









# **Textile Processing Preparatory** Operator

Electives: Singeing & Desizing/ Continuous Bleaching Range

QP Code: TSC/Q5103

Version: 2.0

NSQF Level: 2

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# TSC/Q5103: Textile Processing Preparatory Operator

# **Brief Job Description**

A Textile Processing Preparatory Operator is responsible to do the specified job of pre-treatment of fabric with proper control of parameters to get the desired effect. This job requires the individual to have thorough knowledge of process flow and material flow in a processing mill for fabric production and should know the important functions and operations of machines used in preparatory department of textile processing.

#### **Personal Attributes**

A Textile Chemical Processing Preparatory Operator should have physicals attributes like dexterity, coordination, motor skills, strength, stamina and handle heavy equipment. A Winding Tenter should also have sensory attributes like hearing ability and vision (normal distance vision, color vision, night vision, peripheral vision, depth perception and ability to change focus).

## **Applicable National Occupational Standards (NOS)**

### **Compulsory NOS:**

- 1. TSC/N9015: Follow machine, safety, and organizational guidelines in textile sector
- 2. TSC/N9016: Follow teamwork, adaptability, and communication guidelines in textile sector
- 3. DGT/VSQ/N0101: Employability Skills (30 Hours)

## **Electives**(mandatory to select at least one):

#### Elective 1: Singeing & Desizing

#### To be filled

1. TSC/N5107: Carryout shift change, singeing and desizing activity in the processing preparatory department

### Elective 2: Continuous Bleaching Range

#### To be filled

1. <u>TSC/N5108</u>: Carryout shift change, continuous bleaching range production in the processing preparatory department







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# **Qualification Pack (QP) Parameters**

Sector	Textile
Sub-Sector	Processing - Textiles
Occupation	Pre Treatment Operations
Country	India
NSQF Level	2
Credits	18
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8154.27
Minimum Educational Qualification & Experience	Ability to read and write
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	31/03/2025
NSQC Approval Date	17/11/2022
Version	2.0
Reference code on NQR	2022/TEXT/TSC/07029
NQR Version	1.0







# TSC/N9015: Follow machine, safety, and organizational guidelines in textile sector

# **Description**

This unit provides performance criteria, knowledge and skills required to follow machine, safety and organizational guidelines in textile sector.

## Scope

The scope covers the following:

- Maintaining the work area, tools and machines
- Greening and energy conservation in textile sector
- Health, safety and response to emergencies at textile sector
- Organizational standards and policies

#### **Elements and Performance Criteria**

#### Maintaining the work area, tools and machines

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

- PC1. handle materials, machinery, equipment and tools as per standard procedure
- PC2. use appropriate material handling equipment and tools as per standard procedure
- **PC3.** keep the equipment, machine and work area clean using appropriate cleaning tools as per standard procedure
- **PC4.** undertake minor routine maintenance of equipment and tools as per standard maintenance procedure
- **PC5.** maintain record for defective and unsafe equipment and tools
- **PC6.** verify that machine guards are in place as per standard specifications
- **PC7.** follow specified ergonomics for the assigned job role in textile sector
- **PC8.** collect and store worn-out spare parts at specified location
- **PC9.** report the condition of worn out parts as per standard procedure

#### Greening and energy conservation in textile sector

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

- **PC10.** segregate wastes such as recyclable, non-recyclable, hazardous as per standard protocol
- PC11. optimize usage of material and resources including water, electricity in various tasks
- **PC12.** switch off the machines and lights when not in use

Health, safety and response to emergencies at textile sector

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

- **PC13.** use Personal Protective Equipment (PPEs) like body protector, ear plugs, nose mask, head cap, etc. as per guidelines
- **PC14.** identify abnormal sounds emanating from faulty or worn out machine parts and take appropriate action
- **PC15.** avoid dependency on any type of intoxicants







- **PC16.** maintain social distance as per the instruction at workplace
- **PC17.** report hazardous material to superiors at workplace
- **PC18.** use the various appropriate fire extinguishers on different types of fires correctly
- PC19. follow the specified steps in case of electricity failure
- PC20. lift heavy objects using correct lifting procedures
- **PC21.** recall emergency exits, safe spots, etc. of workplace
- PC22. practice mock drills and evacuation procedures organized by industry
- PC23. assist others to reach to safe spots in emergency situations
- **PC24.** provide basic first aid for injury to peers and report to superiors
- **PC25.** interpret different signs, alarms and take action appropriately
- PC26. follow the guidelines while working in hazards atmosphere
- **PC27.** assist in designing the safety plans with peers and superiors
- PC28. follow the approved safety plans at workplace

