupational health and safety  |
| Scope  | This unit/task covers the following:  |
|  | <ul><li>Health and safety in work area</li><li>Fire safety</li></ul>  |
|  | Emergencies, rescue and first aid procedures  |
| Daufaumanaa Cuitavia/I                             | DC) w # # #ha Saama   |
| Performance Criteria(I                             | ,   |
| Element  | 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 bad working position PC5. Practice appropriate working postures to minimise occupational health related issues   |
| Fire safety  | 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<br>and first aid<br>procedures | 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 situation or medical emergency  PC12. Participate in emergency procedures such as raising alarm, safe evacuation,  |
|  | correct means of escape, correct assembly point etc.  |
| Knowledge and Under                                | standing (K)  |
| A. Organizational                                  | The user/individual on the job needs to know and understand:  |
| Context  | <ul><li>KA1. Company's policies on: safety and hazards and personnel management</li><li>KA2. Names and location of documents that refer to health and safety in work place.</li><li>KA3. Reporting structure</li></ul>  |
| B. Technical                                       | KB1. Meaning of "hazard's" and risks  |
| Knowledge  | KB2. Health and safety hazards commonly present in the work place and related precautions   |







# Maintain health and safety at workplace

|                        | KB3. Various dangers associate with use of electrical equipment                  |
|------------------------|--|
|                        | KB4. Preventative and remedial actions to be taken in case of exposure to toxic  |
|                        | material   |
|                        | KB5. Methods of accident prevention  |
|                        | KB6. How different chemicals react and what could be the danger from them        |
|                        | KB7. How to use machines and tools without suffering bodily harm                 |
|                        | KB8. Importance of using protective clothing/ equipment while working            |
|                        | KB9. Precautionary activities to prevent the fire accident                       |
|                        | KB10. Various causes of fire   |
|                        | KB11. Techniques of using different fire extinguishers                           |
|                        | KB12. Different materials used for extinguishing fire                            |
|                        | KB13. Rescue techniques applied during a fire hazard                             |
|                        | KB14. Various types of safety signs and what they mean                           |
|                        | KB15. Appropriate basic first aid treatment relevant to condition e.g. bleeding, |
|                        | minor burns, eye injuries etc.   |
|                        | KB16. Potential impact to a person who is moved incorrectly                      |
| Skills (S) [Optional]  |  |
| A. Core Skills/        | Writing Skills   |
| Generic Skills         | The individual as the inhomental beautiful and several beautiful.                |
|                        | The individual on the job needs to know and understand how to:                   |
|                        | N.A.   |
|                        | Reading Skills   |
|                        | SA1. Read and comprehend basic content to read labels, charts, signage's         |
|                        | SA2. Read and comprehend basic English to read manuals of operations             |
|                        | Oral Communication (Listening and Speaking skills)                               |
|                        | SA3. Effectively communicate the risk  |
|                        |  |
|                        |  |
| B. Professional Skills | Decision Making  |
|                        | SB1. Report potential sources of danger  |
|                        | SB2. Follow the relevant prescribed procedure in the event of an accident        |
|                        | SB3. Wear appropriate safety gear to avoid an accident                           |
|                        | Plan and Organize  |
|                        | SB4. Learn from past mistakes regarding use of hazardous machines or chemicals   |
|                        | 35 ii. Learn nom past mistakes regarding ase of mazardous machines of efferments |
|                        | Customer Centricity  |
|                        | N. A.  |
|                        | Problem Solving  |
|                        | SB5. Adhere to and guide others to follow prescribed procedures related to       |
|                        | occupational health and safety   |
|                        | , ,  |
|                        | 1  |







# Maintain health and safety at workplace

| Analytical Thinking   |
|---|
| SB6. Analyse untoward incidents from the past and implement correct use of machines, tools or hazardous chemicals                         |
| Critical Thinking   |
| SB7. Critically analyse the processes carried out by self and by colleagues in the department to spot potential hazards and safety issues |

