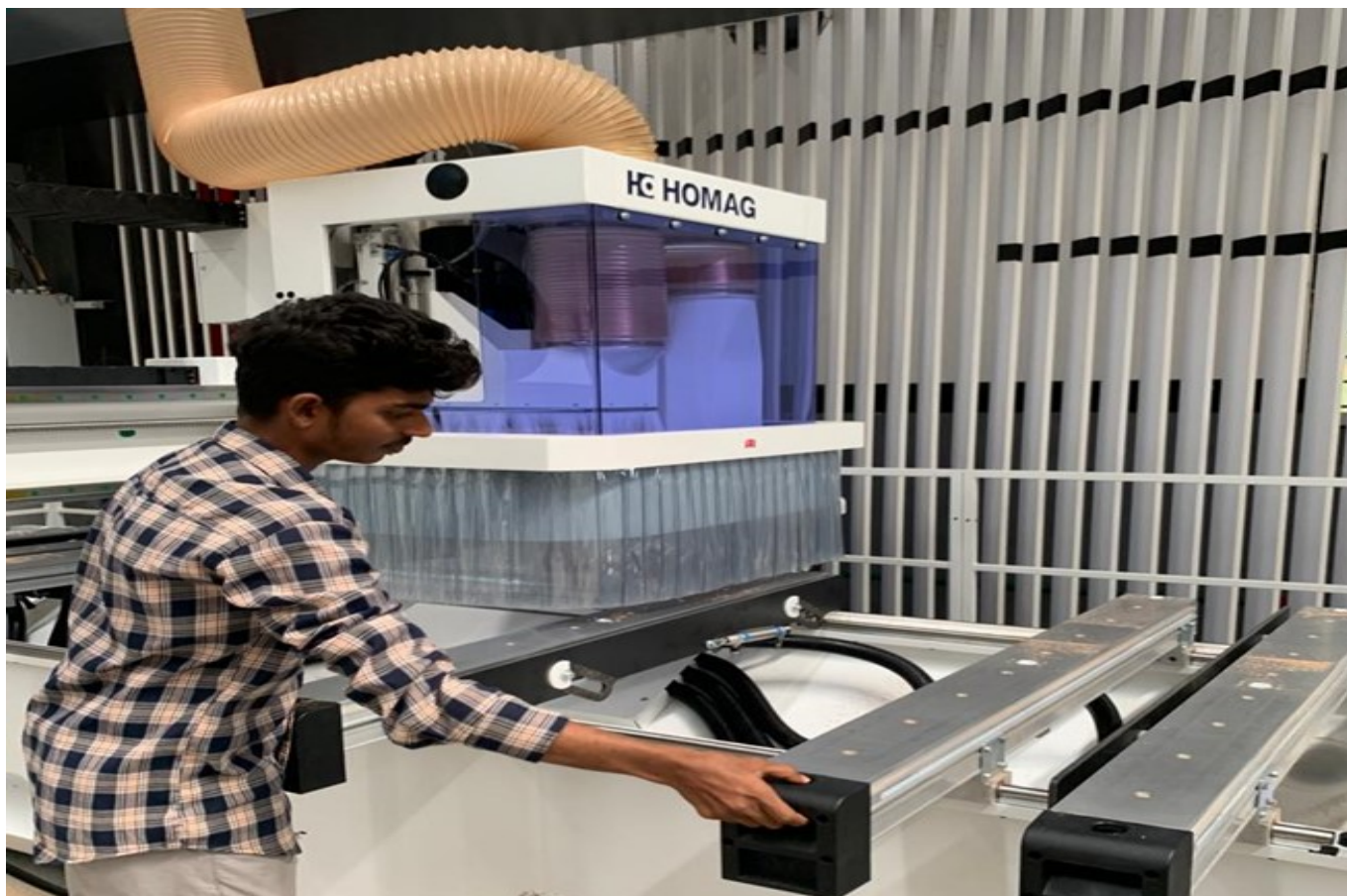


Qualification Pack



Assistant Panelworks Machine Operator

Pasting and Pressing machines/ Cutting and Sizing machines/ Edge Band machines/ Drilling machines/ Routing machines/ Veneer Cutting and Splicing machines

QP Code: FFS/Q1001

Version: 1.0

NSQF Level: 4

Furniture and Fittings Skill Council || 407-408, DLF City Court, M G Road, Sikanderpur
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FFS/Q1001: Assistant Panelworks Machine Operator

Brief Job Description

The Assistant Panelworks Machine Operator supports the operation of panelworks machinery by assisting in setup, maintenance, and monitoring of the equipment. They collaborate with the machine operator to ensure smooth production, perform quality checks, and follow safety protocols to deliver high-quality panel products. 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 possess attention to detail, a strong commitment to safety protocols, and excellent teamwork and communication skills. The Assistant Panelworks Machine Operator should also demonstrate adaptability and a willingness to learn and specialize in various facets of panelworks machinery operations.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [FFS/N1001: Prepare the work site for machine operations](#)
2. [FFS/N1002: Assist in setting up and performing machine operations](#)
3. [FFS/N1003: Assist in performing machine maintenance and quality checking](#)
4. [FFS/N8201: Follow health, safety, and greening practices at the worksite](#)
5. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Electives (mandatory to select at least one):

Elective 1: Pasting and Pressing machines

1. [FFS/N1004: Assist in operating pasting and pressing machines](#)

Elective 2: Cutting and Sizing machines

1. [FFS/N1005: Assist in operating cutting and sizing machines](#)

Elective 3: Edge Band machines

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1. [FFS/N1006: Assist in operating edge band machines](#)

Elective 4: Drilling machines

1. [FFS/N1007: Assist in operating drilling machines](#)

Elective 5: Routing machines

1. [FFS/N1008: Assist in operating routing machines](#)

Elective 6: Veneer Cutting and Splicing machines

1. [FFS/N1009: Assist in operating veneer cutting and splicing machines](#)

Qualification Pack (QP) Parameters

Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
Country	India
NSQF Level	4
Credits	34
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7523.9900

Qualification Pack

<p>Minimum Educational Qualification & Experience</p>	<p>12th grade Pass with NA of experience OR Completed 2nd year of the 3-year diploma after 10 with NA of experience OR Completed 1st year of 3-year diploma (after 10th) and pursuing regular diploma (pursuing 2nd year) with NA of experience OR 10th grade pass (with two years of any combination of NTC/NAC/CITS or equivalent) with NA of experience OR 10th grade pass and pursuing continuous schooling (for 2-year program) with NA of experience OR 11th grade pass (and pursuing continuous schooling) with NA of experience OR 11th grade pass with 1 Year of experience OR 10th grade pass with 2 Years of experience OR Previous relevant Qualification of NSQF Level (Multipurpose Assistant- Furniture Production and Installation at Level-3) with 3 Years of experience</p>
<p>Minimum Level of Education for Training in School</p>	<p>10th Class</p>
<p>Pre-Requisite License or Training</p>	<p>NA</p>
<p>Minimum Job Entry Age</p>	<p>16 Years</p>
<p>Last Reviewed On</p>	<p>NA</p>
<p>Next Review Date</p>	<p>31/08/2026</p>
<p>NSQC Approval Date</p>	<p>31/08/2023</p>
<p>Version</p>	<p>1.0</p>
<p>Reference code on NQR</p>	<p>QG-04-WC-00820-2023-V1-FFSC</p>
<p>NQR Version</p>	<p>1</p>

Qualification Pack

FFS/N1001: Prepare the work site for machine operations

Description

This unit describes performance criteria required to assist in preparing the worksite for panel works machine operations

Scope

The scope covers the following :

- Interpret job tasks and responsibilities
- Assist in machine operation planning
- Clean, maintain, and organize the worksite

Elements and Performance Criteria

Interpret job tasks and responsibilities

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

- PC1.** interpret the scope of work as per the job card and plan resources.
- PC2.** instruct and guide the multipurpose assistant for interpreting the job card and work as per instructions.
- PC3.** ensure timely filling and daily submission of job cards to the supervisor.
- PC4.** assist in the preparation and maintenance of the documents related to maintenance, operation, and quality check.

