



MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



Assistant Construction Fitter

QP Code: CON/Q1202

Version: 2.0

NSQF Level: 3

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Qualification Pack

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CON/Q1202: Assistant Construction Fitter

Brief Job Description

Assistant Construction Fitter provides assistance in fitup activities by placing, positioning and fixing different components after conducting proper measurements, markings and edge preparation under the supervision of trade senior.

Personal Attributes

The individual should be physically fit and mentally alert and safety conscious to be able to work across various locations in extreme weather/site conditions, preferably not suffering from any respiratory disorder, vision defects and skin allergies due to exposure to light and heat. The person must be able to perform efficiently within a team, handle the various fabrication tools and materials.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [CON/N1203: Identify and mark structural steel elements to assist in fit-up of the same](#)
2. [CON/N1204: Identify, use various tools, tackles and handle heavy materials used in fit-up of fabricated components](#)
3. [CON/N1205: Assist in preparatory activities, edge repair and positioning of steel sections for fit-up](#)
4. [CON/N8001: Work effectively in a team to deliver desired results at the workplace](#)
5. [CON/N9001: Work according to personal health, safety and environment protocol at construction site](#)

Qualification Pack (QP) Parameters

Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
Country	India
NSQF Level	3



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Aligned to NCO/ISCO/ISIC Code	NCO-2015/7214.0800
Minimum Educational Qualification & Experience	10th Class with 1-2 Years of experience as a certified Helper “ Fabrication OR 10th Class with 1-2 Years of experience in case of a Non trained worker: experience of working in fitup works
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	04/04/2020
Next Review Date	24/07/2023
Deactivation Date	24/07/2023
NSQC Approval Date	22/08/2019
Version	2.0
Reference code on NQR	2019/CON/CSDCI/3298
NQR Version	2



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CON/N1203: Identify and mark structural steel elements to assist in fit-up of the same

Description

This unit describes the skills and knowledge required to identify and mark structural steel elements to assist in fit-up of the same

Scope

The scope covers the following :

- Identify the structural steel material for measurement and marking of fit-up

Elements and Performance Criteria

Identify the structural steel material for measurement and marking of fit-up

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

- PC1.** identify and distinguish the materials based on their shape, size and thickness
- PC2.** select materials as per requirements and instructions
- PC3.** conduct liner measurements like length, width, diameter, using proper measuring tools like tapers, rulers, calipers etc
- PC4.** read and understand hand sketches/ drawings to interpret fit up requirements
- PC5.** place the sections, plates, pipes or tubes in position as per instructions
- PC6.** mark on the surface of sections the position of bolts, plates or sections for fit-up as per instructions
- PC7.** recheck the markings w.r.t hand sketches to confirm its correctness
- PC8.** report any undulations or bends encountered during measurements to superiors

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** request procedure for tools & materials
- KU2.** housekeeping & other administrative rules
- KU3.** information flow hierarchy and appropriate modes of communications as applicable on site
- KU4.** different types of sections, plates etc.
- KU5.** identification and use of different measuring instruments
- KU6.** read and understand hand sketches/ drawings
- KU7.** how to handle heavy materials
- KU8.** safety hazards while working with heavy materials
- KU9.** methods of measuring and marking
- KU10.** correct procedures of tools and equipment usage for the grinding operations



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- KU11.** effect of different types and grades of grinding achievable by various tools to achieve required surface finish
- KU12.** personal protective equipment (PPE) and clothing that must be worn during the grinding activity and from where can it be obtained

Generic Skills (GS)

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

- GS1.** write in one or more language, preferably in the local language of the site
- GS2.** read one or more language, preferably in the local language of the site
- GS3.** read instructions, guidelines, sign boards, safety rules & safety tags instruction related to exit routes during emergency at the workplace
- GS4.** speak in one or more language, preferably in one of the local language of the site
- GS5.** listen and follow instructions / communication shared by superiors/ coworkers regarding team requirements or interfaces during work processes
- GS6.** orally communicate with co-workers regarding support required to complete the respective works
- GS7.** decide upon the measuring instruments to be used for carrying out given set of measurements
- GS8.** identify and use relevant tools effectively
- GS9.** complete work as per agreed time and quality
- GS10.** identify the marking to be checked in the hand sketch and refer the same while checking the actual marking
- GS11.** observe the gap between tape , line dori etc. and the metal surface during measurement to identify and locate any undulations