# Organizational standards and policies

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

- PC29. perform assigned duties as per organization's protocol within scheduled time period
- **PC30.** follow organization policies, quality standards, rules and regulations for working in textile sector
- PC31. motivate colleagues to follow operational guidelines of organization
- PC32. wear specified uniform and follow etiquette as per standard guidelines for the textile sector
- PC33. maintain hygienic working atmosphere as per protocol of the textile sector
- PC34. submit lost and found articles as per standard protocol

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** organizational standard procedures, quality standards, rules, codes, policies and safety standards in the textile sector
- **KU2.** different type of tools and equipment used in textile sub- sector and their specifications and operating procedures
- **KU3.** safe handling procedure of tools and equipment
- **KU4.** the importance of displays and written instructions for the allocated machines
- **KU5.** dos and donts specific to the assigned work responsibilities
- **KU6.** protocol for minimizing the wastage of material, effort and time
- **KU7.** organization's formats and procedures for reporting production, defects, faults, material/tool requisition and quality parameters and task completed for assigned job
- **KU8.** schedule for cleaning and waste collection for the assigned job role
- **KU9.** importance and standard procedure for disposal of soft, hard, non-hazardous and hazardous wastes and materials
- **KU10.** available types of material handling equipment and handling methods used in the textile sector







- **KU11.** hazards of unsafe workplace conditions and procedures in the textile industry and methods to avoid hazards
- **KU12.** various types of fire extinguishers
- **KU13.** importance of stable mental condition in case of emergency
- **KU14.** correct work posture and importance of ergonomics for the assigned job role
- **KU15.** organizational quality systems like quality circle, 5S, ISO, SA, etc. followed in the textile sector
- **KU16.** importance of following work wear standards, behavioral protocols and etiquette in the textile sector
- **KU17.** importance of energy conservation through proper maintenance schedule in the textile sector
- **KU18.** procedures and formats for reporting lost and found material
- **KU19.** different types of alarms and their significance

# **Generic Skills (GS)**

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

- **GS1.** read and comprehend policies in notice boards displayed in the workplace
- **GS2.** minimize the resource consumption for the assigned task
- **GS3.** solve basic arithmetic calculations related to assigned job role
- **GS4.** recognize and differentiate colors of materials used in textile sector
- **GS5.** lift specified materials for the allotted task using prescribed ergonomic position
- **GS6.** exhibit motor skill required for the allotted task







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintaining the work area, tools and machines	10	10	-	6
<b>PC1.</b> handle materials, machinery, equipment and tools as per standard procedure	-	-	-	-
<b>PC2.</b> use appropriate material handling equipment and tools as per standard procedure	-	-	-	-
<b>PC3.</b> keep the equipment, machine and work area clean using appropriate cleaning tools as per standard procedure	-	-	-	-
<b>PC4.</b> undertake minor routine maintenance of equipment and tools as per standard maintenance procedure	-	-	-	-
<b>PC5.</b> maintain record for defective and unsafe equipment and tools	-	-	-	-
<b>PC6.</b> verify that machine guards are in place as per standard specifications	-	-	-	-
<b>PC7.</b> follow specified ergonomics for the assigned job role in textile sector	-	-	-	-
<b>PC8.</b> collect and store worn-out spare parts at specified location	-	-	-	-
<b>PC9.</b> report the condition of worn out parts as per standard procedure	-	-	-	-
Greening and energy conservation in textile sector	7	10	-	6
<b>PC10.</b> segregate wastes such as recyclable, non-recyclable, hazardous as per standard protocol	-	-	-	-
<b>PC11.</b> optimize usage of material and resources including water, electricity in various tasks	-	-	-	-
<b>PC12.</b> switch off the machines and lights when not in use	-	-	-	-
Health, safety and response to emergencies at textile sector	32	40	-	28