Assist in machine operation planning

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

- PC5.** interpret the technical drawings, part lists, cuttings lists, material lists, tools, equipment, etc., for the required machining operation
- PC6.** assist in identifying suitable machining methods, tools, equipment, and consumables for a given machining task.
- PC7.** identify different types of machines programs, processes, and their functions based on machining requirement
- PC8.** organize and maintain all the necessary tools, materials, and components for the operation as per given specifications and standard operating procedures
- PC9.** ensure availability of work health and safety (WHS) requirements, including personal protective equipment, during operations.

Clean, maintain, and organize the worksite

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

- PC10.** perform the cleaning and maintenance of the worksite at regular intervals
- PC11.** perform the arrangement & stacking of the panels before and after the machine operation
- PC12.** assist in verifying materials received for the machine operation

Knowledge and Understanding (KU)

Qualification Pack

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.** how to accurately interpret and understand the information provided in a job card.
- KU9.** effective communication techniques and methods for instructing and guiding others.
- KU10.** the importance of completing and submitting job cards within the required timeframe.
- KU11.** the purpose and importance of documents related to maintenance, operation, and quality check.
- KU12.** the basics of technical drawings, part lists, cutting lists, material lists, tools, equipment, etc., and their interpretation for machining operations.
- KU13.** different machining methods, tools, equipment, and consumables available and their usage for various machining tasks.
- KU14.** various types of machine programs, processes, and their respective functions in machining operations.
- KU15.** the importance of organizing and maintaining tools, materials, and components according to specifications and standard operating procedures.
- KU16.** the relevance and usage of different work health and safety (WHS) requirements, including personal protective equipment (PPE), in different machining operations.
- KU17.** importance of maintaining a clean and organized worksite for smooth operations.
- KU18.** procedures and techniques for cleaning and maintenance of the worksite.
- KU19.** the proper arrangement and stacking of panels before and after the machine operation in Panelworks operations.
- KU20.** the materials used in Panelworks machine operations and the verification process.

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.)



Qualification Pack

- 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>Interpret job tasks and responsibilities</i>	8	12	6	-
PC1. interpret the scope of work as per the job card and plan resources.	2	4	2	-
PC2. instruct and guide the multipurpose assistant for interpreting the job card and work as per instructions.	2	4	-	-
PC3. ensure timely filling and daily submission of job cards to the supervisor.	2	-	2	-
PC4. assist in the preparation and maintenance of the documents related to maintenance, operation, and quality check.	2	4	2	-
<i>Assist in machine operation planning</i>	8	22	14	4
PC5. interpret the technical drawings, part lists, cuttings lists, material lists, tools, equipment, etc., for the required machining operation	2	6	4	-
PC6. assist in identifying suitable machining methods, tools, equipment, and consumables for a given machining task.	2	6	4	1
PC7. identify different types of machines programs, processes, and their functions based on machining requirement	2	6	4	1
PC8. organize and maintain all the necessary tools, materials, and components for the operation as per given specifications and standard operating procedures	2	4	-	1
PC9. ensure availability of work health and safety (WHS) requirements, including personal protective equipment, during operations.	-	-	2	1
<i>Clean, maintain, and organize the worksite</i>	6	14	4	2
PC10. perform the cleaning and maintenance of the worksite at regular intervals	2	6	4	1

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. perform the arrangement & stacking of the panels before and after the machine operation	2	4	-	1
PC12. assist in verifying materials received for the machine operation	2	4	-	-
NOS Total	22	48	24	6

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1001
NOS Name	Prepare the work site for machine operations
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023

Qualification Pack

FFS/N1002: Assist in setting up and performing machine operations

Description

This unit describes performance criteria required to assist in setting up various panel works machines for the operation

Scope

The scope covers the following :

- Assist in machine initiation operation
- Handling the job work during machine operation
- Assist in performing machine operation

Elements and Performance Criteria

Assist in machine initiation operation

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

- PC1.** check the safety equipment, including emergency stops, gauges, guards and controls, before machine initiation
- PC2.** assist in performing adjustments to machine tools as per job work requirements (like blades, bits, edge bands, adhesives, cutters, table/bed etc.)
- PC3.** check and maintain the functioning of fundamental systems such as air pressure, duct collector, stabilizers, etc.
- PC4.** perform the machine initiation operation in accordance with manufacturer instructions
- PC5.** feed the appropriate consumables (like glue, adhesives, etc.) required for machine operation as per the supervisor's instructions
- PC6.** assist in performing a trial run to evaluate operation, accuracy, and quality and make necessary adjustments

Handling the job work during machine operation

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

- PC7.** perform loading, unloading, and handling of the job work on/from the machine bed
- PC8.** ensure the proper functioning of the handling equipment for material movement
- PC9.** perform measurement and marking operations based on job work specifications

Assist in performing machine operation

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

- PC10.** assist in performing the operation in accordance with its designed capacity and purpose, and to manufacturer recommendations
- PC11.** ensure material storage and movement after the operation

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

Qualification Pack

- 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 purpose and importance of safety equipment such as emergency stops, gauges, guards, and controls.
- KU9.** different machine tool adjustments and their impact on job work requirements in panelworks machine operations.
- KU10.** the functioning and importance of fundamental systems such as air pressure, duct collector, stabilizers, etc.
- KU11.** the manufacturer instructions for machine initiation operation relating to required machines.
- KU12.** the types of consumables used in machine operation and their specific requirements.
- KU13.** the basics of trial runs and their purpose in evaluating operation, accuracy, and quality in Panelworks machine operations.
- KU14.** the techniques and procedures for loading, unloading, and handling job work on/from the machine bed.
- KU15.** the different types of handling equipment used for material movement and their functioning.
- KU16.** the basics of measurement and marking techniques based on job work specifications in panelworks machine operations.
- KU17.** the designed capacity, purpose, and manufacturer recommendations for different machining operations.
- KU18.** the appropriate storage and movement procedures for materials after the 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