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identify the structural steel material for measurement and marking of fit-up</i>	30	70	-	-
PC1. identify and distinguish the materials based on their shape, size and thickness	-	-	-	-
PC2. select materials as per requirements and instructions	-	-	-	-
PC3. conduct liner measurements like length, width, diameter, using proper measuring tools like tapers, rulers, calipers etc	-	-	-	-
PC4. read and understand hand sketches/ drawings to interpret fit up requirements	-	-	-	-
PC5. place the sections, plates, pipes or tubes in position as per instructions	-	-	-	-
PC6. mark on the surface of sections the position of bolts, plates or sections for fit-up as per instructions	-	-	-	-
PC7. recheck the markings w.r.t hand sketches to confirm its correctness	-	-	-	-
PC8. report any undulations or bends encountered during measurements to superiors	-	-	-	-
NOS Total	30	70	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N1203
NOS Name	Identify and mark structural steel elements to assist in fit-up of the same
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	



Qualification Pack

CON/N1204: Identify, use various tools, tackles and handle heavy materials used in fit-up of fabricated components

Description

This unit describes the skills and knowledge required to identify and use various tools, tackles and handle heavy materials used in fit-up of fabricated components

Scope

The scope covers the following :

- Work according to standard health and safety requirements
- Identify and use of tools & tackles to be used in fit-up
- Shift structural steel sections to instructed locations

Elements and Performance Criteria

Work according to standard health and safety requirements

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

- PC1.** identify any potential hazard in the work area related to own work and report the same to appropriate authority
- PC2.** avoid any unsafe act by self particularly while working at site
- PC3.** avoid wearing any loose clothing and preferably wear the yard jumpsuit or any other uniform issued at site
- PC4.** select and correctly use personnel protective equipment as per work requirement
- PC5.** dispose of any unwanted material from the work area as per instructions
- PC6.** participate in safety drills organized at site
- PC7.** participate in perp talks and tool box talks organized at site

Identify and use of tools & tackles to be used in fit-up

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

- PC8.** identify and use correct tools and tackles required for Marking like scribes, dividers, punches etc
- PC9.** identify and use correct tool and tackle for liner and angular measurements like steel rule, tapes, angle gauges etc.
- PC10.** identify and use correct tool and tackle for holding and tightening the metal pieces such as wrenches, vices, different types of clamps etc
- PC11.** identify and use correct tool for cutting and striking metal such as file, chisels, hammers etc
- PC12.** identify and use different types of lifting and shifting arrangements such as chain pulley blocks, trolleys etc
- PC13.** carry out basic upkeep of all hand tools and tackles

Shift structural steel sections to instructed locations

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

- PC14.** identify the material to be shifted



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- PC15.** check the access if any obstructions and report to concerned authority
- PC16.** perform visual checks for good working condition of hand tools like sling, rope, clamp hook etc
- PC17.** anchor the structural member in its right position during lifting to avoid accidents, overturning of lifting machines
- PC18.** control position of suspended objects when being shifted by means of mobile hydraulic lifting equipments
- PC19.** stack heavy objects appropriately as per standard practice

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices of construction fitting works
- KU2.** safety rules and regulation for handling and storing required construction fitting tools, equipment and materials
- KU3.** personal protection including the use of related safety gears & equipment
- KU4.** how to request tools and materials as per set procedures
- KU5.** maintenance of tools and equipment
- KU6.** different hand and power tools available in market for fabrication activity
- KU7.** application of commonly used hand and power tools used in fabrication shop
- KU8.** selection and correct use of different tools and tackles as per the work requirement
- KU9.** how to use the tools in optimized manner
- KU10.** how to carry out basic maintenance of different hand and power tools
- KU11.** tolerance limits and range of operation for all common hand and power tools
- KU12.** ergonomic principles to carry loads
- KU13.** tools and tackles to be used in basic rigging work
- KU14.** standard practices regarding heavy material lifting and shifting
- KU15.** safety measures to be taken while object to be shifted is in mobility
- KU16.** correct posture of lifting equipment during lifting and shifting an object
- KU17.** load lifting capacity of lifting equipment
- KU18.** basic maintenance of load lifting equipment
- KU19.** different hazards associated with fabrication activities
- KU20.** types of fires and different fire safety equipments used
- KU21.** safety evacuation points
- KU22.** safety guidelines for working in a fabrication yard
- KU23.** how to identify and dispose waste and scrape materials from the workplace

