

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR GEMS AND JEWELLERY INDUSTRY

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack - Spot Welder – Imitation Jewellery

SECTOR: GEMS & JEWELLERY

SUB-SECTOR: Imitation Jewellery

OCCUPATION: Welding

REFERENCE ID: G&J/Q1403

ALIGNED TO: : NCO - 2015/NIL

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.

Job Details

Qualifications Pack Code	G&J/Q1403		
Job Role	Spot Welder – Imitation Jewellery		
Credits (NSQF)	TBD	Version number	1.0
Sector	Gems & Jewellery	Drafted on	28/08/2016
Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017
Occupation	Welding	Next review date	31/07/2021
NSQC Clearance on*	DD/MM/YYYY		

*only after clearance from NSQC

Job Role	Spot Welder – Imitation Jewellery
Role Description	This unit is about operating spot welding machine in imitation jewellery and welding the component part or assembly at the precise location.
NSQF level	3
Minimum Educational Qualifications*	Basic Literacy Skill
Maximum Educational Qualifications*	Not applicable
Training (Suggested but not mandatory)	Not applicable
Minimum job entry age	16 years
Experience	Not applicable
Applicable National Occupational Standards (NOS)	Compulsory: <ol style="list-style-type: none"> G&J/N1404 Operate spot welding machine in imitation jewellery G&J/N1405 Understand and change copper diodes as per the job G&J/N9904 Coordinate with co-workers G&J/N9905 Maintain safe work environment
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 Skills	Core skills or generic skills are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. In the context of the OS, these include communication related skills that are applicable to most job roles.

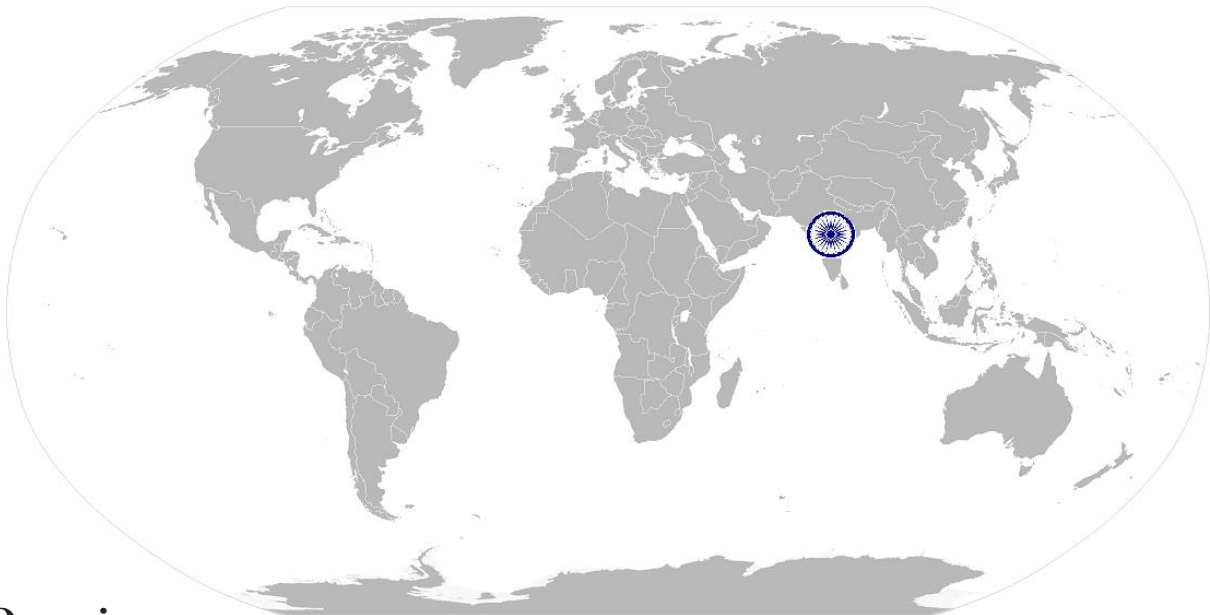
Acronyms

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

G&J/N1404

Operate spot welding machine in imitation jewellery

National Occupational Standard



Overview

This unit is about operating spot welding machine in imitation jewellery. It focuses on spot soldering in jewellery pieces and accessories.