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- 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>Assist in machine initiation operation</i>	8	36	10	3
PC1. check the safety equipment, including emergency stops, gauges, guards and controls, before machine initiation	2	6	-	-
PC2. assist in performing adjustments to machine tools as per job work requirements (like blades, bits, edge bands, adhesives, cutters, table/bed etc.)	2	6	-	1
PC3. check and maintain the functioning of fundamental systems such as air pressure, duct collector, stabilizers, etc.	2	6	4	1
PC4. perform the machine initiation operation in accordance with manufacturer instructions	-	6	4	-
PC5. feed the appropriate consumables (like glue, adhesives, etc.) required for machine operation as per the supervisor's instructions	-	6	2	1
PC6. assist in performing a trial run to evaluate operation, accuracy, and quality and make necessary adjustments	2	6	-	-
<i>Handling the job work during machine operation</i>	6	12	8	3
PC7. perform loading, unloading, and handling of the job work on/from the machine bed	2	6	4	1
PC8. ensure the proper functioning of the handling equipment for material movement	2	-	4	1
PC9. perform measurement and marking operations based on job work specifications	2	6	-	1
<i>Assist in performing machine operation</i>	4	6	4	-
PC10. assist in performing the operation in accordance with its designed capacity and purpose, and to manufacturer recommendations	2	-	2	-
PC11. ensure material storage and movement after the operation	2	6	2	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	18	54	22	6

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1002
NOS Name	Assist in setting up and performing machine operations
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
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/N1003: Assist in performing machine maintenance and quality checking

Description

This unit describes the performance criteria required to assist in performing maintenance and quality check operations

Scope

The scope covers the following :

- Perform cleaning operations
- Conduct maintenance of machines
- Conduct tools and material maintenance
- Assist in performing quality check

Elements and Performance Criteria

Perform cleaning operations

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

- PC1.** perform internal machine cleaning at regular intervals
- PC2.** collect and organize the waste/ offcut material in the designated bay

Conduct maintenance of machines

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

- PC3.** interpret safety protocols and conduct comprehensive checks to ensure the machine's proper working condition.
- PC4.** assist in identifying and resolving minor machine malfunctions or issues during operation
- PC5.** perform routine maintenance tasks, such as cleaning and lubrication, as per the maintenance schedule
- PC6.** report any major machine malfunctions or maintenance requirements to the supervisor

Conduct tools and material maintenance

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

- PC7.** assist in checking and re-sharpening the tools and equipment (like bits, saws, etc.) at regular intervals
- PC8.** check wear and tear of the machine consumables after operations at regular intervals such as edge bands, veneers, laminate, etc, as per standard required quality
- PC9.** store and maintain the tools and materials as per manufacturer instructions

Assist in performing quality check

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

- PC10.** assist in inspecting the output for quality defects, at regular intervals
- PC11.** identify any deviations from the desired specifications and take corrective actions.
- PC12.** report any quality issues or non-conformities to the supervisor

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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.** significance of machine cleanliness for optimal performance and longevity.
- KU9.** different types of waste/offcut materials and their proper handling requirements.
- KU10.** key components and indicators to check for the machine's proper working condition.
- KU11.** common types of minor machine malfunctions or issues that can occur during operation, such as sensor errors, misalignments, jams, or clogged filters.
- KU12.** the specific cleaning requirements for different machine components, considering factors such as material, sensitivity, and contamination risks
- KU13.** the appropriate lubrication methods, including selection of lubricants, application techniques, and frequency of lubrication.
- KU14.** the process of reporting major machine malfunctions or maintenance requirements in panelworks machine operations.
- KU15.** appropriate techniques for checking the condition of tools and equipment, including bits, saws, etc.
- KU16.** the visual indicators of wear and tear for machine consumables, including edge bands, veneers, laminate, etc.
- KU17.** the basics of storing and maintaining tools and materials in Panelworks machine operations.
- KU18.** the specific quality standards and criteria for inspecting the output in terms of defects
- KU19.** how to identify deviations from desired specifications in machine operations.
- KU20.** the criteria for identifying quality issues or non-conformities in the product or workpiece.

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



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- 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>Perform cleaning operations</i>	2	10	4	-
PC1. perform internal machine cleaning at regular intervals	-	6	4	-
PC2. collect and organize the waste/ offcut material in the designated bay	2	4	-	-
<i>Conduct maintenance of machines</i>	6	10	8	2
PC3. interpret safety protocols and conduct comprehensive checks to ensure the machine's proper working condition.	2	-	2	-
PC4. assist in identifying and resolving minor machine malfunctions or issues during operation	2	-	2	1
PC5. perform routine maintenance tasks, such as cleaning and lubrication, as per the maintenance schedule	2	4	-	1
PC6. report any major machine malfunctions or maintenance requirements to the supervisor	-	6	4	-
<i>Conduct tools and material maintenance</i>	6	16	8	2
PC7. assist in checking and re-sharpening the tools and equipment (like bits, saws, etc.) at regular intervals	2	6	4	1
PC8. check wear and tear of the machine consumables after operations at regular intervals such as edge bands, veneers, laminate, etc, as per standard required quality	2	4	-	1
PC9. store and maintain the tools and materials as per manufacturer instructions	2	6	4	-
<i>Assist in performing quality check</i>	4	14	8	-
PC10. assist in inspecting the output for quality defects, at regular intervals	2	6	4	-
PC11. identify any deviations from the desired specifications and take corrective actions.	2	4	2	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. report any quality issues or non-conformities to the supervisor	-	4	2	-
NOS Total	18	50	28	4

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1003
NOS Name	Assist in performing machine maintenance and quality checking
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
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/N8201: Follow health, safety, and greening practices at the worksite

Description

This unit describes the performance outcomes required to assist in maintaining health, safety, cleanliness, and hygiene at the worksite.

Scope

The scope covers the following :

- Maintain cleanliness of the worksite
- Follow health and safety procedures
- Maintain personal hygiene
- Follow precautionary measures to avoid work hazards
- Ensure material conservation and optimization of resources

Elements and Performance Criteria

Maintain cleanliness of the worksite

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

- PC1.** ensure adequate stock of cleaning materials and consumables
- PC2.** identify and report poor organizational practices with respect to hygiene, food handling, cleaning
- PC3.** ensure that the trash cans or waste collection points are cleared every day

Follow health and safety procedures

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

- PC4.** use appropriate personal protective equipment compatible with the work and compliant to relevant Occupational Health and Safety (OHS) guidelines: masks, safety glasses, head protection, ear muffs, safety footwear, gloves, aprons, etc.
- PC5.** use emergency equipment in accordance with manufacturers' specifications as per requirement

Maintain personal hygiene

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

- PC6.** follow the dress code of the worksite
- PC7.** wash hands regularly using suggested material such as soap, one-use disposable tissue, warm water, etc.

Follow precautionary measures to avoid work hazards

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

- PC8.** follow the displayed safety signs at the worksite
- PC9.** undertake the safety measures and checks while handling any electrically powered tools, and equipment, etc.
- PC10.** ensure the usage of harmful chemicals inside work area as per the specified guidelines only
- PC11.** ensure safe handling and disposal of waste and debris

Qualification Pack

PC12. undertake correct ways while lifting or movement of the heavy material 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:

PC13. ensure optimal material utilization in the specific processes

PC14. implement the suggested ways to conserve and re-use water

PC15. ensure to keep the electrical appliances in OFF position when not in use

PC16. carry out routine cleaning of tools, machines, and equipment as per instruction

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the organization structure, its purpose & objective, various departments, hierarchy, reporting matrix, code of conduct, etc

KU2. various Standard Operating Procedures (SOP) and department-specific processes of the organization

KU3. the products and services provided by the company to clients and its quality standards

KU4. the Key Result Areas (KRA) and its importance in the employee performance and growth

KU5. different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses

KU6. relevance of health and safety requirements applicable in the worksite

KU7. types of cleaning equipment and consumables such as chemicals, liquids, etc.