Generic Skills (GS)

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



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- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read in at least one language, preferably in the local language of the site
- GS3.** read instructions, guidelines, sign boards, safety rules and safety tags
- GS4.** read instructions and exit routes during emergency
- GS5.** speak in one or more language, preferably in one of the local language of the site
- GS6.** listen and follow instructions communicated by supervisors
- GS7.** communicate orally and effectively with team member
- GS8.** decide the tool or instrument to be used for a particular task
- GS9.** decide whether the selected tool requires repairs to perform intended task
- GS10.** plan self-work as per instructions given by superiors
- GS11.** ensure work is done within time and as per desired quality as per instructions provided by superiors
- GS12.** check and confirm that the anchorage provided to the structural members is as per instructions to avoid accident while lifting



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Work according to standard health and safety requirements</i>	9	21	-	-
PC1. identify any potential hazard in the work area related to own work and report the same to appropriate authority	-	-	-	-
PC2. avoid any unsafe act by self particularly while working at site	-	-	-	-
PC3. avoid wearing any loose clothing and preferably wear the yard jumpsuit or any other uniform issued at site	-	-	-	-
PC4. select and correctly use personnel protective equipment as per work requirement	-	-	-	-
PC5. dispose of any unwanted material from the work area as per instructions	-	-	-	-
PC6. participate in safety drills organized at site	-	-	-	-
PC7. participate in perp talks and tool box talks organized at site	-	-	-	-
<i>Identify and use of tools & tackles to be used in fit-up</i>	15	35	-	-
PC8. identify and use correct tools and tackles required for Marking like scribes, dividers, punches etc	-	-	-	-
PC9. identify and use correct tool and tackle for liner and angular measurements like steel rule, tapes, angle gauges etc.	-	-	-	-
PC10. identify and use correct tool and tackle for holding and tightening the metal pieces such as wrenches, vices, different types of clamps etc	-	-	-	-
PC11. identify and use correct tool for cutting and striking metal such as file, chisels, hammers etc	-	-	-	-
PC12. identify and use different types of lifting and shifting arrangements such as chain pulley blocks, trolleys etc	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. carry out basic upkeep of all hand tools and tackles	-	-	-	-
<i>Shift structural steelsections to instructed locations</i>	6	14	-	-
PC14. identify the material to be shifted	-	-	-	-
PC15. check the access if any obstructions and report to concerned authority	-	-	-	-
PC16. perform visual checks for good working condition of hand tools like sling, rope, clamp hook etc	-	-	-	-
PC17. anchor the structural member in its right position during lifting to avoid accidents, overturning of lifting machines	-	-	-	-
PC18. control position of suspended objects when being shifted by means of mobile hydraulic lifting equipments	-	-	-	-
PC19. stack heavy objects appropriately as per standard practice	-	-	-	-
NOS Total	30	70	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N1204
NOS Name	Identify, use various tools, tackles and handle heavy materials used in fit-up of fabricated components
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	



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CON/N1205: Assist in preparatory activities, edge preparation and positioning of steel sections for fit-up

Description

This unit describes the skills and knowledge required to assist in preparatory activities, edge preparation and positioning of steel sections

Scope

The scope covers the following :

- Prepare fabrication platform before starting fit-up operations
- Prepare the edges of the components of assemblies
- Position and fix structural elements

