



Helper Fabrication

QP Code: CON/Q1201

Version: 3.0

NSQF Level: 2

Construction Skill Development Council of India || CPB 103 & 104 (1st Floor), Block 4B, DLF Corporate Park, Phase III, MG Road
Gurgaon-122002 || email:standards@csdcindia.org



Qualification Pack



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CON/Q1201: Helper Fabrication

Brief Job Description

A Helper Fabrication is responsible for assisting in various fabrication-related, such as cutting, welding, fitting, bolting and handling fabrication materials, tools and consumables under supervision.

Personal Attributes

The individual should be physically fit and mentally alert. The person should have basic verbal and written communication skills with the ability to work in co-ordination with others.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [CON/N1201: Handle the structural steel fabrication materials, tools, tackles and consumables](#)
2. [CON/N1202: Assist in the fabrication activities](#)
3. [CON/N9001: Work according to personal health, safety and environment protocols at construction site](#)
4. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Construction
Sub-Sector	
Occupation	Fabrication
Country	India
NSQF Level	2
Credits	8
Aligned to NCO/ISCO/ISIC Code	NCO-2015/9313.9900
Minimum Educational Qualification & Experience	No formal education prescribed OR Ability to read and write



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Minimum Level of Education for Training in School	Ability to read and write
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	31/08/2026
Deactivation Date	18/02/2025
NSQC Approval Date	31/08/2023
Version	3.0
Reference code on NQR	QG-02-CO-00805-2023-V2-CSDCI
NQR Version	1



CON/N1201: Handle the structural steel fabrication materials, tools, tackles and consumables

Description

This unit is about handling materials, tools, tackles and consumables used for fabrication of structural steel elements.

Scope

The scope covers the following :

- Handle fabrication tools, tackles and consumables

Elements and Performance Criteria

Handle fabrication tools, tackles and consumables

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

- PC1.** select and store different tools for welding operations as per the supervisor's instructions
- PC2.** coil the cables and pipes appropriately and shift them as instructed
- PC3.** stack cables and other items as per the manufacturer's guidelines, ensuring the stability of stacks
- PC4.** shift gas cylinders using trolleys or other suitable mechanical means, maintaining them in upright position
- PC5.** follow the recommended safety measures, e.g. stacking full and empty cylinders separately
- PC6.** shift and stack lightweight materials applying the ergonomics of material handling
- PC7.** perform basic maintenance of hand tools and tackles used in material handling

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the use of different types of kits for welding works
- KU2.** the various shielding gas cylinders
- KU3.** the difference between gases based on their uses and applications related to gas cutting works
- KU4.** the difference between different types of filler rods used in different welding processes
- KU5.** the difference between different types of grinding wheels
- KU6.** the use of different types of grinders, such as fixed grinding machine, angle or portable grinders bend grinders etc
- KU7.** different types of consumables used with different grinding machines
- KU8.** the difference between various tools and tackles employed in fit-up operations
- KU9.** the standard practices in fabrication works
- KU10.** the safety rules and regulation for handling and storing required fabrication tools, equipment and materials



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- KU11.** personal protection including the use of related safety gears and equipment
- KU12.** different types of welding processes
- KU13.** different kits, tools and tackles used in the fabrication process
- KU14.** different types of consumables, their classification based upon size, material and application in the welding process
- KU15.** different types of gases used for fabrication activity and their distinguishing factors
- KU16.** the importance of transporting gas cylinders in upright position
- KU17.** the stacking and storage of different consumables used in different fabrication processes
- KU18.** the application of ergonomic principles while carrying loads

Generic Skills (GS)

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

- GS1.** maintain the appropriate data and records
- GS2.** read the appropriate reports and literature concerning the field of work
- GS3.** communicate professionally with all the stakeholders
- GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- GS5.** coordinate with the co-workers to achieve the work objectives
- GS6.** identify possible disruptions to work and take appropriate mitigation measures
- GS7.** take prompt action to deal with workplace emergencies and accidents
- GS8.** evaluate all possible solutions to work-related problems and select the best one
- GS9.** follow the recommended practices for the timely completion of work and achievement of organizational objectives



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Handle fabrication tools, tackles and consumables</i>	30	60	-	10
PC1. select and store different tools for welding operations as per the supervisor's instructions	-	-	-	-
PC2. coil the cables and pipes appropriately and shift them as instructed	-	-	-	-
PC3. stack cables and other items as per the manufacturer's guidelines, ensuring the stability of stacks	-	-	-	-
PC4. shift gas cylinders using trolleys or other suitable mechanical means, maintaining them in upright position	-	-	-	-
PC5. follow the recommended safety measures, e.g. stacking full and empty cylinders separately	-	-	-	-
PC6. shift and stack lightweight materials applying the ergonomics of material handling	-	-	-	-
PC7. perform basic maintenance of hand tools and tackles used in material handling	-	-	-	-
NOS Total	30	60	-	10



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N1201
NOS Name	Handle the structural steel fabrication materials, tools, tackles and consumables
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
NSQF Level	2
Credits	3
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023



CON/N1202: Assist in the fabrication activities

Description

This unit is about providing assistance in the fabrication activities.