KU8. the process of raising a grievance and its redressal mechanism

KU9. usage of different colors of dustbins based on the type of waste

KU10. the organization legislative requirements and emergency procedures

KU11. various causes of fire, and usage of different fire prevention equipment

KU12. importance of work ethics, dress code, and personal hygiene

KU13. various types of safety signs and what they mean

KU14. the operational and relevant guidelines for usage and handling of tools and equipment and their serviceability procedures

KU15. storage and handling of hazardous substances

KU16. the process of segregation of waste based on reusable and non-recyclable materials

KU17. importance of safe lifting practices and correct body postures

KU18. importance of material usage planning and utilization

KU19. common practices associated with conserving water and electricity

KU20. various housekeeping process and equipment used for cleaning worksite, tools, and products

Generic Skills (GS)

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

GS1. communicate proficiently in one or more languages, preferably local language and/or english



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- GS2.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS3.** use the communication systems of the company, e.g., telephone, email, chat, public announcement systems, or hard copy memos/letters
- GS4.** effectively communicate with team members and supervisor in a respectful manner as per the protocol of the organization
- GS5.** work constructively and collaboratively with others
- GS6.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS7.** read notes/comments from the supervisor and teams
- GS8.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS9.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS10.** select the optimal process and appropriate tools & equipment to complete the work efficiently
- GS11.** use reasoning skills to take appropriate decisions and troubleshoot concerns related to own responsibilities

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain cleanliness of the worksite</i>	3	4	3	2
PC1. ensure adequate stock of cleaning materials and consumables	1	2	-	1
PC2. identify and report poor organizational practices with respect to hygiene, food handling, cleaning	1	-	-	1
PC3. ensure that the trash cans or waste collection points are cleared every day	1	2	3	-
<i>Follow health and safety procedures</i>	5	6	4	1
PC4. use appropriate personal protective equipment compatible with the work and compliant to relevant Occupational Health and Safety (OHS) guidelines: masks, safety glasses, head protection, ear muffs, safety footwear, gloves, aprons, etc.	3	3	4	-
PC5. use emergency equipment in accordance with manufacturers' specifications as per requirement	2	3	-	1
<i>Maintain personal hygiene</i>	4	4	5	-
PC6. follow the dress code of the worksite	2	2	3	-
PC7. wash hands regularly using suggested material such as soap, one-use disposable tissue, warm water, etc.	2	2	2	-
<i>Follow precautionary measures to avoid work hazards</i>	12	19	-	2
PC8. follow the displayed safety signs at the worksite	3	2	-	1
PC9. undertake the safety measures and checks while handling any electrically powered tools, and equipment, etc.	3	7	-	1
PC10. ensure the usage of harmful chemicals inside work area as per the specified guidelines only	1	3	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. ensure safe handling and disposal of waste and debris	3	3	-	-
PC12. undertake correct ways while lifting or movement of the heavy material from one place to another	2	4	-	-
<i>Ensure material conservation and optimization of resources</i>	11	7	8	-
PC13. ensure optimal material utilization in the specific processes	3	2	-	-
PC14. implement the suggested ways to conserve and re-use water	3	2	2	-
PC15. ensure to keep the electrical appliances in OFF position when not in use	2	-	3	-
PC16. carry out routine cleaning of tools, machines, and equipment as per instruction	3	3	3	-
NOS Total	35	40	20	5

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N8201
NOS Name	Follow health, safety, and greening practices at the worksite
Sector	Furniture & Fittings
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	1
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF 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

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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	-	-	-	-

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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/N1004: Assist in operating pasting and pressing machines

Description

This unit describes performance criteria required to assist in operating pasting & pressing machines

Scope

The scope covers the following :

- Assist in setting up worksite
- Assist in pasting operation
- Maintain workspace and equipment
- Quality control and inspection

Elements and Performance Criteria

Assist in setting up worksite

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 pasting/pressing machine operation
- PC3.** assist in the setup and preparation of pasting/pressing machines according to job requirements.
- PC4.** collaborate with the machine operator in adjusting machine settings, such as temperature, time, and pressure.

Assist in pasting operation

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

- PC5.** assist in applying the appropriate adhesive or glue to the workpieces using the designated equipment and techniques.
- PC6.** ensure the even and consistent distribution of the adhesive to achieve proper bonding between the materials.
- PC7.** assist in aligning and positioning the materials accurately to ensure proper joining and prevent misalignment or gaps.

Assist in pasting/pressing operation

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

- PC8.** support in handling and loading of the workpieces onto the machine accurately and efficiently.
- PC9.** assist in adjusting the pasting/pressing parameters, such as pressure, thickness, and duration, etc. based on the materials and adhesive being used.
- PC10.** assist the operator in following standard operating procedures and safety guidelines for machine operation.
- PC11.** assist in monitoring pasting/pressing operations to discover and communicate any irregularities or defects to the operator.

Maintain workspace and equipment

Qualification Pack

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

- PC12.** assist the operator in cleaning and maintaining the pasting/pressing machine and its parts (upper and lower plates, roller, etc.).
- PC13.** organize and manage the workspace, ensuring proper storage of panels and disposal of waste.

Quality control and inspection

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

- PC14.** assist in inspecting the pasted/pressed materials for defects, ensuring they meet the required quality standards and specifications.
- PC15.** maintain proper documentation of manufacturing specifications and quality control inspections for the pasting/pressing 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 pasting/pressing operations.
- KU9.** the relevant quality standards and criteria for job work received for the pasting/pressing machine operation, including factors such as dimensions, appearance, and adhesion.
- KU10.** the components and functions of pasting/pressing machines, including adjustment mechanisms, temperature controls, and pressure settings.
- KU11.** the purpose and effect of adjusting machine settings, such as temperature, time, and pressure, on the bonding process
- KU12.** the characteristics and properties of different adhesives or glues commonly used in the industry.
- KU13.** importance of even and consistent adhesive distribution for proper bonding between materials
- KU14.** significance of accurate alignment and positioning of materials for proper joining and preventing misalignment or gaps.
- KU15.** the loading and unloading process for the pasting/pressing machine and the associated fixtures.

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- KU16.** standard ranges and recommended values for pasting/pressing parameters specific to different materials and adhesive types.
- KU17.** standard operating procedures for machine operation, including start-up, shutdown, tool changes, and routine maintenance.
- KU18.** the basics of machine operation monitoring techniques and the identification of irregularities or defects.
- KU19.** specific cleaning and maintenance procedures for the pasting/pressing machine and its components
- KU20.** principles of organizing and managing the workspace, including proper storage techniques for panels and waste disposal procedures.
- KU21.** visual and tactile indicators of defects in finished materials.
- KU22.** importance of maintaining accurate documentation of manufacturing specifications and quality control inspections for the pasting/pressing process.