Elements and Performance Criteria

Prepare fabrication platform before starting fitup operations

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

- PC1.** clean the platform to remove any scrap metal
- PC2.** dispose the scrap at instructed location
- PC3.** remove any temporary anchors, supports etc. installed previously for other fit-up
- PC4.** check all the tools and tackles for holding, tightening, striking etc
- PC5.** rearrange all jacks, clamps as per requirement
- PC6.** clean the surface of the structural sections or components before starting the welding works
- PC7.** clear the fabrication platform area so that there is no obstruction for shifting of components
- PC8.** carry out layout of components/ sections on prepared fabrication platform from hand sketches
- PC9.** carry out layout of components/ sections on prepared fabrication platform

Prepare the edges of the components of assemblies

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

- PC10.** mark the positions of the edges to be prepared as per hand sketches and instructions
- PC11.** read and understand hand sketches to interpret edge preparation requirements and confirm the same from superiors if required
- PC12.** confirm the orientation of bevel and scallop from superiors
- PC13.** operate the bevelling machine if required for scalloping and bevelling as per instructions
- PC14.** follow all safety guidelines while operating bevelling machine
- PC15.** confirm that profile of bevel and scallop is as per instructions or work requirements
- PC16.** identify any undulations or other faults in the section if any and report the same to superiors
- PC17.** carryout jacking or striking operations as per instructions for removal off minor defects under close supervision

Position and fix structural elements



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

- PC18.** place the structural component on the fabrication platform as per instructions
- PC19.** ensure that position and orientation of the component is as per instruction
- PC20.** check if the markings on the section are clearly visible prior to fixing the section
- PC21.** check that material has been scalloped as per instructions or hand sketches
- PC22.** check that edge preparation has been done as per instructions or hand sketches
- PC23.** place and tighten the clamps at required positions to restrict the movement of section
- PC24.** place other components post dimensional checking upon the fixed section as per requirements and tighten the required clamps
- PC25.** adjust the fit-up precisely using striking, jacking or other methods as per instruction
- PC26.** mark the locations for tack welds as per instructions
- PC27.** recheck the dimensions of the assembly post tack welding
- PC28.** loosen the clamps or vices etc. to facilitate the removal of fitted section/ assembly
- PC29.** attach proper ropes, belts etc. for lifting and shifting of material as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices of construction fitting works
- KU2.** safety rules and regulation for handling construction fitting tools
- KU3.** personal protection including the use of related safety gears & equipments
- KU4.** how to request tools and materials as per set procedures
- KU5.** maintenance of tools and equipments
- KU6.** how to identify the scrap metal lying on the fabrication platform according to section and dimensions
- KU7.** how and where to dispose of the scrap
- KU8.** importance of housekeeping in relevance with fabrication activities
- KU9.** introduction to fabrication terminologies like jacking, heating, job, etc
- KU10.** how to install temporary supports and clamps for restricting the movements of work pieces and holding the in position
- KU11.** importance of clamps and its functions in fit-up work
- KU12.** steps involved in removing the work pieces from the platform postfit-up
- KU13.** basic concept of working principle of jacks (hydraulic and pneumatic) and respective uses
- KU14.** technique of checking the workability of tools and tackles according to acceptance criteria
- KU15.** how to identify obstructions for lifting
- KU16.** how to read and interpret hand sketches and simplified fabrication drawings
- KU17.** importance of proper orientation of work piece
- KU18.** how to identify and know the steps to be taken to finish the surface before fitting
- KU19.** the steps of checking the dimensions of the work pieces during fit-up
- KU20.** importance of accurate fit-up



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- KU21.** know hows of accurate fit-up
- KU22.** what is meant by welding shrinkage, its causes, and effects
- KU23.** distortion control techniques and their areas of applications

Generic Skills (GS)

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

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read in at least one language, preferably in the local language of the site
- GS3.** read instructions, guidelines, sign boards, safety rules and safety tags
- GS4.** read instructions and exit routes during emergency
- GS5.** speak in one or more language, preferably in one of the local language of the site
- GS6.** listen and follow instructions communicated by supervisors
- GS7.** communicate orally and effectively with team member
- GS8.** decide whether the surface of structural sections and components are suitably cleaned prior to initiating welding works
- GS9.** plan self-work as per instructions given by superiors
- GS10.** ensure work is done within time and as per desired quality as per instructions provided by superiors
- GS11.** check for undulations / faults in the section and report the same to superiors
- GS12.** remove minor defects by carrying out jacking or striking operations under supervision
- GS13.** confirm the orientation of job before carrying out edge preparation
- GS14.** analyze the actions of self that may result in unsafe conditions
- GS15.** review the markings for edge preparation to confirm their compliance with given instructions