G&J/N1404

Operate spot welding machine in imitation jewellery

National Occupational Standard

Unit Code	G&J/N1404
Unit Title (Task)	Operate spot welding machine in imitation jewellery
Description	This OS unit is about operating spot welding machine in imitation jewellery
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Spot welding jewellery • Controlling damages to the product and timely delivery of it as per target • Checking quality • Reporting problems
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Spot welding jewellery	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Collect the components as required by the designs</p> <p>PC2. Accumulate metal and components from the relevant person</p> <p>PC3. Spot weld the component/ part at the precise location</p> <p>PC4. Spot weld the jewellery pieces/ accessories as per the design</p> <p>PC5. Handle spot welding equipments safely</p>
Controlling damages to the product and timely delivery of it as per target	<p>PC6. Minimize damage to the product while working</p> <p>PC7. Align and weld the component part or assembly at the precise location</p> <p>PC8. Deliver the product timely to next process</p> <p>PC9. Rectify number of jewellery pieces/ accessories as per target deliverable and quality approved by the supervisor</p>
Checking quality	<p>PC10. Produce defect-free products</p> <p>PC11. Deliver defect free and evenly set jewellery pieces and accessory</p> <p>PC12. Deliver maximum number of Quality Control certified pieces/ accessories</p> <p>PC13. Rework on the product returned from QC</p>
Reporting problems	<p>PC14. Deliver complete jewellery/accessories on time by reporting problems faced or anticipated well in advance</p>
Knowledge and Understanding (K)	
A. Organizational Context	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Company's policies on: quality, delivery timelines, safety and hazards, integrity, property rights (IPR), and personnel management</p> <p>KA2. Importance of individual's role in the workflow</p> <p>KA3. Reporting Structure</p>
B. Technical Knowledge	<p>KB1. Imitation jewellery and accessories making process</p> <p>KB2. Types of jewellery (product, styles, regional, traditional, making technique)</p> <p>KB3. Spot welding with high precision using spot welding machine fitted with different sizes of copper diodes</p>

G&J/N1404

Operate spot welding machine in imitation jewellery

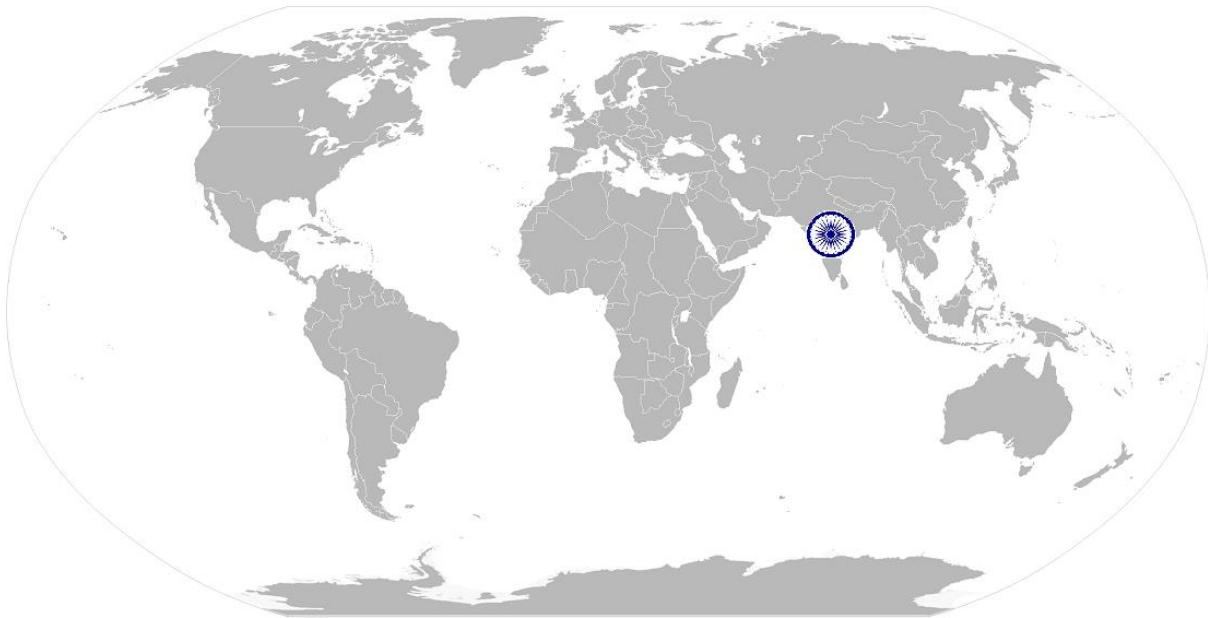
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Prepare notes, task lists and schedule with co-workers SA2. Prepare progress reports
	Reading Skills
	SA3. Read notes and put notes on design SA4. Read company rules and compliance documents required to complete the work
	Oral Communication (Listening and Speaking skills)
	SA5. Discuss task lists, schedules and work-loads with co-workers SA6. Question co-workers appropriately in order to understand the nature of problem and to make a diagnosis SA7. Keep seniors informed about the progress of work
	B. Professional Skills
Decision Making	
SB1. Make decisions pertaining to the concerned area of work to implement them on personal or organizational level	
Plan and Organize	
SB2. Plan and organize the work as per the requirement	
Customer Centricity	
SB3. 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	
Problem Solving	
SB4. Think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s) SB5. Identify immediate or temporary solutions to resolve delays	
Analytical Thinking	
SB6. Analyze activities by breaking them down into single and manageable components SB7. Pass on relevant information to others	
Critical Thinking	
SB8. Anticipate process disruption and reasons for delay	

