

Qualification Pack



Panelworks Machine Operator

CNC machines

QP Code: FFS/Q1002 Instantiated QP Code: FFS/Q1002-SI007

Version: 1.0

NSQF Level: 4.5

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FFS/Q1002-SI007: Panelworks Machine Operator

Brief Job Description

The Panelworks Machine Operator plays the role of operating and monitoring machinery used in the production of panels for various applications. The responsibilities include setting up the machines, ensuring smooth operation, conducting quality checks, and maintaining a safe working environment. The individual may choose a specialization from a range of options, such as pasting/pressing, cutting/sizing, edge banding, drilling, routing, and veneer cutting/splicing operations.

Personal Attributes

This job requires an individual to have effective problem-solving skills and a proactive attitude are essential to troubleshoot any technical issues that may arise during the manufacturing process. Additionally, a strong commitment to safety protocols and the ability to work collaboratively within a team environment are vital attributes for success in this role

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- [FFS/N1010: Perform team & task management for required machining operations](#)
- [FFS/N1011: Manage the worksite for required machine operations](#)
- [FFS/N1012: Perform Machine Operations for required job work](#)
- [FFS/N1013: Perform machine maintenance and quality checking for required specifications](#)
- [FFS/N8203: Maintain health, safety, and greening practices at the worksite](#)
- [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Electives (mandatory to select at least one):

Elective : CNC machines

- [FFS/N1020: Setup and operate panelworks CNC Machines](#)

Qualification Pack (QP) Parameters

Sector	Furniture & Fittings
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Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
Country	India
NSQF Level	4.5
Credits	17
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7523.9900
Minimum Educational Qualification & Experience	<p>Completed 1st year of UG (UG Certificate) (3-year/ 4-years UG) with NA of experience OR Pursuing 1st year of UG (3-year/ 4-years UG and continuing education) with NA of experience OR Pursuing 3rd year of 3-year diploma after 10th (and continuing education) with NA of experience OR Completed 3 year diploma after 10th with NA of experience OR Completed 1st year of diploma (after 12th) (2-year program) with NA of experience OR Pursuing 2nd year of 2-year diploma after 12th (and continuing education) with NA of experience OR 12th grade Pass with 1 Year of experience OR 10th grade pass (with 2 years of any combination of NTC/NAC/CITS or equivalent) with 1 Year of experience OR 10th grade pass with 3 Years of experience OR Previous relevant Qualification of NSQF Level (Assistant Panelworks Machine Operator at Level-4) with 1-2 Years of experience</p>
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	31/08/2026



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NSQC Approval Date	31/08/2023
Version	1.0
Reference code on NQR	QG-4.5-WC-00821-2023-V1-FFSC
NQR Version	1



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FFS/N1010: Perform team & task management for required machining operations

Description

This unit describes the performance criteria required to perform team & task management activities for the panel works machine operation

Scope

The scope covers the following :

- Task planning and allocation
- Team management & documentation

Elements and Performance Criteria

Task planning and allocation

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

- PC1.** analyse work orders and project details to identify job work requirements
- PC2.** assist in planning & scheduling with supervisor to operate machine to its maximum capacity
- PC3.** allocate tasks to team members based on their skills and capabilities
- PC4.** foster effective communication with the assistants, ensuring clarity and understanding of assigned tasks
- PC5.** oversee timely filling and submission of job cards to the supervisor.

Team management & documentation

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

- PC6.** evaluate team members' performance and provide constructive feedback and guidance to facilitate improvement.
- PC7.** assist in addressing any performance issues or conflicts within the team promptly.
- PC8.** perform documentation of the deliverables based on the scope of the project
- PC9.** provide work updates to the supervisor at regular intervals

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses

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- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** the work order specifications, project requirements, and production processes.
- KU9.** the relevant production planning principles, machine capabilities, and optimization techniques.
- KU10.** the team dynamics, individual competencies, and task allocation strategies.
- KU11.** the role of strong communication and interpersonal skills, including active listening and clear articulation in work productivity.
- KU12.** the relevant job card filling and submission procedures, documentation standards, and project tracking systems.
- KU13.** the performance evaluation methods, feedback techniques, and coaching principles.
- KU14.** the basics of conflict resolution strategies, problem-solving techniques, and team dynamics.
- KU15.** the project documentation standards, templates, and organizational requirements.
- KU16.** the significance of communication protocols, reporting formats, and supervisor expectations.