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>Assist in setting up worksite</i>	6	10	8	3
PC1. perform stacking and storage of materials and workpieces for machine operation at the designated machine stations	2	4	-	1
PC2. check the quality of job work received for the pasting/pressing machine operation	-	6	4	1
PC3. assist in the setup and preparation of pasting/pressing machines according to job requirements.	2	-	2	-
PC4. collaborate with the machine operator in adjusting machine settings, such as temperature, time, and pressure.	2	-	2	1
<i>Assist in pasting operation</i>	4	12	10	1
PC5. assist in applying the appropriate adhesive or glue to the workpieces using the designated equipment and techniques.	2	6	4	1
PC6. ensure the even and consistent distribution of the adhesive to achieve proper bonding between the materials.	2	-	2	-
PC7. assist in aligning and positioning the materials accurately to ensure proper joining and prevent misalignment or gaps.	-	6	4	-
<i>Assist in pasting/pressing operation</i>	6	10	8	-
PC8. support in handling and loading of the workpieces onto the machine accurately and efficiently.	-	6	4	-
PC9. assist in adjusting the pasting/pressing parameters, such as pressure, thickness, and duration, etc. based on the materials and adhesive being used.	2	4	-	-
PC10. assist the operator in following standard operating procedures and safety guidelines for machine operation.	2	-	2	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. assist in monitoring pasting/pressing operations to discover and communicate any irregularities or defects to the operator.	2	-	2	-
<i>Maintain workspace and equipment</i>	4	4	2	1
PC12. assist the operator in cleaning and maintaining the pasting/pressing machine and its parts (upper and lower plates, roller, etc.).	2	4	-	1
PC13. organize and manage the workspace, ensuring proper storage of panels and disposal of waste.	2	-	2	-
<i>Quality control and inspection</i>	4	4	2	1
PC14. assist in inspecting the pasted/pressed materials for defects, ensuring they meet the required quality standards and specifications.	2	4	-	1
PC15. maintain proper documentation of manufacturing specifications and quality control inspections for the pasting/pressing process.	2	-	2	-
NOS Total	24	40	30	6

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1004
NOS Name	Assist in operating pasting and pressing machines
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4
Credits	4
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

Qualification Pack

FFS/N1005: Assist in operating cutting and sizing machines

Description

This unit describes the performance criteria required to assist in operating cutting & sizing machines

Scope

The scope covers the following :

- Assist in setting up worksite
- Assist in cutting/sizing operation
- Maintain workspace and equipment
- Quality control and inspection

Elements and Performance Criteria

Assist in setting up worksite

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 cutting/sizing operation
- PC3.** assist in setting up cutting/sizing machines, including blade height, alignment, mitre angles, etc. to achieve accurate and consistent results.

Assist in cutting/sizing operation

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

- PC4.** support in handling and loading of the workpieces onto the machine accurately and efficiently.
- PC5.** support in positioning and securing the materials on the cutting/sizing machines, utilizing clamps, jigs, or other appropriate methods.
- PC6.** assist in adjusting the machines during the cutting/sizing process to ensure consistent quality and dimensional accuracy.
- PC7.** assist in performing measurement and marking on the job work for cutting/sizing operation
- PC8.** assist the operator in following standard operating procedures and safety guidelines for machine operation.
- PC9.** apply printed labels on finished panels for ease in tracking and identification
- PC10.** assist in monitoring cutting/sizing operations to discover and communicate any irregularities or defects to the operator.

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 cutting/sizing 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

Qualification Pack

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

- PC13.** assist in inspecting the cut and sized 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 cutting/sizing 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 cutting/sizing operations.
- KU9.** the relevant quality standards and criteria for job work received for the cutting/sizing machine operation
- KU10.** components and functions of machine setup, including adjusting blade height, alignment, and mitre angles to ensure accuracy and consistency.
- KU11.** the loading and unloading process for the cutting/sizing machine and the associated fixtures.
- KU12.** different methods for positioning and securing materials on cutting/sizing machines, including clamps, jigs, or other appropriate methods.
- KU13.** methods and techniques for adjusting different machine parameters to achieve desired cutting/sizing outcomes.
- KU14.** principles and techniques of measurement and marking for cutting/sizing operations.
- KU15.** standard operating procedures for machine operation, including start-up, shutdown, tool changes, and routine maintenance.
- KU16.** purpose and significance of applying printed labels on finished panels.
- KU17.** the basics of machine operation monitoring techniques and the identification of irregularities or defects.
- KU18.** specific cleaning and maintenance procedures for the cutting/sizing machine and its components
- KU19.** principles of organizing and managing the workspace, including proper storage techniques for panels and waste disposal procedures.
- KU20.** visual and tactile indicators of defects in finished materials.

Qualification Pack

KU21. importance of maintaining accurate documentation of manufacturing specifications and quality control inspections for the cutting/sizing process.

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>Assist in setting up worksite</i>	6	8	8	2
PC1. perform stacking and storage of materials and workpieces for machine operation at the designated machine stations	2	4	-	1
PC2. check the quality of job work received for the cutting/sizing operation	2	4	4	1
PC3. assist in setting up cutting/sizing machines, including blade height, alignment, mitre angles, etc. to achieve accurate and consistent results.	2	-	4	-
<i>Assist in cutting/sizing operation</i>	10	20	16	2
PC4. support in handling and loading of the workpieces onto the machine accurately and efficiently.	2	4	2	-
PC5. support in positioning and securing the materials on the cutting/sizing machines, utilizing clamps, jigs, or other appropriate methods.	-	4	2	-
PC6. assist in adjusting the machines during the cutting/sizing process to ensure consistent quality and dimensional accuracy.	2	4	-	-
PC7. assist in performing measurement and marking on the job work for cutting/sizing operation	2	4	2	1
PC8. assist the operator in following standard operating procedures and safety guidelines for machine operation.	2	-	4	-
PC9. apply printed labels on finished panels for ease in tracking and identification	-	4	2	-
PC10. assist in monitoring cutting/sizing operations to discover and communicate any irregularities or defects to the operator.	2	-	4	1
<i>Maintain workspace and equipment</i>	4	8	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 cutting/sizing machine and its parts (machine bed, blade chamber, etc.).	2	4	-	1
PC12. organize and manage the workspace, ensuring proper storage of panels and disposal of waste.	2	4	2	-
<i>Quality control and inspection</i>	4	4	4	1
PC13. assist in inspecting the cut and sized materials for dimensional accuracy, cleanliness, and quality, ensuring they meet the required specifications.	2	4	-	1
PC14. maintain proper documentation of manufacturing specifications and quality control inspections for the cutting/sizing process.	2	-	4	-
NOS Total	24	40	30	6

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1005
NOS Name	Assist in operating cutting and sizing machines
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4
Credits	4
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

Qualification Pack

FFS/N1006: Assist in operating edge band machines

Description

This unit describes performance criteria required to assist in operating edge band machines

Scope

The scope covers the following :

- Assist in setting up worksite
- Assist in edge banding operation
- Maintain workspace and equipment
- Quality control and inspection

Elements and Performance Criteria

Assist in setting up worksite

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 edge banding machine operation
- PC3.** assist in the alignment and installation of edge banding materials, tools, and adhesives
- PC4.** collaborate with the machine operator in adjusting machine settings, such as temperature, feed rate, and pressure.