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare fabrication platform before starting fitup operations</i>	10	22	-	-
PC1. clean the platform to remove any scrap metal	-	-	-	-
PC2. dispose the scrap at instructed location	-	-	-	-
PC3. remove any temporary anchors, supports etc. installed previously for other fit-up	-	-	-	-
PC4. check all the tools and tackles for holding, tightening, striking etc	-	-	-	-
PC5. rearrange all jacks, clamps as per requirement	-	-	-	-
PC6. clean the surface of the structural sections or components before starting the welding works	-	-	-	-
PC7. clear the fabrication platform area so that there is no obstruction for shifting of components	-	-	-	-
PC8. carry out layout of components/ sections on prepared fabrication platform from hand sketches	-	-	-	-
PC9. carry out layout of components/ sections on prepared fabrication platform	-	-	-	-
<i>Prepare the edges of the components of assemblies</i>	10	24	-	-
PC10. mark the positions of the edges to be prepared as per hand sketches and instructions	-	-	-	-
PC11. read and understand hand sketches to interpret edge preparation requirements and confirm the same from superiors if required	-	-	-	-
PC12. confirm the orientation of bevel and scallop from superiors	-	-	-	-
PC13. operate the bevelling machine if required for scalloping and bevelling as per instructions	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. follow all safety guidelines while operating bevelling machine	-	-	-	-
PC15. confirm that profile of bevel and scallop is as per instructions or work requirements	-	-	-	-
PC16. identify any undulations or other faults in the section if any and report the same to superiors	-	-	-	-
PC17. carryout jacking or striking operations as per instructions for removal off minor defects under close supervision	-	-	-	-
<i>Position and fix structural elements</i>	10	24	-	-
PC18. place the structural component on the fabrication platform as per instructions	-	-	-	-
PC19. ensure that position and orientation of the component is as per instruction	-	-	-	-
PC20. check if the markings on the section are clearly visible prior to fixing the section	-	-	-	-
PC21. check that material has been scalloped as per instructions or hand sketches	-	-	-	-
PC22. check that edge preparation has been done as per instructions or hand sketches	-	-	-	-
PC23. place and tighten the clamps at required positions to restrict the movement of section	-	-	-	-
PC24. place other components post dimensional checking upon the fixed section as per requirements and tighten the required clamps	-	-	-	-
PC25. adjust the fit-up precisely using striking, jacking or other methods as per instruction	-	-	-	-
PC26. mark the locations for tack welds as per instructions	-	-	-	-
PC27. recheck the dimensions of the assembly post tack welding	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC28. loosen the clamps or vices etc. to facilitate the removal of fitted section/ assembly	-	-	-	-
PC29. attach proper ropes, belts etc. for lifting and shifting of material as per requirement	-	-	-	-
NOS Total	30	70	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N1205
NOS Name	Assist in preparatory activities, edge reparation and positioning of steel sections for fit-up
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	



Qualification Pack

CON/N8001: Work effectively in a team to deliver desired results at the workplace

Description

This unit describes the skills and knowledge required to work effectively within a team to achieve the desired results

Scope

The scope covers the following :

- Interact and communicate effectively with co-workers, superiors and sub-ordinates across different teams
- Support co-workers, superiors and sub-ordinates within the team and across interfacing teams to ensure effective execution of assigned task

Elements and Performance Criteria

Interact and communicate in effective and conclusive manner

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

- PC1.** pass on work related information/ requirement clearly to the team members
- PC2.** inform co-workers and superiors about any kind of deviations from work
- PC3.** address the problems effectively and report if required to immediate supervisor appropriately
- PC4.** receive instructions clearly from superiors and respond effectively on the same
- PC5.** communicate to team members/subordinates for appropriate work technique and method
- PC6.** seek clarification and advice as per the requirement and applicability

