









Spot Welder - Imitation Jewellery

QP Code: G&J/Q1403

Version: 3.0

NSQF Level: 3

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G&J/Q1403: Spot Welder - Imitation Jewellery

Brief Job Description

The individual at work in Imitation jewellery manufacturing solders the spots as per the design requirement of the jewellery, accessories etc. The individual solders two metal parts on earring post and pendant loop etc. with high precision using spot welding machine fitted with different sizes of copper diodes. The individual welds the component part or assembly at the precise location

Personal Attributes

The job requires the individual to have: integrity; attention to details; hand-eye coordination; ability to work in a process driven team for long hours in sitting position; a lot of patience; and creativity. The individual must work in small groups in an enclosed area with minimum hazards when dealing with sharp tools

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. G&J/N1404: Operate spot welding machine in imitation jewellery
- 2. G&J/N1405: Understand and change copper diodes as per the job
- 3. G&I/N9904: Coordinate with co-workers
- 4. G&J/N9905: Maintain occupational health and safety

Qualification Pack (QP) Parameters

Sector	Gem & Jewellery
Sub-Sector	Imitation Jewellery
Occupation	Soldering, Welding
Country	India
NSQF Level	3
Credits	0
Aligned to NCO/ISCO/ISIC Code	NCO - 2015/7313.0703









Minimum Educational Qualification & Experience	Basic Literacy
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	16 Years
Last Reviewed On	NA
Next Review Date	27/05/2024
NSQC Approval Date	27/05/2021
Version	3.0
Reference code on NQR	2021/GJ/GJSCI/04251
NQR Version	3









G&J/N1404: Operate spot welding machine in imitation jewellery

Description

This OS unit is about operating spot welding machine in imitation jewellery

Elements and Performance Criteria

Spot welding jewellery

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

- **PC1.** collect the components as required by the designs
- **PC2.** accumulate metal and components from the relevant person
- **PC3.** spot weld the component/ part at the precise location
- **PC4.** spot weld the jewellery pieces/ accessories as per the design
- **PC5.** handle spot welding equipments safely

Controlling damages to the product and timely delivery of it as per target

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

- **PC6.** minimize damage to the product while working
- PC7. align and weld the component part or assembly at the precise location
- **PC8.** deliver the product timely to next process
- **PC9.** rectify number of jewellery pieces/ accessories as per target deliverable and quality approved by the supervisor

Checking quality

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

- **PC10.** produce defect-free products
- **PC11.** deliver defect free and evenly set jewellery pieces and accessory
- PC12. deliver maximum number of quality control certified pieces/ accessories
- **PC13.** rework on the product returned from qc

Reporting problems

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

PC14. deliver complete jewellery/accessories on time by reporting problems faced or anticipated well in advance

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** companys policies on: quality, delivery timelines, safety and hazardsintegrity property rights (ipr), and personnel management
- KU2. importance of individuals role in the workflow
- **KU3.** reporting structure
- **KU4.** imitation jewellery and accessories making process
- **KU5.** types of jewellery (product, styles, regional, traditional, making technique)









KU6. spot welding with high precision using spot welding machine fitted with different sizes of copper diodes

Generic Skills (GS)

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

- **GS1.** prepare notes, task lists and schedule with co-workers
- **GS2.** prepare progress reports
- **GS3.** read notes and put notes on design
- **GS4.** read company rules and compliance documents required to complete the work
- **GS5.** discuss task lists, schedules and work-loads with co-workers
- **GS6.** question co-workers appropriately in order to understand the nature of problem and to make a diagnosis
- **GS7.** keep seniors informed about the progress of work
- **GS8.** make decisions pertaining to the concerned area of work to implement them on personal or organizational level
- **GS9.** plan and organize the work according to the requirement
- **GS10.** use customer centric approach that provides a positive customer experience before and after the sale in order to drive repeat business, customer loyalty and profits
- **GS11.** think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s)
- **GS12.** identify immediate or temporary solutions to resolve delays
- **GS13.** analyze activities by breaking them down into single and manageable components
- **GS14.** pass on relevant information to others
- **GS15.** anticipate process disruption and reasons for delay