# **NOS Version Control**

| NOS Code            |                                   | G&J/N9901        |            |
|---------------------|-----------------------------------|------------------|------------|
| Credits (NSQF)      | TBD                               | Version number   | 1.0        |
| Industry            | Gems & Jewellery                  | Drafted on       | 28/08/2016 |
| Industry Sub-sector | Cast and Diamonds - Set Jewellery | Last reviewed on | 18/10/2016 |
| Occupation          | Wax setting                       | Next review date | 17/10/2019 |



G&J/Q1701

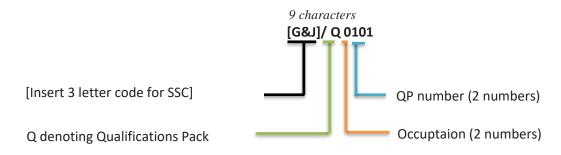


Qualifications Pack For Wax Setter

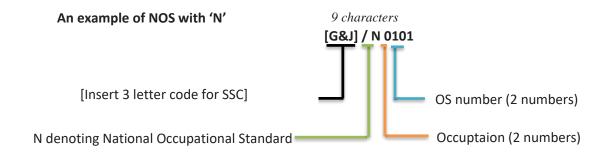
# **Annexure**

# Nomenclature for QP and NOS

# **Qualifications Pack**



# **Occupational Standard**







# G&J/Q1701

# Qualifications Pack For Wax Setter

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

| Sub-sector                           | Range of Occupation numbers |
|--------------------------------------|-----------------------------|
| Handmade gold and gems-set jewellery | 01-15                       |
| Cast and diamond-set jewellery       | 16-35                       |
| Diamond processing                   | 36-50                       |
| Gemstone processing                  | 51-65                       |
| Jewellery retailing                  | 66-75                       |
| Fashion jewellery                    | 76-85                       |
| Common                               | 86-98                       |

| 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 Wax Setter
Qualification Pack G&J/Q1701
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. Individual assessment agencies will create theory question papers for candidates at every examination/training centre. (As per assessment criteria below)
- 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 on the balance NOSs to pass the Qualification Pack.

|   |   |                      |        | Marks Al | location            |
|---|---|----------------------|--------|----------|---------------------|
| Assessment outcomes   | Assessment Criteria for outcomes  | Total Marks (30+120) | Out of | Theory   | Skills<br>Practical |
| 1. G&J/N1701<br>Set diamonds<br>and stones in<br>the wax models | PC1. Follow design specifications in terms of type of jewellery as well as number, weight and size of diamonds and gemstones required | 110                  | 5      | 1        | 4                   |
|   | PC2. Follow and apply the working procedures desired for the type of waxes as per standard operating procedures                       |                      | 5      | 1        | 4                   |
|   | PC3. Match the size of diamonds and gemstones received against the requirement mentioned in the job sheet                             |                      | 5      | 1        | 4                   |
|   | PC4. Inspect all wax patterns for signs of defects or blemishes that will be transported into the metal cast jewellery                |                      | 5      | 1        | 4                   |





| PC5. Clean and smooth all wax patterns in preparation for setting the diamond and stones into the wax    | 5  | 1 | 4  |
|--|----|---|----|
| PC6. In case of wax pieces which are defective bring it to supervisors'                                  | 2  | 1 | 1  |
| PC7. Select tools, materials and equipment in accordance with the job specifications and type of setting | 5  | 1 | 4  |
| PC8. Use the advanced techniques for setting   | 19 | 5 | 14 |
| PC9. Press the diamond and gemstones at the required levels using hand tools                             | 5  | 1 | 4  |
| PC10. Use the specified soldering/locking technique required for the design of jewellery                 | 5  | 1 | 4  |
| PC11. Finish the wax pieces by correcting the surface for defects  | 5  | 1 | 4  |
| PC12. Secure setting of diamonds and gemstones   | 5  | 1 | 4  |
| PC13. Provide finishing to wax pieces as per design requirement and laid down standards                  | 5  | 1 | 4  |
| PC.14 Handle diamonds and precious stones with care  | 1  | 0 | 1  |
| PC15. Minimise or avoid damage to diamonds and precious stones during setting process                    | 2  | 1 | 1  |