G&J/N1404

Operate spot welding machine in imitation jewellery

NOS Version Control

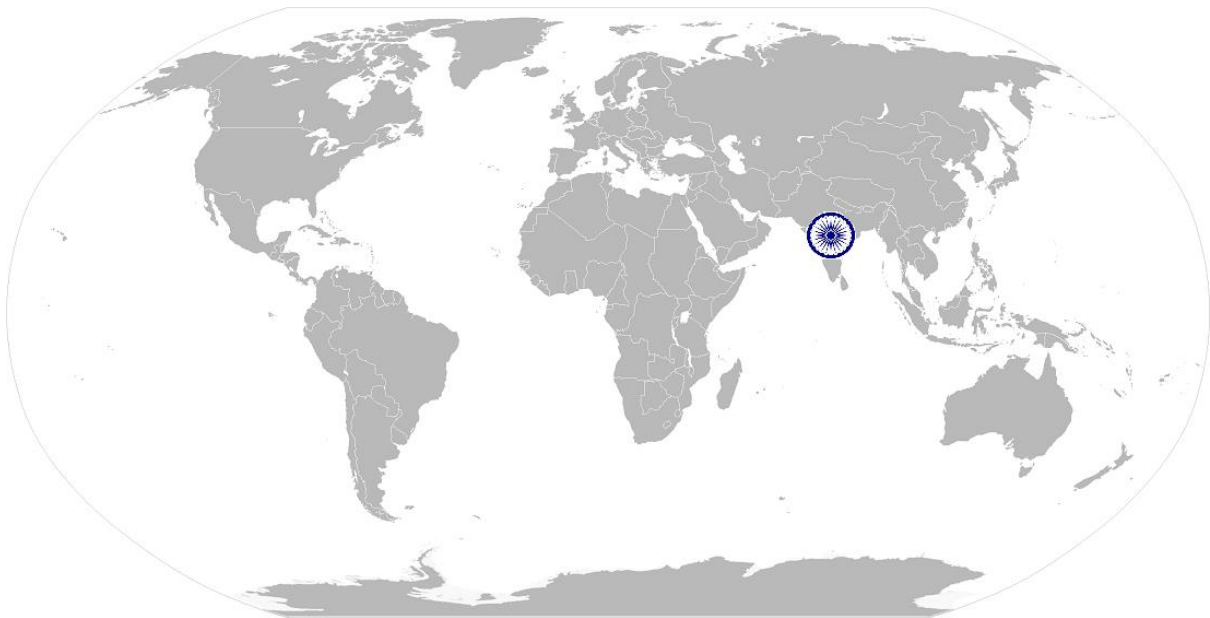
NOS Code	G&J/N1404		
Credits (NSQF)	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017
Occupation	Welding	Next review date	31/07/2021



G&J/N1405

Understand and change copper diodes as per the job

National Occupational Standard



Overview

This unit is about changing copper diodes as per the requirement of jewellery pieces and accessories.