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Spot welding jewellery	3	19	-	-
PC1. collect the components as required by the designs	-	5	-	-
PC2. accumulate metal and components from the relevant person	-	5	-	-
PC3. spot weld the component/ part at the precise location	3	3	-	-
PC4. spot weld the jewellery pieces/ accessories as per the design	-	3	-	-
PC5. handle spot welding equipments safely	-	3	-	-
Controlling damages to the product and timely delivery of it as per target	1	11	-	-
PC6. minimize damage to the product while working	-	3	-	-
PC7. align and weld the component part or assembly at the precise location	1	3	-	-
PC8. deliver the product timely to next process	-	2	-	-
PC9. rectify number of jewellery pieces/ accessories as per target deliverable and quality approved by the supervisor	-	3	-	-
Checking quality	2	11	-	-
PC10. produce defect-free products	2	2	-	-
PC11. deliver defect free and evenly set jewellery pieces and accessory	-	3	-	-
PC12. deliver maximum number of quality control certified pieces/ accessories	-	3	-	-
PC13. rework on the product returned from qc	-	3	-	-
Reporting problems	-	3	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. deliver complete jewellery/accessories on time by reporting problems faced or anticipated well in advance	-	3	-	-
NOS Total	6	44	-	-









National Occupational Standards (NOS) Parameters

NOS Code	G&J/N1404
NOS Name	Operate spot welding machine in imitation jewellery
Sector	Gem & Jewellery
Sub-Sector	Imitation Jewellery
Occupation	Welding
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	27/05/2021
Next Review Date	27/05/2024
NSQC Clearance Date	27/05/2021









G&J/N1405: Understand and change copper diodes as per the job

Description

This OS unit is about operating spot welding machine in fashion jewellery

Elements and Performance Criteria

Using copper diodes

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

- **PC1.** use copper diodes as per the job
- **PC2.** use different copper diodes for spot welding jewellery/ accessories

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** companys policies on: quality, delivery timelines, safety and hazards, integrity, property rights (ipr), and personnel management
- KU2. importance of individuals role in the workflow
- **KU3.** reporting structure
- **KU4.** fashion jewellery and accessories making process
- **KU5.** types of jewellery (product, styles, regional, traditional, making technique)
- **KU6.** spot welding two metal parts, and broken parts, resize rings, earring post, pendant loop, etc. with high precision using welding equipments

Generic Skills (GS)

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

- **GS1.** prepare notes, task lists and schedule with co-workers
- **GS2.** prepare progress reports
- **GS3.** read notes and put notes on design
- **GS4.** read company rules and compliance documents required to complete the work
- **GS5.** discuss task lists, schedules and work-loads with co-workers
- **GS6.** question co-workers appropriately in order to understand the nature of problem and to make a diagnosis
- **GS7.** keep seniors informed about the progress of work
- **GS8.** make decisions pertaining to the concerned area of work to implement them on personal or organizational level
- **GS9.** plan and organize the work according to the requirement by doing time management so the work goal can be achieved
- **GS10.** use customer centric approach that provides a positive customer experience before and after the sale in order to drive repeat business, customer loyalty and profits









- **GS11.** think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s)
- **GS12.** identify immediate or temporary solutions to resolve delays
- **GS13.** analyze activities by breaking them down into single and manageable components
- **GS14.** anticipate process disruption and reasons for delay









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Using copper diodes	4	6	-	-
PC1. use copper diodes as per the job	2	3	-	-
PC2. use different copper diodes for spot welding jewellery/ accessories	2	3	-	-
NOS Total	4	6	-	-