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. use Personal Protective Equipment (PPEs) like body protector, ear plugs, nose mask, head cap, etc. as per guidelines	-	-	-	-
<b>PC14.</b> identify abnormal sounds emanating from faulty or worn out machine parts and take appropriate action	-	-	-	-
<b>PC15.</b> avoid dependency on any type of intoxicants	-	-	-	-
<b>PC16.</b> maintain social distance as per the instruction at workplace	-	-	-	-
<b>PC17.</b> report hazardous material to superiors at workplace	-	-	-	-
<b>PC18.</b> use the various appropriate fire extinguishers on different types of fires correctly	-	-	-	-
<b>PC19.</b> follow the specified steps in case of electricity failure	-	-	-	-
<b>PC20.</b> lift heavy objects using correct lifting procedures	-	-	-	-
<b>PC21.</b> recall emergency exits, safe spots, etc. of workplace	-	-	-	-
<b>PC22.</b> practice mock drills and evacuation procedures organized by industry	-	-	-	-
<b>PC23.</b> assist others to reach to safe spots in emergency situations	-	-	-	-
<b>PC24.</b> provide basic first aid for injury to peers and report to superiors	-	-	-	-
<b>PC25.</b> interpret different signs, alarms and take action appropriately	-	-	-	-
PC26. follow the guidelines while working in hazards atmosphere	-	-	-	-
<b>PC27.</b> assist in designing the safety plans with peers and superiors	-	-	-	_







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC28.</b> follow the approved safety plans at workplace	-	-	-	-
Organizational standards and policies	16	20	-	10
<b>PC29.</b> perform assigned duties as per organization's protocol within scheduled time period	-	-	-	-
<b>PC30.</b> follow organization policies, quality standards, rules and regulations for working in textile sector	-	-	-	-
<b>PC31.</b> motivate colleagues to follow operational guidelines of organization	-	-	-	-
<b>PC32.</b> wear specified uniform and follow etiquette as per standard guidelines for the textile sector	-	-	-	-
<b>PC33.</b> maintain hygienic working atmosphere as per protocol of the textile sector	-	-	-	-
<b>PC34.</b> submit lost and found articles as per standard protocol	-	-	-	-
NOS Total	65	80	-	50







# **National Occupational Standards (NOS) Parameters**

NOS Code	TSC/N9015
NOS Name	Follow machine, safety, and organizational guidelines in textile sector
Sector	Textile
Sub-Sector	Generic - Textiles Handloom
Occupation	Generic - Textiles & Handloom
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	27/01/2022
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022







# TSC/N9016: Follow teamwork, adaptability, and communication guidelines in textile sector

# **Description**

This unit provides performance criteria, knowledge and skills required to follow team work, communication and adaptability in textile sector

# Scope

The scope covers the following:

- Teamwork and communication
- Adaptability

#### **Elements and Performance Criteria**

#### Teamwork, trust and communication

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

- **PC1.** contribute to create a positive work environment in the team
- **PC2.** carry out tasks as per instructions received from superiors
- **PC3.** contribute to team work as per allocated responsibility to complete the task by using appropriate tools and methods
- **PC4.** build trust with team mates and superiors
- **PC5.** implement the ideas after superior's approval at work place
- **PC6.** communicate clearly with the team members as per standard protocol
- **PC7.** use suggested hand signs, vocal sound signals to convey the information in the production area
- **PC8.** listen effectively to the ideas and concerns of the peers
- **PC9.** use correct and respectful terms while communicating as per industry policy
- **PC10.** express views proactively and effectively
- **PC11.** make efforts to resolve difference of opinion with superiors and team members
- **PC12.** report to superior for problems identified in assigned duty
- **PC13.** report the daily performance to superior in prescribed manner and formats

#### Adaptability

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

- PC14. adapt to flexible work environment for the assigned task
- PC15. adapt to work with various members of different ethnicity, gender and PwD without biases
- PC16. consider opinions of colleagues, fitters, superiors for the assigned task
- **PC17.** plan the work-routine within the limits of the responsibility
- PC18. adopt new ideas after due approval from superior for improving the productivity

# **Knowledge and Understanding (KU)**







The individual on the job needs to know and understand:

- KU1. importance of teamwork and discipline
- KU2. limits and responsibilities for the assigned duties in the textile sector
- **KU3.** possible conflicts in the assigned job role and methods to resolve the same
- **KU4.** importance of teamwork, group discussions and healthy work environment
- KU5. importance of reporting as per the standard protocol
- **KU6.** hierarchy of communication and communication etiquettes in the textile sector
- KU7. protocol for communication with different ethnicity, gender and PwD
- KU8. report and grievance submission formats
- **KU9.** importance of hand, vocal sound signals in the textile sector

# **Generic Skills (GS)**

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

- **GS1.** read and comprehend written instructions
- **GS2.** listen effectivity for the instructions
- **GS3.** coordinate with team mates for the allotted tasks
- GS4. use and comprehend prescribed voice and hand signals in the textile production area
- **GS5.** fill forms and prepare reports such as production report, material requisition forms, leave application, etc. as per standard formats







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Teamwork, trust and communication	10	15	-	5
<b>PC1.</b> contribute to create a positive work environment in the team	-	-	-	-
<b>PC2.</b> carry out tasks as per instructions received from superiors	-	-	-	-
<b>PC3.</b> contribute to team work as per allocated responsibility to complete the task by using appropriate tools and methods	-	-	-	-
PC4. build trust with team mates and superiors	-	-	-	-
<b>PC5.</b> implement the ideas after superior's approval at work place	-	-	-	-
<b>PC6.</b> communicate clearly with the team members as per standard protocol	-	-	-	-
<b>PC7.</b> use suggested hand signs, vocal sound signals to convey the information in the production area	-	-	-	-
<b>PC8.</b> listen effectively to the ideas and concerns of the peers	-	-	-	-
<b>PC9.</b> use correct and respectful terms while communicating as per industry policy	-	-	-	-
PC10. express views proactively and effectively	-	-	-	-
<b>PC11.</b> make efforts to resolve difference of opinion with superiors and team members	-	-	-	-
<b>PC12.</b> report to superior for problems identified in assigned duty	-	-	-	-
<b>PC13.</b> report the daily performance to superior in prescribed manner and formats	-	-	-	-
Adaptability	5	5	-	5
<b>PC14.</b> adapt to flexible work environment for the assigned task	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> adapt to work with various members of different ethnicity, gender and PwD without biases	-	-	-	-
<b>PC16.</b> consider opinions of colleagues, fitters, superiors for the assigned task	-	-	-	-
<b>PC17.</b> plan the work-routine within the limits of the responsibility	-	-	-	-
<b>PC18.</b> adopt new ideas after due approval from superior for improving the productivity	-	-	-	-
NOS Total	15	20	-	10







# **National Occupational Standards (NOS) Parameters**

NOS Code	TSC/N9016
NOS Name	Follow teamwork, adaptability, and communication guidelines in textile sector
Sector	Textile
Sub-Sector	Generic - Textiles Handloom
Occupation	Generic - Textiles & Handloom
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	27/01/2022
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022







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

# **Description**

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

# Scope

The scope covers the following:

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

#### **Elements and Performance Criteria**

#### Introduction to Employability Skills

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

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

#### Constitutional values - Citizenship

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

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

### Becoming a Professional in the 21st Century

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

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

#### Basic English Skills

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

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

#### Communication Skills

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

**PC5.** follow good manners while communicating with others

**PC6.** work with others in a team







### **Diversity & Inclusion**

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

- **PC7.** communicate and behave appropriately with all genders and PwD
- **PC8.** report any issues related to sexual harassment

#### Financial and Legal Literacy

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

- **PC9.** use various financial products and services safely and securely
- PC10. calculate income, expenses, savings etc.
- **PC11.** approach the concerned authorities for any exploitation as per legal rights and laws

## Essential Digital Skills

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

- PC12. operate digital devices and use its features and applications securely and safely
- **PC13.** use internet and social media platforms securely and safely

#### Entrepreneurship

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

- PC14. identify and assess opportunities for potential business
- PC15. identify sources for arranging money and associated financial and legal challenges

#### Customer Service

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

- **PC16.** identify different types of customers
- **PC17.** identify customer needs and address them appropriately
- **PC18.** follow appropriate hygiene and grooming standards

### Getting ready for apprenticeship & Jobs

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

- PC19. create a basic biodata
- **PC20.** search for suitable jobs and apply
- PC21. identify and register apprenticeship opportunities as per requirement