Scope

The scope covers the following :

- Assist in welding/ gas cutting/ grinding operations
- Assist in fitting operations
- Carry out bolting connections

Elements and Performance Criteria

Assist in welding/ gas cutting/ grinding operations

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

- PC1.** carry the welding tools, equipment, grinding machines and consumables to the identified location as per the given instructions
- PC2.** clean the base material to remove any dust, oil, rust, paint etc., from the surface
- PC3.** check the equipment cables and gas pipes are not tangled, and untangle them as required
- PC4.** store and stack the consumables at the site as per the given instructions

Assist in fitting operations

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

- PC5.** remove any waste, dust, scrap materials, and debris from the fabrication platform
- PC6.** position the tools, clamps and arrestors as per the supervisor's instructions
- PC7.** assist in taking and marking the relevant measurements
- PC8.** clean the components assemblies before their erection

Carry out bolting connections

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

- PC9.** select the correct bolts and bolt/ group location for fixing as per instructions
- PC10.** use washers and nuts as per instructions
- PC11.** tighten the bolts until the recommended torque is achieved
- PC12.** fix the bolts in a sequential manner as per the supervisor's instructions
- PC13.** ensure no scratches on the surface during the bolting operation

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the process of requesting tools and materials
- KU2.** the standard sizes of relevant fabrication tools and equipment and how to carry out their maintenance
- KU3.** the importance of cleaning joints during the welding activity



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- KU4.** the importance of removing paint and dust from the base metal surface
- KU5.** the importance of proper ventilation and illumination in the welding area
- KU6.** the importance of proper fitting
- KU7.** the process of preparing the fabrication platform
- KU8.** the importance of positioning clamps and arrestors correctly on the fabrication platform
- KU9.** the use of different tools and tackles in the fitting activity
- KU10.** the importance and process of proper marking on metal
- KU11.** different types of bolts
- KU12.** different relevant cleaning methods
- KU13.** different components of a bolting assembly
- KU14.** the common terminologies used in welding, gas cutting, bolting and fitting operations
- KU15.** the process of marking and measuring the dimensions of assemblies
- KU16.** the use of various tools and tackles in joining assemblies through bolted connections
- KU17.** the importance of practicing good housekeeping

Generic Skills (GS)

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

- GS1.** maintain the appropriate data and records
- GS2.** read the appropriate reports and literature concerning the field of work
- GS3.** communicate professionally with all the stakeholders
- GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- GS5.** coordinate with the co-workers to achieve the work objectives
- GS6.** identify possible disruptions to work and take appropriate mitigation measures
- GS7.** take prompt action to deal with workplace emergencies and accidents
- GS8.** evaluate all possible solutions to work-related problems and select the best one
- GS9.** follow the recommended practices for the timely completion of work and achievement of organizational objectives



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in welding/ gas cutting/ grinding operations</i>	9	25	-	4
PC1. carry the welding tools, equipment, grinding machines and consumables to the identified location as per the given instructions	-	-	-	-
PC2. clean the base material to remove any dust, oil, rust, paint etc., from the surface	-	-	-	-
PC3. check the equipment cables and gas pipes are not tangled, and untangle them as required	-	-	-	-
PC4. store and stack the consumables at the site as per the given instructions	-	-	-	-
<i>Assist in fitting operations</i>	10	20	-	3
PC5. remove any waste, dust, scrap materials, and debris from the fabrication platform	-	-	-	-
PC6. position the tools, clamps and arrestors as per the supervisor’s instructions	-	-	-	-
PC7. assist in taking and marking the relevant measurements	-	-	-	-
PC8. clean the components assemblies before their erection	-	-	-	-
<i>Carry out bolting connections</i>	11	15	-	3
PC9. select the correct bolts and bolt/ group location for fixing as per instructions	-	-	-	-
PC10. use washers and nuts as per instructions	-	-	-	-
PC11. tighten the bolts until the recommended torque is achieved	-	-	-	-
PC12. fix the bolts in a sequential manner as per the supervisor’s instructions	-	-	-	-
PC13. ensure no scratches on the surface during the bolting operation	-	-	-	-
NOS Total	30	60	-	10



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N1202
NOS Name	Assist in the fabrication activities
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
NSQF Level	2
Credits	3
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023



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

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Introduction to Employability Skills

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

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

Constitutional values - Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team

Diversity & Inclusion



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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

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

Essential Digital Skills

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

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

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

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

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

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

KU5. how to use basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

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

KU9. different types of financial products and services

KU10. how to compute income and expenses

KU11. importance of maintaining safety and security in financial transactions



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- KU12.** different legal rights and laws
- KU13.** how to operate digital devices and applications safely and securely
- KU14.** ways to identify business opportunities
- KU15.** types of customers and their needs
- KU16.** how to apply for a job and prepare for an interview
- KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

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



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	1	3	-	-
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-
PC10. calculate income, expenses, savings etc.	-	-	-	-



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



National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	12/03/2026
Next Review Date	12/03/2029
NSQC Clearance Date	12/03/2026

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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 knowledge part will be based on knowledge bank of questions created by Assessment Bodies subject to approval by SSC.
3. Individual assessment agencies will create unique question papers for knowledge/theory part for assessment of candidates as per assessment criteria given below.
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on assessment criteria.
5. The passing percentage for each QP will be 50%. To pass the Qualification Pack, every trainee should score a minimum of 50% individually in each NOS.
6. The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome.
7. The trainee shall be provided with a chance to repeat the test to correct his procedures in case of



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improper performance, with a deduction of marks for each iteration.

8. After the certain number of iteration as decided by SSC the trainee is marked as fail, scoring zero marks for the procedure for the practical activity.

9. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack within the specified timeframe set by SSC.

10. Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

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
CON/N1201.Handle the structural steel fabrication materials, tools, tackles and consumables	30	60	0	10	100	40
CON/N1202.Assist in the fabrication activities	30	60	0	10	100	40
CON/N9001.Work according to personal health, safety and environment protocols at construction site	30	70	0	0	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	110	220	0	20	350	100



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Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
EHS	Environment Health and Safety
MCQ	Multiple Choice Question
PPE	Personal Protective Equipment



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.



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Organisational Context	<p>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.</p>
Technical Knowledge	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
Core Skills/ Generic Skills (GS)	<p>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.</p>
Electives	<p>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.</p>
Options	<p>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.</p>