Assist in edge banding operation

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

- PC5.** assist in configuring the edge banding machine depending on project requirements such as adhesive type, panel thickness, edge band thickness, etc.
- PC6.** assist in selecting or implementing the appropriate machine program on the workpiece for the edge banding operation
- PC7.** assist the operator in following standard operating procedures and safety guidelines for machine operation.
- PC8.** assist the machine operator in positioning and feeding panel materials into the conveyor of the edge banding machine.
- PC9.** assist in ensuring proper alignment and placement of the edge band material during feeding.
- PC10.** assist in identifying the machine functions and carry out the remaining functions either manually or using another machine.
- PC11.** assist in monitoring edge band operations to discover and communicate any irregularities or defects to the operator.

Maintain workspace and equipment

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

- PC12.** assist the operator in cleaning and maintaining the edge banding machine and its parts (glue pot, conveyor, scraping unit, etc.).

Qualification Pack

PC13. organize and manage the workspace, ensuring proper storage of edge bands and disposal of waste.

Quality control and inspection

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

PC14. assist in inspecting the edge banding results for adherence, smoothness, and overall quality.

PC15. maintain proper documentation of manufacturing specifications and quality control inspections for edge banding 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 edge banding operations.
- KU9.** the relevant quality standards and criteria for job work received for the edge banding machine operation
- KU10.** different edge banding materials, tools, and adhesives used in machine operations.
- KU11.** the basics of machine settings and their impact on edge banding results.
- KU12.** the machine configuration principles and considerations based on project requirements.
- KU13.** basic machine programs and their selection for edge banding operations.
- KU14.** standard operating procedures for machine operation, including start-up, shutdown, tool changes, and routine maintenance.
- KU15.** the basics of panel material positioning and feeding techniques for edge banding machine operation.
- KU16.** the importance of edge band material alignment and relevant placement techniques during feeding.
- KU17.** the functions and operations of the edge banding machine.
- KU18.** the basics of machine operation monitoring techniques and the identification of irregularities or defects.
- KU19.** specific cleaning and maintenance procedures for the edge banding machine and its components
- KU20.** principles of organizing and managing the workspace, including proper storage techniques for panels and waste disposal procedures.



Qualification Pack

- KU21.** visual and tactile indicators of defects in finished materials.
- KU22.** importance of maintaining accurate documentation of manufacturing specifications and quality control inspections for the edge banding process.

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>Assist in setting up worksite</i>	6	12	6	3
PC1. perform stacking and storage of materials and workpieces for machine operation at the designated machine stations	2	4	-	1
PC2. check the quality of job work received for the edge banding machine operation	2	4	2	1
PC3. assist in the alignment and installation of edge banding materials, tools, and adhesives	-	4	2	-
PC4. collaborate with the machine operator in adjusting machine settings, such as temperature, feed rate, and pressure.	2	-	2	1
<i>Assist in edge banding operation</i>	10	26	16	-
PC5. assist in configuring the edge banding machine depending on project requirements such as adhesive type, panel thickness, edge band thickness, etc.	2	4	-	-
PC6. assist in selecting or implementing the appropriate machine program on the workpiece for the edge banding operation	-	6	4	-
PC7. assist the operator in following standard operating procedures and safety guidelines for machine operation.	2	-	2	-
PC8. assist the machine operator in positioning and feeding panel materials into the conveyor of the edge banding machine.	-	6	4	-
PC9. assist in ensuring proper alignment and placement of the edge band material during feeding.	2	4	-	-
PC10. assist in identifying the machine functions and carry out the remaining functions either manually or using another machine.	2	6	4	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. assist in monitoring edge band operations to discover and communicate any irregularities or defects to the operator.	2	-	2	-
<i>Maintain workspace and equipment</i>	4	4	2	1
PC12. assist the operator in cleaning and maintaining the edge banding machine and its parts (glue pot, conveyor, scraping unit, etc.).	2	4	-	1
PC13. organize and manage the workspace, ensuring proper storage of edge bands and disposal of waste.	2	-	2	-
<i>Quality control and inspection</i>	4	4	2	-
PC14. assist in inspecting the edge banding results for adherence, smoothness, and overall quality.	2	4	-	-
PC15. maintain proper documentation of manufacturing specifications and quality control inspections for edge banding process.	2	-	2	-
NOS Total	24	46	26	4

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1006
NOS Name	Assist in operating edge band machines
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4
Credits	4
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023

Qualification Pack

FFS/N1007: Assist in operating drilling machines

Description

This unit describes performance criteria required to assist in operating drilling machines

Scope

The scope covers the following :

- Assist in setting up worksite
- Assist in drilling operation
- Maintain workspace and equipment
- Quality control and inspection

Elements and Performance Criteria

Assist in setting up worksite

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 drilling machine operation
- PC3.** collaborate with the machine operator to set up the drilling machine, including adjusting machine controls, installing cutting tools, and ensuring proper alignment.

Assist in drilling operation

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

- PC4.** support the machine operator in loading and unloading workpieces onto and off the machine table or holding fixtures.
- PC5.** collaborate with the machine operator to feed workpieces through the drilling operations, maintaining a steady and controlled pace.
- PC6.** assist in collecting and organizing the drilled workpieces, ensuring they are labelled or sorted according to project requirements.
- PC7.** assist the operator in following standard operating procedures and safety guidelines for machine operation.
- PC8.** assist in adjusting the machines during the drilling process to ensure consistent quality and dimensional accuracy.
- PC9.** assist in monitoring drilling operations to discover and communicate any irregularities or defects to the operator.

Maintain workspace and equipment

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

- PC10.** assist in cleaning and maintaining the drilling machine and its parts (machine bed, drill chamber, etc.)
- PC11.** collaborate in the maintenance of cutting tools by helping to clean, sharpen, or replace them as instructed by the machine operator.

Qualification Pack

PC12. organize and manage the workspace, ensuring proper storage of drilling and disposal of waste.

Quality control and inspection

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

PC13. assist in inspecting the drilled workpieces for any visible defects, irregularities, or incomplete cuts

PC14. maintain proper documentation of manufacturing specifications and quality control inspections for drilling 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 drilling operations.
- KU9.** the relevant quality standards and criteria for job work received for the drilling machine operation
- KU10.** the basics of machine settings and their impact on drilling results.
- KU11.** the loading and unloading process for the drilling machine and the associated fixtures.
- KU12.** the feeding process for the drilling machine and the importance of maintaining a steady and controlled pace.
- KU13.** labelling or sorting techniques to identify routed workpieces based on project requirements, such as dimensions, materials, or specific characteristics.
- KU14.** standard operating procedures for machine operation, including start-up, shutdown, tool changes, and routine maintenance.
- KU15.** techniques and parameters for machine adjustments, such as speed, depth, feed rate, or tool selection, to achieve desired drilling results.
- KU16.** the basics of machine operation monitoring techniques and the identification of irregularities or defects.
- KU17.** specific cleaning and maintenance procedures for the drilling machine and its components
- KU18.** proper cleaning, sharpening, or replacement techniques for cutting tools based on the machine operator's instructions.