Support co-workers to execute project requirements

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

- PC7.** hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams
- PC8.** work together with co-workers in a synchronized manner

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** own roles and responsibilities
- KU2.** importance of effective communication and establishing strong working
- KU3.** risks of a failure in teamwork in terms of effects on project outcomes, timelines, safety at the construction site, etc.
- KU4.** different modes of communication, and its appropriate usage
- KU5.** importance of creating healthy and cooperative work environment among the gangs of workers



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- KU6.** different activities within his work area where an interaction with other workers is required
- KU7.** applicable techniques of work, properties of materials used, tools and tackles used, safety standards that co-workers might need as per the requirement
- KU8.** importance of proper and effective communication and the expected adverse
- KU9.** importance and need of supporting co-workers facing problems for smooth

Generic Skills (GS)

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

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read in one or more languages, preferably the local language of the site
- GS3.** read communication from team members regarding work completed, materials used, tools and tackles used, support required
- GS4.** speak in one or more languages, preferably in one of the local language of the site
- GS5.** listen and follow instructions / communication shared by superiors/ co-workers regarding team requirements or interfaces during work processes
- GS6.** orally communicate with co-workers regarding support required to complete the respective work
- GS7.** decide on what information is to be shared with co-workers within the team or from interfacing gang of workers
- GS8.** plan work and organize required resources in coordination with team members
- GS9.** complete all assigned task in coordination with team members
- GS10.** take initiative in resolving issues among co-workers or report the same to superiors
- GS11.** ensure best ways of coordination among team members
- GS12.** communicate with co-workers considering their educational / social background
- GS13.** evaluate the complexity of task and determine if any guidance is required from superiors



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact and communicate in effective and conclusive manner</i>	18	42	-	-
PC1. pass on work related information/ requirement clearly to the team members	-	-	-	-
PC2. inform co-workers and superiors about any kind of deviations from work	-	-	-	-
PC3. address the problems effectively and report if required to immediate supervisor appropriately	-	-	-	-
PC4. receive instructions clearly from superiors and respond effectively on the same	-	-	-	-
PC5. communicate to team members/subordinates for appropriate work technique and method	-	-	-	-
PC6. seek clarification and advice as per the requirement and applicability	-	-	-	-
<i>Support co-workers to execute project requirements</i>	12	28	-	-
PC7. hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams	-	-	-	-
PC8. work together with co-workers in a synchronized manner	-	-	-	-
NOS Total	30	70	-	-



Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	CON/N8001
NOS Name	Work effectively in a team to deliver desired results at the workplace
Sector	Construction
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	4.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	



Qualification Pack

CON/N9001: Work according to personal health, safety and environment protocol at construction site

Description

This NOS covers the skill and knowledge required for an individual to work according to personal health, safety and environmental protocol at construction site

Scope

The scope covers the following :

- Follow safety norms as defined by organization
- Adopt healthy & safe work practices
- Implement good housekeeping and environment protection process and activities

Elements and Performance Criteria

Follow safety norms as defined by organization

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

- PC1.** identify and report any hazards, risks or breaches in site safety to the appropriate authority
- PC2.** follow emergency and evacuation procedures in case of accidents, fires, natural calamities
- PC3.** follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable
- PC4.** participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site
- PC5.** select and operate different types of fire extinguishers corresponding to types of fires as per EHS guideline
- PC6.** identify near miss, unsafe condition and unsafe act

Adopt healthy & safe work practices

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

- PC7.** use appropriate Personal Protective Equipment (PPE) as per work requirements including: Head Protection (Helmets), Ear protection, Fall Protection, Foot Protection, Face and Eye Protection, Hand and Body Protection, Respiratory Protection (if required)
- PC8.** handle all required tools, tackles, materials & equipment safely
- PC9.** follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines
- PC10.** install and apply properly all safety equipment as instructed
- PC11.** follow safety protocol and practices as laid down by site EHS department
- PC12.** undertake and pass height pass test as per EHS guideline

Implement good housekeeping practices

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

- PC13.** collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes
- PC14.** apply ergonomic principles wherever required