G&J/N1405

Understand and change copper diodes as per the job

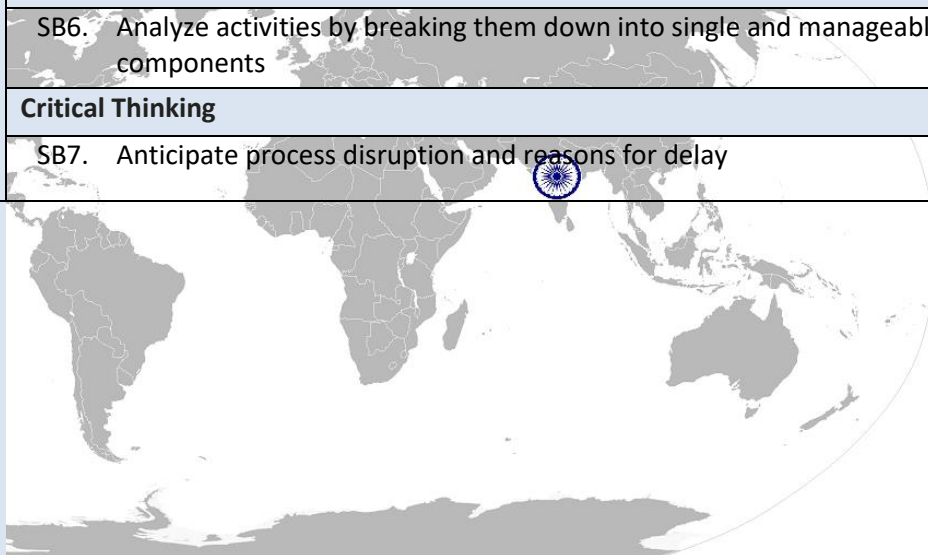
National Occupational Standard

Unit Code	G&J/N1405
Unit Title (Task)	Understand and change copper diodes as per the job
Description	This OS unit is about operating spot welding machine in fashion jewellery
Scope	This unit/task covers the following: <ul style="list-style-type: none"> Using copper diodes
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Using copper diodes	To be competent, the user/individual on the job must be able to: <ul style="list-style-type: none"> PC1. Use copper diodes as per the job PC2. Use different copper diodes for spot welding jewellery/ accessories
Knowledge and Understanding (K)	
A. Organizational Context	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. Company's policies on: quality, delivery timelines, safety and hazards, integrity, property rights (IPR), and personnel management KA2. Importance of individual's role in the workflow KA3. Reporting Structure
B. Technical Knowledge	<ul style="list-style-type: none"> KB1. Fashion jewellery and accessories making process KB2. Types of jewellery (product, styles, regional, traditional, making technique) KB3. Spot welding two metal parts, and broken parts, resize rings, earring post, pendant loop, etc. with high precision using welding equipments
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: <ul style="list-style-type: none"> SA1. Prepare notes, task lists and schedule with co-workers SA2. Prepare progress reports
	Reading Skills
	<ul style="list-style-type: none"> SA3. Read notes and put notes on design SA4. Read company rules and compliance documents required to complete the work
	Oral Communication (Listening and Speaking skills)
	<ul style="list-style-type: none"> SA5. Discuss task lists, schedules and work-loads with co-workers SA6. Question co-workers appropriately in order to understand the nature of problem and to make a diagnosis SA7. Keep seniors informed about the progress of work
B. Professional Skills	Decision Making

G&J/N1405

Understand and change copper diodes as per the job

	SB1. Make decisions pertaining to the concerned area of work to implement them on personal or organizational level
	Plan and Organize
	SB2. Plan and organize the work according to the requirement by doing time management so the work goal can be achieved
	Customer Centricity
	SB3. 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
	Problem Solving
	SB4. Think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s)
	SB5. Identify immediate or temporary solutions to resolve delays
	Analytical Thinking
	SB6. Analyze activities by breaking them down into single and manageable components
Critical Thinking	
SB7. Anticipate process disruption and reasons for delay	