Qualification Pack

- KU19.** principles of organizing and managing the workspace, including proper storage techniques for panels and waste disposal procedures.
- KU20.** visual and tactile indicators of defects in finished materials.
- KU21.** importance of maintaining accurate documentation of manufacturing specifications and quality control inspections for the drilling process.

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>Assist in setting up worksite</i>	6	10	6	3
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 drilling machine operation	2	4	2	1
PC3. collaborate with the machine operator to set up the drilling machine, including adjusting machine controls, installing cutting tools, and ensuring proper alignment.	2	-	4	1
<i>Assist in drilling operation</i>	10	14	16	-
PC4. support the machine operator in loading and unloading workpieces onto and off the machine table or holding fixtures.	2	4	2	-
PC5. collaborate with the machine operator to feed workpieces through the drilling operations, maintaining a steady and controlled pace.	2	-	4	-
PC6. assist in collecting and organizing the drilled workpieces, ensuring they are labelled or sorted according to project requirements.	-	4	2	-
PC7. assist the operator in following standard operating procedures and safety guidelines for machine operation.	2	-	4	-
PC8. assist in adjusting the machines during the drilling process to ensure consistent quality and dimensional accuracy.	2	6	-	-
PC9. assist in monitoring drilling operations to discover and communicate any irregularities or defects to the operator.	2	-	4	-
<i>Maintain workspace and equipment</i>	6	6	8	1
PC10. assist in cleaning and maintaining the drilling machine and its parts (machine bed, drill chamber, etc.)	2	6	-	1

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. collaborate in the maintenance of cutting tools by helping to clean, sharpen, or replace them as instructed by the machine operator.	2	-	4	-
PC12. organize and manage the workspace, ensuring proper storage of drilling and disposal of waste.	2	-	4	-
<i>Quality control and inspection</i>	4	6	4	-
PC13. assist in inspecting the drilled workpieces for any visible defects, irregularities, or incomplete cuts	2	6	-	-
PC14. maintain proper documentation of manufacturing specifications and quality control inspections for drilling process.	2	-	4	-
NOS Total	26	36	34	4

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1007
NOS Name	Assist in operating drilling machines
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4
Credits	4
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023

Qualification Pack

FFS/N1008: Assist in operating routing machines

Description

This unit describes performance criteria required to assist in operating routing machines

Scope

The scope covers the following :

- Assist in setting up worksite
- Assist in routing operation
- Maintain workspace and equipment
- Quality control and inspection

Elements and Performance Criteria

Assist in setting up worksite

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 routing machine operation
- PC3.** collaborate with the machine operator to set up the routing machine, including adjusting machine controls, installing routing tools, and ensuring proper alignment.

Assist in routing operation

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

- PC4.** support the machine operator in loading and unloading workpieces onto and off the machine table or holding fixtures.
- PC5.** collaborate with the machine operator to feed workpieces through the routing operations, maintaining a steady and controlled pace.
- PC6.** assist in collecting and organizing the routed workpieces, ensuring they are labelled or sorted according to project requirements.
- PC7.** assist the operator in following standard operating procedures and safety guidelines for machine operation.
- PC8.** assist in adjusting the machines during the routing process to ensure consistent quality and dimensional accuracy.
- PC9.** assist in monitoring routing operations to discover and communicate any irregularities or defects to the operator.

Maintain workspace and equipment

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

- PC10.** assist in cleaning and maintaining the routing machine and its parts (machine bed, routing & routing chamber, etc.)
- PC11.** collaborate in the maintenance of cutting tools by helping to clean, sharpen, or replace them as instructed by the machine operator.

Qualification Pack

PC12. organize and manage the workspace, ensuring proper storage of routing and disposal of waste.

Quality control and inspection

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

PC13. assist in inspecting the routed workpieces for any visible defects, irregularities, or incomplete cuts

PC14. maintain proper documentation of manufacturing specifications and quality control inspections for routing 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 routing operations.
- KU9.** the relevant quality standards and criteria for job work received for the routing machine operation
- KU10.** the basics of machine settings and their impact on routing results.
- KU11.** the loading and unloading process for the routing machine and the associated fixtures.
- KU12.** the feeding process for the routing machine and the importance of maintaining a steady and controlled pace.
- KU13.** labelling or sorting techniques to identify routed workpieces based on project requirements, such as dimensions, materials, or specific characteristics.
- KU14.** standard operating procedures for machine operation, including start-up, shutdown, tool changes, and routine maintenance.
- KU15.** techniques and parameters for machine adjustments, such as speed, depth, feed rate, or tool selection, to achieve desired routing results.
- KU16.** the basics of machine operation monitoring techniques and the identification of irregularities or defects.
- KU17.** specific cleaning and maintenance procedures for the routing machine and its components
- KU18.** proper cleaning, sharpening, or replacement techniques for cutting tools based on the machine operator's instructions.



Qualification Pack

- KU19.** principles of organizing and managing the workspace, including proper storage techniques for panels and waste disposal procedures.
- KU20.** visual and tactile indicators of defects in finished materials.
- KU21.** importance of maintaining accurate documentation of manufacturing specifications and quality control inspections for the routing process.

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>Assist in setting up worksite</i>	6	10	6	3
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 routing machine operation	2	4	2	1
PC3. collaborate with the machine operator to set up the routing machine, including adjusting machine controls, installing routing tools, and ensuring proper alignment.	2	-	4	1
<i>Assist in routing operation</i>	10	14	16	-
PC4. support the machine operator in loading and unloading workpieces onto and off the machine table or holding fixtures.	2	4	2	-
PC5. collaborate with the machine operator to feed workpieces through the routing operations, maintaining a steady and controlled pace.	2	-	4	-
PC6. assist in collecting and organizing the routed workpieces, ensuring they are labelled or sorted according to project requirements.	-	4	2	-
PC7. assist the operator in following standard operating procedures and safety guidelines for machine operation.	2	-	4	-
PC8. assist in adjusting the machines during the routing process to ensure consistent quality and dimensional accuracy.	2	6	-	-
PC9. assist in monitoring routing operations to discover and communicate any irregularities or defects to the operator.	2	-	4	-
<i>Maintain workspace and equipment</i>	6	6	8	1
PC10. assist in cleaning and maintaining the routing machine and its parts (machine bed, routing & routing chamber, etc.)	2	6	-	1

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. collaborate in the maintenance of cutting tools by helping to clean, sharpen, or replace them as instructed by the machine operator.	2	-	4	-
PC12. organize and manage the workspace, ensuring proper storage of routing and disposal of waste.	2	-	4	-
<i>Quality control and inspection</i>	4	6	4	-
PC13. assist in inspecting the routed workpieces for any visible defects, irregularities, or incomplete cuts	2	6	-	-
PC14. maintain proper documentation of manufacturing specifications and quality control inspections for routing process.	2	-	4	-
NOS Total	26	36	34	4

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1008
NOS Name	Assist in operating routing machines
Sector	Furniture & Fittings
Sub-Sector	Interior Design & Installation
Occupation	Furniture Production (Machine Shop)
NSQF Level	4
Credits	4
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023

Qualification Pack

FFS/N1009: Assist in operating veneer cutting and splicing machines

Description

This unit describes performance criteria required to assist in operating veneer cutting and splicing machines

Scope

The scope covers the following :

- Assist in setting up worksite
- Assist in veneer cutting/ splicing operation
- Maintain workspace and equipment
- Quality control and inspection

Elements and Performance Criteria

Assist in setting up worksite

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.** assist in checking the quality of veneer sheets received for the machine operation
- PC3.** verify the alignment and installation of tools, adhesives, and veneer materials under the guidance of the machine operator.
- PC4.** assist in setting up veneer cutting/splicing machines for time, pressure, thickness, etc., according to job requirements.