Generic Skills (GS)

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

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Task planning and allocation</i>	6	24	24	-
PC1. analyse work orders and project details to identify job work requirements	-	8	6	-
PC2. assist in planning & scheduling with supervisor to operate machine to its maximum capacity	-	8	6	-
PC3. allocate tasks to team members based on their skills and capabilities	2	-	6	-
PC4. foster effective communication with the assistants, ensuring clarity and understanding of assigned tasks	2	-	6	-
PC5. oversee timely filling and submission of job cards to the supervisor.	2	8	-	-
<i>Team management & documentation</i>	4	24	18	-
PC6. evaluate team members' performance and provide constructive feedback and guidance to facilitate improvement.	-	8	6	-
PC7. assist in addressing any performance issues or conflicts within the team promptly.	-	8	6	-
PC8. perform documentation of the deliverables based on the scope of the project	2	8	-	-
PC9. provide work updates to the supervisor at regular intervals	2	-	6	-
NOS Total	10	48	42	-

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1010
NOS Name	Perform team & task management for required machining operations
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4.5
Credits	2
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

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FFS/N1011: Manage the worksite for required machine operations

Description

This unit describes the performance criteria required to manage the worksite for the panel works machine operations.

Scope

The scope covers the following :

- Prepare the work site for machine operation
- Machine and job work setup

Elements and Performance Criteria

Prepare the work site for machine operation

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

- PC1.** Prepare the work site for machine operation
- PC2.** identify and select suitable machining methods, tools, equipment, and consumables for a given machining task.
- PC3.** ensure organization of all the necessary tools, materials, and components based on job work requirements
- PC4.** verify the availability and quality of materials to comply with drawing and specifications
- PC5.** maintain health and safety (WHS) requirements, including personal protective equipment, during operations.
- PC6.** perform the cleaning and maintenance of the worksite at regular intervals

Machine and job work setup

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

- PC7.** setout and adjust the machining program based on job work specifications
- PC8.** select and feed the suitable machine consumables (like glue, adhesives, edge bands, etc.) based on job work details
- PC9.** monitor the loading and unloading of the job work on/from the machine bed
- PC10.** perform measurement and marking operations based on job work specifications

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses

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- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** how to interpret technical drawing, bill of materials, and machining requirements.
- KU9.** various machining methods, tools, equipment, and consumables used in panelworks machine department based on specific operations.
- KU10.** the relevant tool and material organization principles and best practices.
- KU11.** the material verification techniques, quality standards, and compliance requirements.
- KU12.** the workplace health and safety regulations, hazard identification, and personal protective equipment (PPE) usage.
- KU13.** the relevant worksite cleanliness and maintenance procedures for panelworks machine operations.
- KU14.** how to set out machining programs for relevant machines and programming principles.
- KU15.** the relevant machine consumables, their properties, and their application in panelworks machine operations.
- KU16.** the machine bed loading and unloading procedures, safety precautions, and equipment handling relevant to different machines.
- KU17.** the usage of relevant measurement tools, techniques, and marking principles in panelworks machine operation.

Generic Skills (GS)

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

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare the work site for machine operation</i>	6	30	20	3
PC1. Prepare the work site for machine operation	-	6	4	-
PC2. identify and select suitable machining methods, tools, equipment, and consumables for a given machining task.	-	6	4	-
PC3. ensure organization of all the necessary tools, materials, and components based on job work requirements	-	6	4	-
PC4. verify the availability and quality of materials to comply with drawing and specifications	2	6	-	1
PC5. maintain health and safety (WHS) requirements, including personal protective equipment, during operations.	2	-	4	1
PC6. perform the cleaning and maintenance of the worksite at regular intervals	2	6	4	1
<i>Machine and job work setup</i>	6	18	16	1
PC7. setout and adjust the machining program based on job work specifications	-	6	4	-
PC8. select and feed the suitable machine consumables (like glue, adhesives, edge bands, etc.) based on job work details	2	6	4	-
PC9. monitor the loading and unloading of the job work on/from the machine bed	2	-	4	-
PC10. perform measurement and marking operations based on job work specifications	2	6	4	1
NOS Total	12	48	36	4

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1011
NOS Name	Manage the worksite for required machine operations
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4.5
Credits	2
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

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FFS/N1012: Perform Machine Operations for required job work

Description

This unit describes the performance criteria required to operate the panel works-related machines efficiently and safely.