National Occupational Standards (NOS) Parameters

NOS Code	G&J/N1405
NOS Name	Understand and change copper diodes as per the job
Sector	Gem & Jewellery
Sub-Sector	Imitation Jewellery
Occupation	Welding
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	27/05/2021
Next Review Date	27/05/2024
NSQC Clearance Date	27/05/2021









G&J/N9904: Coordinate with co-workers

Description

This OS unit is about communicating with colleagues and seniors in order to maintain smooth work flow

Elements and Performance Criteria

Interacting with supervisor

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

- **PC 1.** understand the work output requirements and work accordingly
- **PC 2.** communicate to reporting supervisor about process-flow improvements, product defects received from previous process, repairs and maintenance of tools and machinery as required
- **PC 3.** handover completed work to supervisor
- PC 4. deliver quality work on time as required by reporting any anticipated reasons
- PC 5. comply with company policy and rules and work accordingly

Interacting with colleagues and other departments

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

- **PC 6.** put team over individual goals and work with team
- PC 7. resolve conflicts
- PC 8. learn how to multi-task relevant activities and apply that in various situations
- **PC 9.** work with colleagues of other departments

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** companys policies on personnel management
- **KU2.** work flow involved in companys jewellery manufacturing process
- **KU3.** importance of the individuals role in the workflow
- **KU4.** reporting structure
- **KU5.** various categories of people that one is required to communicate and coordinate within the organization
- **KU6.** various components of effective communication
- **KU7.** key elements of active listening
- **KU8.** expressing and addressing grievances appropriately and effectively

Generic Skills (GS)

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

GS1. write instructions, remarks, job sheets, basic information, technical details etc. in preferred local language of communication and english









- **GS2.** read company rules and compliance documents required to complete the work
- **GS3.** discuss task lists, schedules and work-loads with co-workers
- **GS4.** question co-workers appropriately in order to understand the nature of problem and to make a diagnosis
- **GS5.** keep seniors informed about the progress of work
- **GS6.** make decisions pertaining to the concerned area of work to implement them on personal or organizational level
- **GS7.** plan and organize the work according to the requirement by doing time management so the work goal can be achieved
- **GS8.** check that your own work meets customer requirements so convey accurate information to all
- **GS9.** think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s)
- **GS10.** identify immediate or temporary solutions to resolve delays
- **GS11.** analyze needs, requirements and dependencies in order to meet your work requirements
- **GS12.** use prior experience to observe and reflect for development of ideas
- **GS13.** anticipate process disruption and reasons for delay









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Interacting with supervisor	3	7	-	-
PC 1. understand the work output requirements and work accordingly	1	2	-	-
PC 2. communicate to reporting supervisor about process-flow improvements, product defects received from previous process, repairs and maintenance of tools and machinery as required	-	1	-	-
PC 3. handover completed work to supervisor	-	1	-	-
PC 4. deliver quality work on time as required by reporting any anticipated reasons	1	1	-	-
PC 5. comply with company policy and rules and work accordingly	1	2	-	-
Interacting with colleagues and other departments	2	8	-	-
PC 6. put team over individual goals and work with team	1	2	-	-
PC 7. resolve conflicts	-	3	-	-
PC 8. learn how to multi-task relevant activities and apply that in various situations	-	1	-	-
PC 9. work with colleagues of other departments	1	2	-	-
NOS Total	5	15	-	-









National Occupational Standards (NOS) Parameters

NOS Code	G&J/N9904
NOS Name	Coordinate with co-workers
Sector	Gem & Jewellery
Sub-Sector	Imitation Jewellery
Occupation	Casting
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	27/05/2021
Next Review Date	27/05/2024
NSQC Clearance Date	27/05/2021









G&J/N9905: Maintain occupational health and safety

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

The scope covers the following:

- This unit/task covers the following:
- Communicating potential accident points
- Using safety gear

Elements and Performance Criteria

Communicating potential accident points

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

- **PC1.** spot and report potential hazards on time
- PC2. follow company policy and rules regarding use of hazardous materials
- **PC3.** attend and actively participate in the health and safety campaigns organised by the company *Using safety gear*