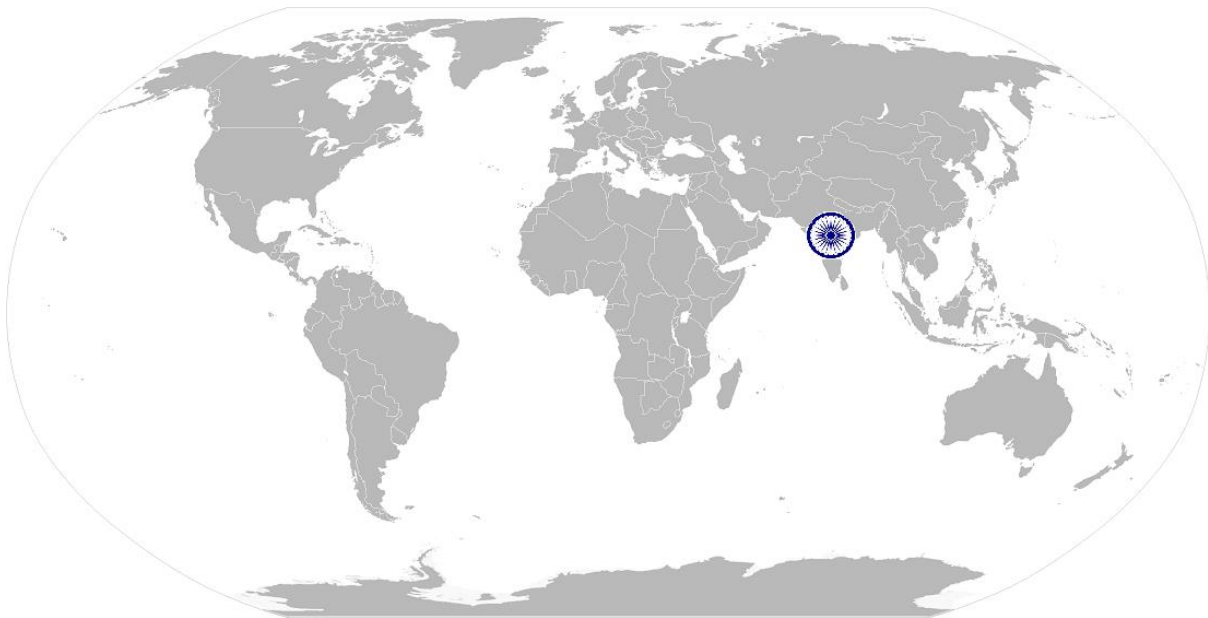


G&J/N1405

Understand and change copper diodes as per the job

NOS Version Control

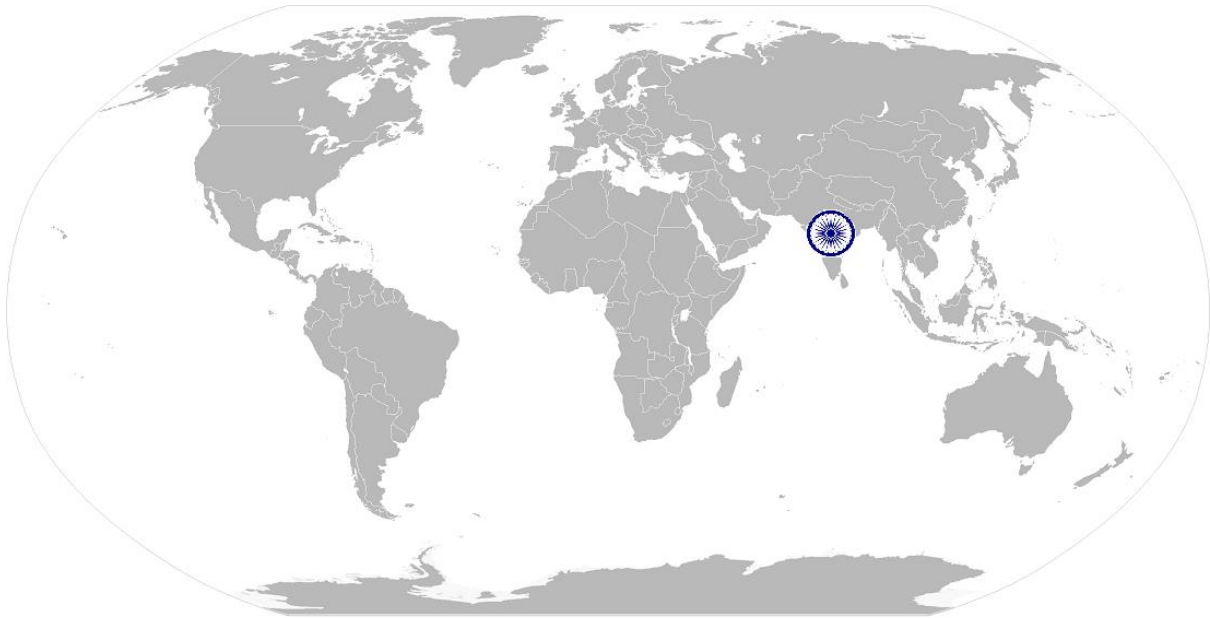
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Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017
Occupation	Welding	Next review date	31/07/2021



G&J/N9904

Coordinate with co-workers

National Occupational Standard



Overview

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

G&J/N9904

Coordinate with co-workers

National Occupational Standard

Unit Code	G&J/N9904
Unit Title (Task)	Coordinate with co-workers
Description	This OS unit is about communicating with colleagues and seniors in order to maintain smooth work flow
Scope	This unit/task covers the following: <ul style="list-style-type: none"> • Interacting with supervisor • Interacting with colleagues within and other the department
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Interacting with supervisor	To be competent, the user/individual on the job must be able to: <ul style="list-style-type: none"> PC1. Deliver the work output as per requirements and communicate the same 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. Handover completed work to supervisor PC4. Deliver quality work on time as required by reporting any anticipated reasons for delay PC5. Comply with company policy and rules
Interacting with colleagues within and outside the department	<ul style="list-style-type: none"> PC6. Put team over individual goals and work with team PC7. Resolve conflicts PC8. Learn how to multi-task relevant activities and use them accordingly PC9. Work with colleagues of other departments
Knowledge and Understanding (K)	
A. Organizational Context	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. Company's policies on personnel management KA2. Work flow involved in company's jewellery manufacturing process KA3. Importance of the individual's role in the workflow KA4. Reporting structure
B. Technical Knowledge	<ul style="list-style-type: none"> KB1. Various components of effective communication KB2. Key elements of active listening KB3. Various categories of people that one is required to communicate and coordinate within the organization
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: <ul style="list-style-type: none"> SA1. Complete accurate work in writing with attention to detail such as; writing job sheets, technical details, basic information etc.
	Reading Skills