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** need for employability skills
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use basic spoken English language
- **KU6.** Do and dont of effective communication
- **KU7.** inclusivity and its importance
- KU8. different types of disabilities and appropriate communication and behaviour towards PwD
- **KU9.** different types of financial products and services







- **KU10.** how to compute income and expenses
- **KU11.** importance of maintaining safety and security in financial transactions
- KU12. different legal rights and laws
- **KU13.** how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- KU15. types of customers and their needs
- **KU16.** how to apply for a job and prepare for an interview
- **KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

# **Generic Skills (GS)**

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

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







# **Assessment Criteria**

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







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
<b>PC21.</b> identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-







# **National Occupational Standards (NOS) Parameters**

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	30/12/2024
NSQC Clearance Date	30/12/2021







# TSC/N5107: Carryout shift change, singeing and desizing activity in the processing preparatory department

# **Description**

This unit is about carryout shift change, singeing and desizing activity in the processing preparatory department

# Scope

The scope covers the following:

- Taking charge of shift from Singeing & desizing machine operator
- Handling over shift to Singeing & desizing machine operator
- Carry out preparatory activities for operations in the machine
- Operate the machine for specified task as per work order
- Clean the machine on a regular basis& carryout preventive maintenance activities
- Preparing the desizing chemicals
- Checking the result & comparing with the standard

#### **Elements and Performance Criteria**

#### Taking charge of shift from Singeing & desizing machine operator

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

- **PC1.** ensure to bring the necessary operational tools to the department
- **PC2.** come at least 10 15 minutes earlier to the work place and meet the previous shift operator and discuss with him/ her regarding the lot and quality changes, any issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.
- **PC3.** understand the fabric being processed and process running on the machine
- **PC4.** ensure the technical details are mentioned on the job card displayed on the machine
- **PC5.** check for the availability of the spare trolley / batching trolley for unloading the fabric
- **PC6.** ensure that the next batch to be processed is ready and placed near the machine
- **PC7.** ensure the required chemicals are weighed and prepared for the next process
- **PC8.** check the cleanliness of the machines and other work areas
- **PC9.** Obtain information from the previous shift operator for any deviation in the above and bring the same to the knowledge of the shift superior as well as that of the previous shift.
- **PC10.** follow the process to take charge of the shift from the outgoing operator in a proper manner

# Handing over shift to Singeing & desizing machine operator

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

- **PC11.** ensure in providing the details regarding fabric quality as well as the process running on the machine
- **PC12.** provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine.
- PC13. get clearance from the incoming counterpart before leaving the work area







- **PC14.** report to your shift superiors as well as that of the incoming shift operator in case your counterpart doesn't report for the incoming shift
- **PC15.** report to your shift superior about the quality / production / safety issues/ any other issue faced in your shift and leave the department only after getting necessary clearance
- **PC16.** collect the wastes from waste collection bags, weigh them and transport to storage area
- **PC17.** ensure the work spot is clean at the time of takeover

#### Carry out preparatory activities for operations in the machine

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

- **PC18.** obtain clear instructions from the supervisor and understand the tasks mentioned in the work order
- **PC19.** follow standard procedure to clean the machine properly including guide rolls, fabric spreader, tensioning rolls, burners, impregnation trough, squeezing& quenching rollers
- **PC20.** follow proper technique to feed the fabric evenly, spread from the batch or trolley, using J box for continuous operation
- **PC21.** follow the process to feed desizing chemicals in the trough and adjust the mangle pressure
- **PC22.** ensure all safety devices are functioning properly including exhaust system
- **PC23.** take the fabric out from the other end of the machine on a batching device or a trolley using proper tension while batching

## Operate the machine for specified tasks as per Work Order

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

- **PC24.** set various parameters such as the flame width according to the width of the fabric to be singed
- PC25. set the distance between flame burner and fabric
- PC26. set the flame intensity according to the fabric structure and machine speed
- **PC27.** set the drain temperature of water-cooled rollers
- **PC28.** check that the fabric is evenly and uniformly dried before singeing
- **PC29.** verify that the exhaust system is working properly
- **PC30.** ensure all safety controls are in good working condition

### Clean the machine on a regular basis and carryout preventive maintenance activities

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

- **PC31.** ensure the machine is kept clean at all times, before loading, while running and after unloading the fabric
- PC32. follow the preventive maintenance schedule & ensure the machine is running smoothly
- **PC33.** check that all controls are functioning properly
- **PC34.** ensure the right quality of water, steam and air is available