Assist in veneer cutting/ splicing operation

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

- PC5.** support the machine operator in loading and unloading workpieces onto and off the machine table or holding fixtures.
- PC6.** collaborate with the machine operator to feed workpieces through the veneer cutting/ splicing machine, maintaining a steady and controlled pace.
- PC7.** support the machine operator in applying adhesive and cutting veneer materials accurately and consistently.
- PC8.** assist in tracing the desired shape and size on the veneer
- PC9.** assist in monitoring machine operations to discover and communicate any irregularities or defects to the operator.

Maintain workspace and equipment

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

- PC10.** assist in cleaning and maintaining the veneer cutting/splicing machine and its parts by removing debris and residues
- PC11.** collaborate in the maintenance of cutting tools by helping to clean, sharpen, or replace them as instructed by the machine operator.

Qualification Pack

PC12. organize and manage the workspace, ensuring proper storage of veneer sheets and disposal of waste.

Quality control and inspection

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

PC13. assist in inspecting the prepared veneer for accuracy, smoothness, and overall quality, ensuring they meet the required specifications.

PC14. maintain proper documentation of manufacturing specifications and quality control inspections for veneer preparation.

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 veneer cutting/splicing operations.
- KU9.** the relevant quality standards and criteria for job work received for the veneer cutting/splicing machine operation
- KU10.** the basics of different tools, adhesives, and veneer materials used in the veneer cutting/splicing process.
- KU11.** components and functions of machine setup, including adjusting time, pressure, thickness, etc to ensure accuracy and consistency.
- KU12.** the loading and unloading process for the veneer cutting/splicing machine and the associated fixtures.
- KU13.** the feeding process for the veneer cutting/splicing machine and the importance of maintaining a steady and controlled pace.
- KU14.** the adhesive application and veneer cutting processes in the veneer cutting/splicing machine.
- KU15.** different tracing techniques and tools used for marking desired shapes and sizes on veneer materials.
- KU16.** the basics of machine operation monitoring techniques and the identification of irregularities or defects.
- KU17.** specific cleaning and maintenance procedures for the veneer cutting/splicing machine and its components

Qualification Pack

- KU18.** proper cleaning, sharpening, or replacement techniques for cutting tools based on the machine operator's instructions.
- KU19.** principles of organizing and managing the workspace, including proper storage techniques for panels and waste disposal procedures.
- KU20.** visual and tactile indicators of defects in finished materials.
- KU21.** importance of maintaining accurate documentation of manufacturing specifications and quality control inspections for the veneer cutting/splicing process.

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>Assist in setting up worksite</i>	6	16	10	2
PC1. perform stacking and storage of materials and workpieces for machine operation at the designated machine stations	2	6	-	1
PC2. assist in checking the quality of veneer sheets received for the machine operation	2	4	2	1
PC3. verify the alignment and installation of tools, adhesives, and veneer materials under the guidance of the machine operator.	-	6	4	-
PC4. assist in setting up veneer cutting/splicing machines for time, pressure, thickness, etc., according to job requirements.	2	-	4	-
<i>Assist in veneer cutting/ splicing operation</i>	8	18	8	-
PC5. support the machine operator in loading and unloading workpieces onto and off the machine table or holding fixtures.	2	4	2	-
PC6. collaborate with the machine operator to feed workpieces through the veneer cutting/ splicing machine, maintaining a steady and controlled pace.	2	4	2	-
PC7. support the machine operator in applying adhesive and cutting veneer materials accurately and consistently.	2	6	-	-
PC8. assist in tracing the desired shape and size on the veneer	-	4	2	-
PC9. assist in monitoring machine operations to discover and communicate any irregularities or defects to the operator.	2	-	2	-
<i>Maintain workspace and equipment</i>	6	6	6	1
PC10. assist in cleaning and maintaining the veneer cutting/splicing machine and its parts by removing debris and residues	2	6	-	1

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. collaborate in the maintenance of cutting tools by helping to clean, sharpen, or replace them as instructed by the machine operator.	2	-	4	-
PC12. organize and manage the workspace, ensuring proper storage of veneer sheets and disposal of waste.	2	-	2	-
<i>Quality control and inspection</i>	4	6	2	1
PC13. assist in inspecting the prepared veneer for accuracy, smoothness, and overall quality, ensuring they meet the required specifications.	2	6	-	1
PC14. maintain proper documentation of manufacturing specifications and quality control inspections for veneer preparation.	2	-	2	-
NOS Total	24	46	26	4

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N1009
NOS Name	Assist in operating veneer cutting and splicing machines
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Machine Shop)
NSQF Level	4
Credits	4
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

Qualification Pack

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/N1001.Prepare the work site for machine operations	22	48	24	6	100	15
FFS/N1002.Assist in setting up and performing machine operations	18	54	22	6	100	20
FFS/N1003.Assist in performing machine maintenance and quality checking	18	50	28	4	100	20
FFS/N8201.Follow health, safety, and greening practices at the worksite	35	40	20	5	100	10
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	10
Total	113	222	94	21	450	75

Elective: 1 Pasting and Pressing machines

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N1004.Assist in operating pasting and pressing machines	24	40	30	6	100	25
Total	24	40	30	6	100	25

Qualification Pack

Elective: 2 Cutting and Sizing machines

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N1005.Assist in operating cutting and sizing machines	24	40	30	6	100	25
Total	24	40	30	6	100	25

Elective: 3 Edge Band machines

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N1006.Assist in operating edge band machines	24	46	26	4	100	25
Total	24	46	26	4	100	25

Elective: 4 Drilling machines

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N1007.Assist in operating drilling machines	26	36	34	4	100	25
Total	26	36	34	4	100	25

Elective: 5 Routing machines

Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N1008.Assist in operating routing machines	26	36	34	4	100	25
Total	26	36	34	4	100	25

Elective: 6 Veneer Cutting and Splicing machines

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N1009.Assist in operating veneer cutting and splicing machines	24	46	26	4	100	25
Total	24	46	26	4	100	25

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
NCO	National Classification of Occupation
NTC	National Training Certificate
NAC	National Apprenticeship Certificate
CITS	Craft Instructor Training Scheme
NA	Not Applicable
PwD	Person with Disability
POSH	Prevention of Sexual Harassment

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.