G&J/N9904

Coordinate with co-workers

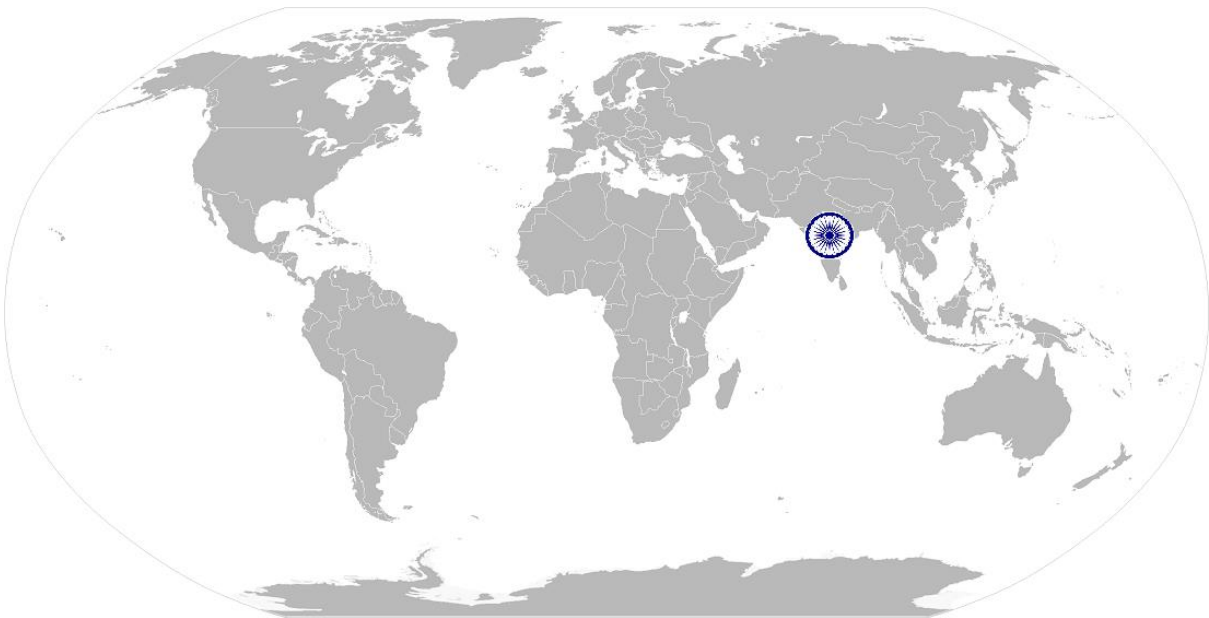
	SA2. Read company rules and compliance documents required to complete the work
	Oral Communication (Listening and Speaking skills)
	SA3. Discuss task lists, schedules, and work-loads with co-workers SA4. Question co-workers appropriately in order to understand the nature of problem and to make a diagnosis SA5. Keep seniors informed about the progress of work
B. Professional Skills	Decision Making
	SB1. Make decisions pertaining to the concerned area of work to implement them on personal or organizational level
	Plan and Organize
	SB2. Plan and organize the work according to the requirement by doing time management so the work goal can be achieved
	Customer Centricity
	SB3. Convey accurate information to all internal as well as external customers (or right information to right person)
	Problem Solving
	SB4. Think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s) SB5. Identify immediate or temporary solutions to resolve delays
	Analytical Thinking
	SB6. Provide relevant information to others SB7. Analyze needs, requirements and dependencies in order to meet your work requirements
Critical Thinking	
SB8. Anticipate process disruption and reasons for delay	