Scope

The scope covers the following :

- Perform machine initiation process
- Perform machining operation

Elements and Performance Criteria

Perform machine initiation process

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

- PC1.** supervise the checking of fundamental systems such as air pressure, duct collector, stabilizers, etc. as per the machine initiation checklist
- PC2.** perform installation and adjustment of appropriate tools and equipment per the project requirements (e.g., blades, edge bands, drill bits, etc.)
- PC3.** ensure proper checking of the safety equipment, including emergency stops, gauges, guards and controls, before machine initiation
- PC4.** perform marking on the dust extraction connections using machine marker as recommended by supervisor
- PC5.** monitor the machine trial run to evaluate a required operation, accuracy, and quality and make necessary adjustments, if required.

Perform machining operation

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

- PC6.** perform feeding and handling of the job work in the machine for required operation
- PC7.** perform the operation in accordance with its designed capacity and purpose, and to manufacturer recommendations
- PC8.** monitor the operation periodically to evaluate product quality and yield.
- PC9.** follow standard operating procedures and safety protocols during machine operation
- PC10.** oversee material handling and movement after the operation
- PC11.** ensure machine is operated to full efficiency and safety

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards

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- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** the basics of fundamental systems in panelworks machines, machine initiation procedures, and safety protocols.
- KU9.** the relevant tools and equipment used in panelworks machine operations, their installation, adjustment procedures, and project requirements.
- KU10.** the process of checking safety equipment used in panelworks machines, their functions, and the importance of pre-initiation checks.
- KU11.** the importance of machine trial run and their relevant procedures, operation evaluation criteria, and adjustment techniques.
- KU12.** the job work handling techniques, machine feeding procedures, and safety considerations.
- KU13.** the machine's designed capacity, purpose, operation procedures, and manufacturer recommendations for different panelworks machines.
- KU14.** the product quality evaluation techniques, yield assessment methods, and monitoring procedures.
- KU15.** the standard operating procedures (SOPs), safety protocols, and the importance of their adherence in different machine operations.
- KU16.** different material handling techniques, post-operation movement procedures, and safety considerations.
- KU17.** the machine operation optimization techniques and efficiency measures for different panelwork machines.

Generic Skills (GS)

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

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products



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- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform machine initiation process</i>	10	24	16	3
PC1. supervise the checking of fundamental systems such as air pressure, duct collector, stabilizers, etc. as per the machine initiation checklist	2	-	4	1
PC2. perform installation and adjustment of appropriate tools and equipment per the project requirements (e.g., blades, edge bands, drill bits, etc.)	2	8	-	1
PC3. ensure proper checking of the safety equipment, including emergency stops, gauges, guards and controls, before machine initiation	2	8	4	1
PC4. perform marking on the dust extraction connections using machine marker as recommended by supervisor	2	8	4	-
PC5. monitor the machine trial run to evaluate a required operation, accuracy, and quality and make necessary adjustments, if required.	2	-	4	-
<i>Perform machining operation</i>	10	16	20	1
PC6. perform feeding and handling of the job work in the machine for required operation	2	8	-	-
PC7. perform the operation in accordance with its designed capacity and purpose, and to manufacturer recommendations	-	8	4	-
PC8. monitor the operation periodically to evaluate product quality and yield.	2	-	4	1
PC9. follow standard operating procedures and safety protocols during machine operation	2	-	4	-
PC10. oversee material handling and movement after the operation	2	-	4	-
PC11. ensure machine is operated to full efficiency and safety	2	-	4	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	20	40	36	4

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1012
NOS Name	Perform Machine Operations for required job work
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4.5
Credits	2
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023

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FFS/N1013: Perform machine maintenance and quality checking for required specifications

Description

This unit describes the performance criteria required to maintain machines and perform quality checks at regular intervals.