|   | PC16. Maintain zero defect wax pieces in the process before setting  | 5   | 1  | 4  |
|---|--|-----|----|----|
|   | PC17. Select right size of diamonds and gemstone for setting in the wax piece  | 5   | 1  | 4  |
|   | PC18. Deliver in time the product to tree-making and casting processes   | 1   | 0  | 1  |
|   | PC19. Set number of stones or carat per day against target given   | 5   | 2  | 3  |
|   | PC20. Rework as per QC suggestions on the defective wax pieces   | 1   | 0  | 1  |
|   | PC21. Return completed wax piece to supervisor   | 1   | 0  | 1  |
|   | PC22. Ensure timely delivery   | 2   | 0  | 2  |
|   | PC23. Maintain accurate level of the stones in the wax piece   | 5   | 1  | 4  |
|   | PC24. Produce number of Quality<br>Control approved wax pieces' set  | 2   | 0  | 2  |
|   | PC25. Keep the work station, machine and tools clean   | 2   | 1  | 1  |
|   | PC26. Keep all the tools in an organised manner  | 2   | 0  | 2  |
|   | Sub Total  | 110 | 24 | 86 |
| 2. G&J/N9901<br>Coordinate with<br>others | PC1. Coordinate for receiving work instructions and raw materials from reporting supervisor  | 1   | 0  | 1  |
|   | PC2. Communicate to the reporting supervisor about process flow improvements, product defects received from previous process, repairs and maintenance of tools and machinery as required | 1   | 0  | 1  |





|   | PC3. Communicate to reporting supervisor about operation details and hazards  |    | 1  | 0 | 1  |
|---|---|----|----|---|----|
|   | PC4. Interact with supervisor regarding compliance of company policy and rules  | 20 | 2  | 0 | 2  |
|   | PC5. Coordinate with colleagues to share work, as per the workload  |    | 3  | 0 | 3  |
|   | PC6.Communicate and discuss work flow related difficulties in order to find solutions with mutual agreement                 |    | 2  | 0 | 2  |
|   | PC7. Coordinate and receive feedback from quality control department  |    | 2  | 1 | 1  |
|   | PC8. Coordinate for putting team goals over individual goals  |    | 1  | 0 | 1  |
|   | PC9. Resolve conflicts by communicating with colleagues and other departments   |    | 2  | 0 | 2  |
|   | PC10. Communicate and discuss work Coordinate with colleagues regarding multitasking in other departments with requirements |    | 3  | 1 | 2  |
|   | PC11. Adhere to nondisclosure policy of the company in all outside coordination   |    | 2  | 1 | 1  |
|   | Sub Total   |    | 20 | 3 | 17 |
| 3. G&J/N9902<br>Maintain health<br>and safety at<br>workplace | PC1. Identify and use appropriate protective clothing/equipment for specific tasks and work                                 |    | 2  | 0 | 2  |





| PC2. Identify hazardous job activities in his/her job and communicate the possible causes of risks or accidents in the workplace          |    | 1  | 0 | 1  |
|---|----|----|---|----|
| PC3. Carry out safe working practices while dealing with hazards to ensure safety of self and others                                      |    | 1  | 0 | 1  |
| PC4. Identify and avoid doing any tasks or activities in a bad working position   |    | 2  | 0 | 2  |
| PC5. Practice appropriate working postures to minimise occupational health related issues   |    | 2  | 1 | 1  |
| PC6. Use the appropriate fire extinguishers on different types of fire.   | 20 | 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 situation or medical emergency  |    | 3  | 1 | 2  |
| PC12. Participate in emergency procedures such as raising alarm, safe evacuation, correct means of escape, correct assembly point etc.    |    | 2  | 1 | 1  |
| Sub Total   |    | 20 | 3 | 17 |