G&J/N9904

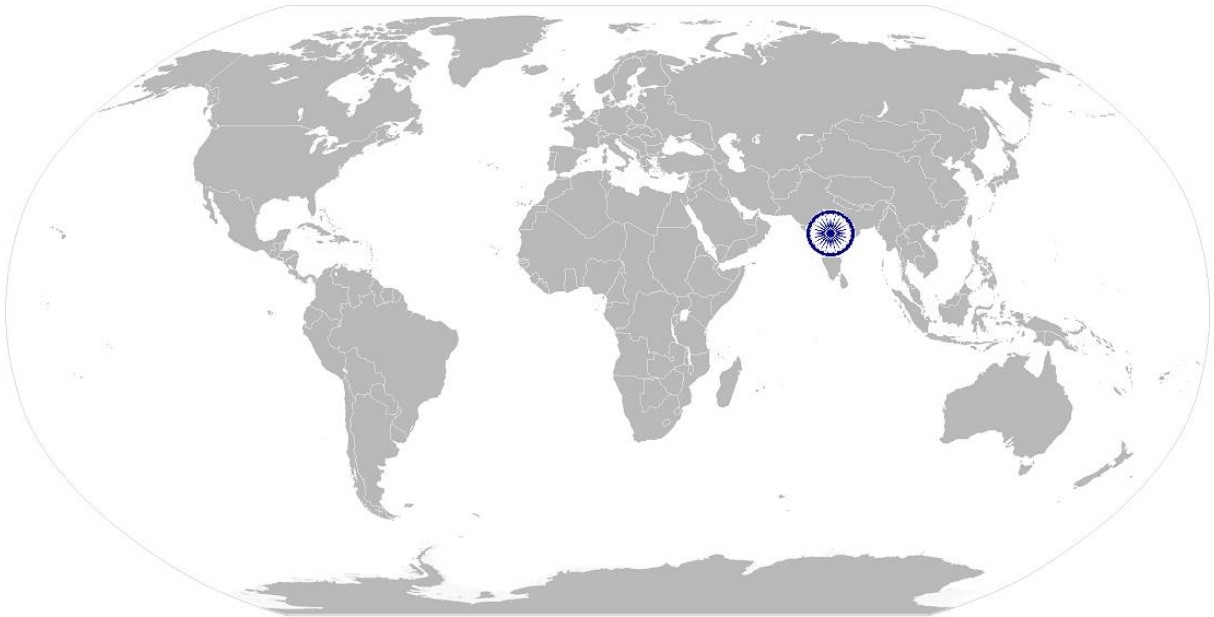
Coordinate with co-workers

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Industry Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017
Occupation	Welding	Next review date	31/07/2021



National Occupational Standard



Overview

This unit is about the individual's commitment towards reporting potential hazards and accidents in order to make the work environment safe for self and colleagues.

G&J/N9905

Maintain safe work environment

Unit Code	G&J/N9905
Unit Title (Task)	Maintain safe work environment
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
Scope	This unit/task covers the following: <ul style="list-style-type: none"> • Understanding of potential sources of accidents and communicating • Using safety gears • Understanding of safety procedures
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Understanding of potential sources of accidents and communicating	To be competent, the user/individual on the job must be able to PC1. Spot and report potential hazards on time
Understanding of safety procedures	PC2. Understand which safety gear must be used for a particular task and use when required PC3. Understand and follow the evacuation procedure properly during a fire
Knowledge and Understanding (K)	
A. Organizational Context	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. Company's policies on handling: harmful chemicals and sharp tools, safety and hazards of machines, fire safety and, disposal of harmful chemicals and materials KA2. Work flow involved in company's jewellery manufacturing process KA3. Importance of the individual's role in the workflow KA4. Reporting structure
B. Technical Knowledge	<ul style="list-style-type: none"> KB1. How different chemicals react and what could be the danger from them KB2. How to use machines and tools without causing bodily harm KB3. Fire safety education KB4. First aid execution KB5. Disposal of hazardous chemicals, tools and materials by following prescribed environmental norms or as per company policy
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: <ul style="list-style-type: none"> SA1. Prepare notes, task lists and schedule with co-workers SA2. Prepare progress reports

G&J/N9905

Maintain safe work environment

	Reading Skills
	SA3. Read notes and put notes on design SA4. Read company rules and compliance documents required to complete the work
	Oral Communication (Listening and Speaking skills)
	SA5. Discuss task lists, schedules, and work-loads with co-workers SA6. Question co-workers appropriately in order to understand the nature of problem and to make a diagnosis SA7. Keep seniors informed about the progress of work
	B. Professional Skills
	Decision Making
	SB1. Make decisions pertaining to the concerned area of work to implement them on personal or organizational level
Plan and Organize	
SB2. Plan and organize the work to meet health, safety and security requirements	
Customer Centricity	
SB3. Use customer centric approach that provides a positive customer experience before and after the sale in order to give repeat business, customer loyalty and profits	
Problem Solving	
SB4. Think through the problem, evaluate the possible solution (s) and suggest an optimum/ best possible solution (s) SB5. Identify immediate or temporary solutions to resolve delays	
Analytical Thinking	
SB6. Analyze activities by breaking them down into single and manageable components	
Critical Thinking	
SB7. Anticipate process disruption and reasons for delay	