Scope

The scope covers the following :

- Perform machine maintenance activities
- Perform quality checking for finished job work
- Clean up and maintain work area

Elements and Performance Criteria

Perform machine maintenance activities

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

- PC1.** record and report any machine malfunctions or deviations from standard procedures.
- PC2.** conduct routine maintenance checks on machines to ensure proper functioning
- PC3.** perform necessary cleaning, lubrication, and calibration of machines as per maintenance schedules
- PC4.** inspect tools and equipment's for any wear, tear and take appropriate action as required

Perform quality checking for finished job work

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

- PC5.** inspect finished panels for measurement, quality, accuracy, and adherence to specifications.
- PC6.** inspect and mark the defects, if any, such as wear & tear, paint, dents, grooves, cracks, rough edges, etc.

Clean up and maintain work area

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

- PC7.** ensure identification and storage of material after machining operation for re-use purpose
- PC8.** ensure collection and disposal of the waste/ offcut material in the designated bay
- PC9.** perform internal cleaning of tools and machines after machining operation
- PC10.** ensure cleanliness at the machine station, tools and equipment at regular intervals

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards

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- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** Explain how to report machine faults and deviations from regular processes
- KU9.** Discuss the significance of conducting routine maintenance checks on machines and the procedures involved in conducting inspections.
- KU10.** Describe the importance of performing necessary cleaning, lubrication, and calibration of machines and the procedures involved in these tasks.
- KU11.** Explain the importance of inspecting tools and equipment for wear and tear and the actions to be taken based on the inspection findings.
- KU12.** Discuss the process of inspecting finished panels for measurement, quality, accuracy, and the techniques and tools used in the inspection.
- KU13.** Explain the types of defects commonly found in panels, the visual inspection techniques used to identify defects, and the procedures for marking identified defects.
- KU14.** Describe the key constraints and procedures involved in identifying and storing material after machining operations for re-use purposes
- KU15.** Discuss the process of collecting and disposing of waste/offcut material in the designated bay.
- KU16.** Illustrate the process of cleaning tools and machines after machining operations using appropriate cleaning agents and tools.
- KU17.** Describe the importance of maintaining cleanliness at the machine station, tools, and equipment and the procedures for regular cleaning and maintenance.

Generic Skills (GS)

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

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS6.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products



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- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform machine maintenance activities</i>	6	24	12	2
PC1. record and report any machine malfunctions or deviations from standard procedures.	-	6	4	-
PC2. conduct routine maintenance checks on machines to ensure proper functioning	2	6	4	1
PC3. perform necessary cleaning, lubrication, and calibration of machines as per maintenance schedules	2	6	-	-
PC4. inspect tools and equipment's for any wear, tear and take appropriate action as required	2	6	4	1
<i>Perform quality checking for finished job work</i>	4	12	4	2
PC5. inspect finished panels for measurement, quality, accuracy, and adherence to specifications.	2	6	-	1
PC6. inspect and mark the defects, if any, such as wear & tear, paint, dents, grooves, cracks, rough edges, etc.	2	6	4	1
<i>Clean up and maintain work area</i>	8	12	12	2
PC7. ensure identification and storage of material after machining operation for re-use purpose	2	-	4	-
PC8. ensure collection and disposal of the waste/ offcut material in the designated bay	2	6	4	1
PC9. perform internal cleaning of tools and machines after machining operation	2	6	-	-
PC10. ensure cleanliness at the machine station, tools and equipment at regular intervals	2	-	4	1
NOS Total	18	48	28	6

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1013
NOS Name	Perform machine maintenance and quality checking for required specifications
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4.5
Credits	2
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

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FFS/N8203: Maintain health, safety, and greening practices at the worksite

Description

This unit describes the performance outcomes required to maintain a healthy, safe and secure work environment.

Scope

The scope covers the following :

- Maintain health and hygiene protocols
- Dealing with emergencies
- Precautionary measures to avoid work hazards
- Ensure material conservation and optimization of resources

Elements and Performance Criteria

Maintain health and hygiene protocols

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

- PC1.** comply with health and personal hygiene-related protocols
- PC2.** maintain adequate inventory of cleaning materials and consumables
- PC3.** identify and report poor organizational practices concerning hygiene, food handling, cleaning
- PC4.** ensure that the trash cans or waste collection points are cleared every day
- PC5.** maintain records for cleanliness and maintenance schedule
- PC6.** use appropriate personal protective equipment compatible with the work and compliant with relevant Occupational Health and Safety (OHS) guidelines: masks, safety glasses, head protection, ear muffs, safety footwear, gloves, aprons, etc.
- PC7.** wear clean clothes as per the dress code of the worksite
- PC8.** wash hands regularly using suggested material such as soap, one-use disposable tissue, warm water, etc.