Qualification Pack

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** reporting procedures in cases of breaches or hazards for site safety, accidents, and emergency situations as per guidelines
- KU2.** types of safety hazards at construction sites
- KU3.** basic ergonomic principles as per applicability
- KU4.** the procedure for responding to accidents and other emergencies at site
- KU5.** use of appropriate personal protective equipment to be used based on various working conditions
- KU6.** importance of handling tools, equipment and materials as per applicable
- KU7.** health and environments effect of construction materials as per applicability
- KU8.** various environmental protection methods as per applicability
- KU9.** storage of waste including the following at appropriate location: non-combustible scrap material and debris, combustible scrap material and debris, general construction waste and trash (non-toxic, non-hazardous), any other hazardous wastes and any other flammable wastes
- KU10.** how to use hazardous material, in a safe and appropriate manner as per applicability
- KU11.** types of fire
- KU12.** procedure of operating different types of fire extinguishers
- KU13.** safety relevant to tools, tackles, & requirement as per applicability
- KU14.** housekeeping activities relevant to task

Generic Skills (GS)

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

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** fill safety formats for near miss, unsafe conditions and safety suggestions
- GS3.** read in one or more language, preferably in the local language of the site
- GS4.** read sign boards, notice boards relevant to safety
- GS5.** speak in one or more language, preferably in one of the local language of the site
- GS6.** listen instructions / communication shared by site EHS and superiors regarding site safety, and conducting tool box talk
- GS7.** communicate reporting of site conditions, hazards, accidents, etc.
- GS8.** not create unsafe conditions for others
- GS9.** keep the workplace clean and tidy
- GS10.** identify safety risks that affect the health, safety and environment for self and others working in the vicinity, tackle it if within limit or report to appropriate authority
- GS11.** assess and analyze areas which may affect health, safety and environment protocol on the site
- GS12.** ensure personal safety behavior



GS13. respond to emergency



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Follow safety norms as defined by organization</i>	9	21	-	-
PC1. identify and report any hazards, risks or breaches in site safety to the appropriate authority	-	-	-	-
PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities	-	-	-	-
PC3. follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable	-	-	-	-
PC4. participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site	-	-	-	-
PC5. select and operate different types of fire extinguishers corresponding to types of fires as per EHS guideline	-	-	-	-
PC6. identify near miss , unsafe condition and unsafe act	-	-	-	-
<i>Adopt healthy & safe work practices</i>	15	35	-	-
PC7. use appropriate Personal Protective Equipment (PPE) as per work requirements including: Head Protection (Helmets), Ear protection Fall Protection, Foot Protection, Face and Eye Protection, Hand and Body Protection, Respiratory Protection (if required)	-	-	-	-
PC8. handle all required tools, tackles , materials & equipment safely	-	-	-	-
PC9. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines	-	-	-	-
PC10. install and apply properly all safety equipment as instructed	-	-	-	-



Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. follow safety protocol and practices as laid down by site EHS department	-	-	-	-
PC12. undertake and pass height pass test as per EHS guideline	-	-	-	-
<i>Implement good housekeeping practices</i>	6	14	-	-
PC13. collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes	-	-	-	-
PC14. apply ergonomic principles wherever required	-	-	-	-
NOS Total	30	70	-	-



Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	CON/N9001
NOS Name	Work according to personal health, safety and environment protocol at construction site
Sector	Construction
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	4.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	

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.



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7. The trainee shall be provided with a chance to repeat the test to correct his procedures in case of improper performance, with a deduction of marks for each iteration.
8. After the certain number of iterations 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/N1203. Identify and mark structural steel elements to assist in fit-up of the same	30	70	-	-	100	20
CON/N1204. Identify, use various tools, tackles and handle heavy materials used in fit-up of fabricated components	30	70	-	-	100	25
CON/N1205. Assist in preparatory activities, edge reparation and positioning of steel sections for fit-up	30	70	-	-	100	30
CON/N8001. Work effectively in a team to deliver desired results at the workplace	30	70	-	-	100	10
CON/N9001. Work according to personal health, safety and environment protocol at construction site	30	70	-	-	100	15



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National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
Total	150	350	-	-	500	100



Qualification Pack

Acronyms

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



Qualification Pack

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.



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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.