G&J/N9905

Maintain safe work environment

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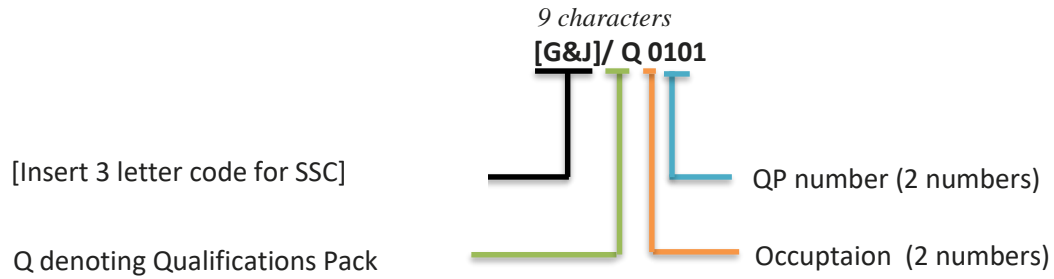
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Credits (NSQF)	TBD	Version number	1.0
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Industry Sub-sector	Imitation Jewellery	Last reviewed on	10/11/2017
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Annexure

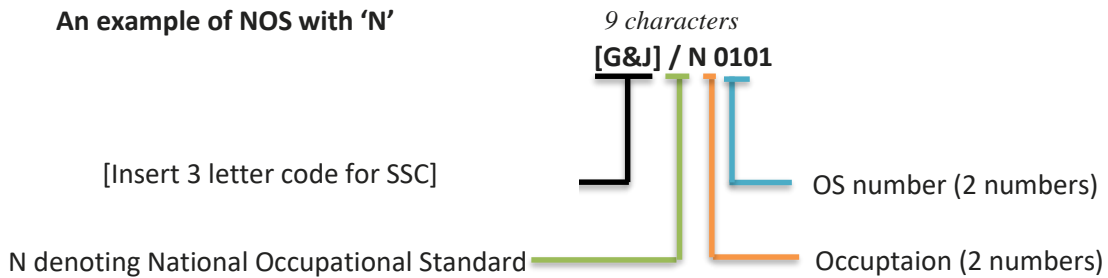
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



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

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

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

Criteria For Assessment Of Trainees

Job Role Spot Welder – Imitation Jewellery

Qualification Pack G&J/Q1403

Sector Skill Council Gem & Jewellery

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 50% of aggregate marks to successfully clear the assessment.
7. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

Compulsory NOS				Marks Allocation	
Total Marks: 100				Theory	Skills Practical
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
1. G&J/N1404 Operate spot welding machine in imitation jewellery	PC1. Collect the components as required by the designs	50	5	0	5
	PC2. Accumulate metal and components from the relevant person		5	0	5
	PC3. Spot weld the component/ part at the precise location		5	3	3
	PC4. Spot weld the jewellery pieces/ accessories as per the design		3	0	3
	PC5. Handle spot welding equipments safely		3	0	3
	PC6. Minimize damage to the product while working		3	0	3
	PC7. Align and weld the component part or assembly at the precise location		5	1	3

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC8. Deliver the product timely to next process		2	0	2
	PC9. Rectify number of jewellery pieces/ accessories as per target deliverable and quality approved by the supervisor		3	0	3
	PC10. Produce defect-free products		5	2	2
	PC11. Deliver defect free and evenly set jewellery pieces and accessory		3	0	3
	PC12. Deliver maximum number of Quality Control certified pieces/ accessories		3	0	3
	PC13. Rework on the product returned from QC		3	0	3
	PC14. Deliver complete jewellery/accessories on time by reporting problems faced or anticipated well in advance		2	0	3
	Total			50	6

Compulsory NOS				Marks Allocation	
Total Marks: 100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
2. G&J/N1405 Understand and change copper diodes as per the job	PC1. Use copper diodes as per the job	10	5	2	3
	PC2. Use different copper diodes for spot welding jewellery/ accessories		5	2	3
	Total		10	4	6

Compulsory NOS				Marks Allocation	
Total Marks:100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
3. G&J/N9904 Coordinate with co-workers	PC1. Deliver the work output as per requirements and communicate the same	20	3	1	2
	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		3	1	2
	PC3. Handover completed work to supervisor		2	0	2
	PC4. Deliver quality work on time as required by reporting any anticipated reasons for delay		1	0	1
	PC5. Comply with company policy and rules		2	0	2
	PC6. Put team over individual goals and work with team		2	1	1
	PC7. Resolve conflicts		2	1	1
	PC8. Learn how to multi-task relevant activities and use them accordingly		2	0	2
	PC9. Work with colleagues of other departments		3	1	2
	Total			20	5

Compulsory NOS				Marks Allocation	
Total Marks:100					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
4. G&J/N9905 Maintain safe work environment	PC1. Spot and report potential hazards on time	20	10	3	7
	PC2. Understand which safety gear must be used for a particular task and use when required		5	0	5
	PC3. Understand and follow the evacuation procedure properly during a fire		5	2	3
	Total		20	5	15