Dealing with emergencies

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

- PC9.** use emergency equipment in accordance with manufacturers' specifications as per requirement
- PC10.** follow emergency and evacuation procedures in case of accidents, fires, natural calamities
- PC11.** respond promptly and appropriately to an accident situation or medical emergency
- PC12.** undertake first aid activities in case of an accident, if required and asked to do so

Precautionary measures to avoid work hazards

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

- PC13.** ensure that safety instructions applicable to the work place are being followed
- PC14.** monitor the usage of harmful chemicals inside the work area as per the specified guidelines only

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- PC15.** plan out the routine cleaning of tools, machines, and equipment
- PC16.** employ an effective process to dispose off the hazardous material and wastage
- PC17.** employ safe working practices to perform a lift, carry or move heavy wooden furniture and accessories from one place to another

Ensure material conservation and optimization of resources

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

- PC18.** plan out the process to ensure optimal material utilization
- PC19.** collect information on the pattern of electricity and fuel consumption
- PC20.** identify possibilities of using renewable energy and environment-friendly fuels
- PC21.** plan the implementation of energy-efficient systems in a phased manner
- PC22.** plan and utilize the reusable materials and wastage in the process
- PC23.** perform segregation of waste based on the type of material
- PC24.** ensure to keep the electrical appliances in OFF position when not in use

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** types of cleaning equipment and consumables such as chemicals, liquids, etc.
- KU9.** the operational and relevant guidelines for usage and handling of different emergency equipment
- KU10.** the organization's legislative requirements and emergency procedures
- KU11.** various causes of fire, and usage of different fire prevention equipment
- KU12.** know different types of fire and fire extinguishers
- KU13.** the process and role in responding to an emergency situation in line with organizational procedures
- KU14.** the basic first aid process and techniques in case of an emergency
- KU15.** various types of safety signs and what they mean
- KU16.** types of cleaning equipment and consumables such as chemicals, liquids, etc.
- KU17.** importance of safe lifting practices and correct body postures
- KU18.** importance of material usage planning and utilization

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- KU19.** material and water conservation process
- KU20.** types of cleaning equipment and consumables such as chemicals, liquids, etc.
- KU21.** the importance of efficient energy usage and its technologies
- KU22.** the importance of utilizing reusable materials and wastage
- KU23.** the process of segregation of waste based on reusable and non-recyclable materials
- KU24.** the safety processes associated with the handling and usage of electrical appliances

Generic Skills (GS)

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

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain health and hygiene protocols</i>	6	8	16	5
PC1. comply with health and personal hygiene-related protocols	1	1	2	1
PC2. maintain adequate inventory of cleaning materials and consumables	1	1	2	1
PC3. identify and report poor organizational practices concerning hygiene, food handling, cleaning	1	1	2	-
PC4. ensure that the trash cans or waste collection points are cleared every day	1	1	2	1
PC5. maintain records for cleanliness and maintenance schedule	-	1	2	-
PC6. use appropriate personal protective equipment compatible with the work and compliant with relevant Occupational Health and Safety (OHS) guidelines: masks, safety glasses, head protection, ear muffs, safety footwear, gloves, aprons, etc.	1	1	2	1
PC7. wear clean clothes as per the dress code of the worksite	-	1	2	-
PC8. wash hands regularly using suggested material such as soap, one-use disposable tissue, warm water, etc.	1	1	2	1
<i>Dealing with emergencies</i>	2	4	8	1
PC9. use emergency equipment in accordance with manufacturers' specifications as per requirement	-	1	2	-
PC10. follow emergency and evacuation procedures in case of accidents, fires, natural calamities	1	1	2	-
PC11. respond promptly and appropriately to an accident situation or medical emergency	-	1	2	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. undertake first aid activities in case of an accident, if required and asked to do so	1	1	2	1
<i>Precautionary measures to avoid work hazards</i>	3	5	10	2
PC13. ensure that safety instructions applicable to the work place are being followed	-	1	2	-
PC14. monitor the usage of harmful chemicals inside the work area as per the specified guidelines only	1	1	2	-
PC15. plan out the routine cleaning of tools, machines, and equipment	-	1	2	-
PC16. employ an effective process to dispose off the hazardous material and wastage	1	1	2	1
PC17. employ safe working practices to perform a lift, carry or move heavy wooden furniture and accessories from one place to another	1	1	2	1
<i>Ensure material conservation and optimization of resources</i>	5	7	14	4
PC18. plan out the process to ensure optimal material utilization	1	1	2	1
PC19. collect information on the pattern of electricity and fuel consumption	-	1	2	-
PC20. identify possibilities of using renewable energy and environment-friendly fuels	1	1	2	-
PC21. plan the implementation of energy-efficient systems in a phased manner	-	1	2	1
PC22. plan and utilize the reusable materials and wastage in the process	1	1	2	1
PC23. perform segregation of waste based on the type of material	1	1	2	1
PC24. ensure to keep the electrical appliances in OFF position when not in use	1	1	2	-
NOS Total	16	24	48	12