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

PC4. use or wear safety gear as per the rules of the company

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** companys policies on handling: harmful chemicals and sharp tools, safety and hazards of machines, fire safety and, disposal of harmful chemicals and materials
- **KU2.** work flow involved in companys jewellery manufacturing process
- KU3. importance of the individuals role in the workflow
- **KU4.** reporting structure
- **KU5.** how different chemicals react and what could be the danger from them
- **KU6.** how to use machines and tools without causing bodily harm
- KU7. fire safety education
- KU8. first aid execution
- **KU9.** disposal of hazardous chemicals, tools and materials by following prescribed environmental norms or as per company policy
- KU10. companys policies on: safety and hazardsand personnel management
- **KU11.** reporting structure
- **KU12.** how to use machines and tools without suffering bodily harm









Generic Skills (GS)

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

- **GS1.** prepare notes, task lists and schedule with co-workers
- **GS2.** prepare progress reports
- **GS3.** read notes and put notes on design
- **GS4.** read company rules and compliance documents required to complete the work
- **GS5.** discuss task lists, schedules and work-loads with co-workers
- **GS6.** question co-workers appropriately in order to understand the nature of problem and to make a diagnosis
- **GS7.** keep seniors informed about the progress of work
- **GS8.** make decisions pertaining to the concerned area of work to implement them on personal or organizational level
- GS9. plan and organize the work to meet health, safety and security requirements
- **GS10.** use customer centric approach that provides a positive customer experience before and after the sale in order to drive repeat business, customer loyalty and profits
- **GS11.** think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s)
- **GS12.** identify immediate or temporary solutions to resolve delays
- **GS13.** analyze activities by breaking them down into single and manageable components
- **GS14.** anticipate process disruption and reasons for delay
- **GS15.** effectively communicate the danger
- **GS16.** keep all the tools in an organised manner so as to avoid accidents
- **GS17.** keep the work environment safe and clean
- **GS18.** report potential sources of danger
- **GS19.** follow prescribed procedure in the event of an accident
- **GS20.** wear appropriate safety gear to avoid an accident
- **GS21.** learn from past mistakes regarding use of hazardous machines or chemicals
- **GS22.** spot danger
- **GS23.** report potential sources of danger
- **GS24.** follow prescribed procedure in the event of an accident
- **GS25.** wear appropriate safety gear to avoid an accident









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Communicating potential accident points	2	4	-	-
PC1. spot and report potential hazards on time	1	1	-	-
PC2. follow company policy and rules regarding use of hazardous materials	-	2	-	-
PC3. attend and actively participate in the health and safety campaigns organised by the company	1	1	-	-
Using safety gear	1	1	-	-
PC4. use or wear safety gear as per the rules of the company	1	1	-	-
NOS Total	3	5	-	-









National Occupational Standards (NOS) Parameters

NOS Code	G&J/N9905
NOS Name	Maintain occupational health and safety
Sector	Gem & Jewellery
Sub-Sector	Imitation Jewellery, Cast and diamonds-set jewellery, Handmade Gold and Gems-set Jewellery, Gemstone Processing, Silver Smithing, Jewellery Retail, Diamond Processing
Occupation	Generic
NSQF Level	3
Credits	1
Version	3.0
Last Reviewed Date	27/05/2021
Next Review Date	27/05/2024
NSQC Clearance Date	27/05/2021

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.

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/N1404.Operate spot welding machine in imitation jewellery	6	44	-	-	50	20
G&J/N1405.Understand and change copper diodes as per the job	4	6	-	-	10	60
G&J/N9904.Coordinate with co-workers	5	15	-	-	20	10
G&J/N9905.Maintain occupational health and safety	3	5	-	-	8	10
Total	18	70	-	-	88	100









Acronyms

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









Glossary

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 (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	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 (KU)	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.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	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.
Electives	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.
Options	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.