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N8203
NOS Name	Maintain health, safety, and greening practices at the worksite
Sector	Furniture & Fittings
Sub-Sector	Generic
Occupation	Generic
NSQF Level	5
Credits	1
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

Qualification Pack

DGT/VSQ/N0102: Employability Skills (60 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
- Career Development & Goal Setting
- 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.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

Constitutional values - Citizenship

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

- PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

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

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

Basic English Skills

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

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- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

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

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

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

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

Diversity & Inclusion

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

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

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

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

Essential Digital Skills

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

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

Entrepreneurship

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

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

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

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.

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PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC29. create a professional Curriculum vitae (Résumé)

PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively

PC31. apply to identified job openings using offline /online methods as per requirement

PC32. answer questions politely, with clarity and confidence, during recruitment and selection

PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills and different learning and employability related portals

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 English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

KU6. importance of career development and setting long- and short-term goals

KU7. about effective communication

KU8. POSH Act

KU9. Gender sensitivity and inclusivity

KU10. different types of financial institutes, products, and services

KU11. how to compute income and expenditure

KU12. importance of maintaining safety and security in offline and online financial transactions

KU13. different legal rights and laws

KU14. different types of digital devices and the procedure to operate them safely and securely

KU15. how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.

KU16. how to identify business opportunities

KU17. types and needs of customers

KU18. how to apply for a job and prepare for an interview

KU19. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

GS1. read and write different types of documents/instructions/correspondence

GS2. communicate effectively using appropriate language in formal and informal settings



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- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

Qualification Pack

FFS/N1020: Setup and operate panelworks CNC Machines

Description

This unit describes the performance criteria required to setup and operate panel works CNC Machines

Scope

The scope covers the following :

- Prepare worksite & set up machine
- Perform CNC operation
- Maintain workspace and equipment
- Quality control and inspection

Elements and Performance Criteria

Prepare worksite & set up machine

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

- PC1.** perform stacking and storage of materials and workpieces for machine operation at the designated machine stations
- PC2.** check the quality of job work received for the CNC operation
- PC3.** configure the CNC program to align with the task requirements
- PC4.** adjust machine settings and perform necessary modifications based on job requirements and instructions provided by the machine and tool manufacturers.
- PC5.** make final adjustments to CNC programs and equipment according to the task requirements and workplace protocols.

Perform CNC operation

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

- PC6.** support in handling and loading of the workpieces onto the machine accurately and efficiently.
- PC7.** support in positioning and securing the materials on the CNC machines, utilizing clamps, jigs, or other appropriate methods.
- PC8.** assist in performing measurement and marking on the job work for CNC operation
- PC9.** operate the machine in line with its designated capacity, intended purpose, and the manufacturer's recommendations
- PC10.** monitor machine operation to ensure the production of high-quality outputs.

Maintain workspace and equipment

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

- PC11.** assist the operator in cleaning and maintaining the CNC machine and its parts (machine bed, blade chamber, etc.).
- PC12.** organize and manage the workspace, ensuring proper storage of panels and disposal of waste.

Quality control and inspection

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

- PC13.** assist in inspecting the materials for dimensional accuracy, cleanliness, and quality, ensuring they meet the required specifications.
- PC14.** maintain proper documentation of manufacturing specifications and quality control inspections for the CNC process.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** the basics of stacking and storage procedures for materials and workpieces during panelworks CNC machine operations.
- KU9.** the relevant quality standards and criteria for job work received for the panelworks CNC machine operation
- KU10.** the basics of CNC programming and its alignment with task requirements.
- KU11.** the basics of machine settings and modifications based on job requirements and manufacturer instructions.
- KU12.** the process of final adjustments to CNC programs and equipment based on task requirements and workplace protocols.
- KU13.** the loading and unloading process for the panelworks CNC machine and the associated fixtures.
- KU14.** different methods for positioning and securing materials on panelworks CNC machines, including clamps, jigs, or other appropriate methods.
- KU15.** principles and techniques of measurement and marking for panelworks CNC operations.
- KU16.** the usage of different machine operation, including its capacity, purpose, and manufacturer's recommendations.
- KU17.** the basics of machine operation monitoring techniques and the identification of irregularities or defects.
- KU18.** specific cleaning and maintenance procedures for the panelworks CNC machine and its components
- KU19.** principles of organizing and managing the workspace, including proper storage techniques for panels and waste disposal procedures.
- KU20.** the quality standards, inspection techniques, and evaluation criteria for processed materials.



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KU21. the details of preparing requisite documents for quality control processes

Generic Skills (GS)

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

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare worksite & set up machine</i>	4	24	8	2
PC1. perform stacking and storage of materials and workpieces for machine operation at the designated machine stations	2	6	-	1
PC2. check the quality of job work received for the CNC operation	-	6	2	1
PC3. configure the CNC program to align with the task requirements	2	-	2	-
PC4. adjust machine settings and perform necessary modifications based on job requirements and instructions provided by the machine and tool manufacturers.	-	6	2	-
PC5. make final adjustments to CNC programs and equipment according to the task requirements and workplace protocols.	-	6	2	-
<i>Perform CNC operation</i>	8	18	10	1
PC6. support in handling and loading of the workpieces onto the machine accurately and efficiently.	2	6	2	-
PC7. support in positioning and securing the materials on the CNC machines, utilizing clamps, jigs, or other appropriate methods.	-	6	2	-
PC8. assist in performing measurement and marking on the job work for CNC operation	2	6	2	1
PC9. operate the machine in line with its designated capacity, intended purpose, and the manufacturer's recommendations	2	-	2	-
PC10. monitor machine operation to ensure the production of high-quality outputs.	2	-	2	-
<i>Maintain workspace and equipment</i>	4	6	2	1

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. assist the operator in cleaning and maintaining the CNC machine and its parts (machine bed, blade chamber, etc.).	2	6	-	1
PC12. organize and manage the workspace, ensuring proper storage of panels and disposal of waste.	2	-	2	-
<i>Quality control and inspection</i>	4	6	2	-
PC13. assist in inspecting the materials for dimensional accuracy, cleanliness, and quality, ensuring they meet the required specifications.	2	6	-	-
PC14. maintain proper documentation of manufacturing specifications and quality control inspections for the CNC process.	2	-	2	-
NOS Total	20	54	22	4

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1020
NOS Name	Setup and operate panelworks CNC Machines
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4.5
Credits	5
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each Element/ PC.
2. The assessment for the theory part will be based on a 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 the theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score a minimum aggregate passing percentage of 70% for the QP and a minimum of 70% for each NOS.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

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Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Minimum Passing % at NOS Level: 50

(Please note: A Trainee must score the minimum percentage for each NOS separately as well as on the QP as a whole.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N1010.Perform team & task management for required machining operations	10	48	42	-	100	10
FFS/N1011.Manage the worksite for required machine operations	12	48	36	4	100	15
FFS/N1012.Perform Machine Operations for required job work	20	40	36	4	100	20
FFS/N1013.Perform machine maintenance and quality checking for required specifications	18	48	28	6	100	20
FFS/N8203.Maintain health, safety, and greening practices at the worksite	16	24	48	12	100	5
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	5
Total	96	238	190	26	550	75

Elective: 1 CNC machines



Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N1020.Setup and operate panelworks CNC Machines	20	54	22	4	100	25
Total	20	54	22	4	100	25