#### Preparing the desizing chemicals

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

- **PC35.** dissolving and mixing the desizing chemicals as per the recipe
- **PC36.** adjust the pH and temperature of the desizing solution
- **PC37.** feed the solution to the machine tank during the process
- PC38. check the temperature, pH and reaction time in the desizing chamber

Checking the result & comparing with the standards







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

- **PC39.** cut the sample after desizing
- **PC40.** ensure to dry the sample and check the size content in the fabric
- PC41. perform necessary comparison of the results with the standard

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** the importance of quality & productivity
- **KU2.** various defects in the fabric due to yarn, weaving or processing
- **KU3.** reasons for various defects in the fabric due to processing & their remedy
- **KU4.** process flow in a processing unit
- KU5. material flow in a processing unit
- **KU6.** functions of various controls of the machine
- **KU7.** importance of material handling and types of material handling equipment being used
- **KU8.** importance of cleanliness at workplace
- KU9. functions and methodology for operating different material handling equipment
- **KU10.** the functions of various alarm signals
- **KU11.** guidelines for operating the machine
- **KU12.** guidelines for taking charge of shift from previous shift Singeing & desizing machine operator
- **KU13.** guidelines for handing over the shift to the next shift Singeing & desizing machine operator safety procedures to be followed while operating the machine
- **KU14.** SOP (Standard Operating Procedures) and regulations in processing unit
- **KU15.** procedure followed to get the final output in processing unit
- **KU16.** safe working practices to be adopted in processing unit
- **KU17.** how to report to the supervisor or higher authority about any grievances faced
- **KU18.** importance of discipline & punctuality
- **KU19.** importance of take over & handover in achieving quality & productivity
- **KU20.** how to report any abnormal sound/ noise to the concerned/ supervisor
- **KU21.** type of fiber, yarn and fabric
- **KU22.** that clogged burners will give uneven singeing
- **KU23.** fabric tension must be even throughout
- **KU24.** knowledge about various controls of machine
- **KU25.** knowledge about various functions of singeing & desizing machine
- **KU26.** knowledge of machine speed according to fabric quality (best 50- 150m/min)
- **KU27.** knowledge about safety measures in case of an accident
- **KU28.** fabric should be checked for moisture content before singeing
- **KU29.** safety of man, machine & material in case of an accident
- **KU30.** procedure followed to get the final output in processing unit







- KU31. standard operating procedures (SOP) and regulations in processing unit
- **KU32.** safe working practices to be adopted in processing unit
- KU33. how to report to the supervisor or higher authority about any grievances faced
- KU34. basic knowledge of various sizing chemicals & their removal
- KU35. maintain the concentration of desizing solution
- **KU36.** proper use of cutting tools
- **KU37.** consulting the supervisor in case of any problem
- **KU38.** various desizing agents & their properties
- KU39. about ph & temp of various chemicals for optimum results

# **Generic Skills (GS)**

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

- **GS1.** comprehend written instructions
- **GS2.** communicate with supervisor appropriately
- GS3. talk to others to convey information effectively
- **GS4.** apply problem-solving approaches in different situations
- **GS5.** apply good attention to detail
- **GS6.** check your work is complete and free from errors







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Taking charge of shift from Singeing & desizing machine operator	9	10	-	11
<b>PC1.</b> ensure to bring the necessary operational tools to the department	-	-	-	-
<b>PC2.</b> come at least 10 - 15 minutes earlier to the work place and meet the previous shift operator and discuss with him/ her regarding the lot and quality changes, any issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.	-	-	-	-
<b>PC3.</b> understand the fabric being processed and process running on the machine	-	-	-	-
<b>PC4.</b> ensure the technical details are mentioned on the job card displayed on the machine	-	-	-	-
<b>PC5.</b> check for the availability of the spare trolley / batching trolley for unloading the fabric	-	-	-	-
<b>PC6.</b> ensure that the next batch to be processed is ready and placed near the machine	-	-	-	-
<b>PC7.</b> ensure the required chemicals are weighed and prepared for the next process	-	-	-	-
<b>PC8.</b> check the cleanliness of the machines and other work areas	-	-	-	-
<b>PC9.</b> Obtain information from the previous shift operator for any deviation in the above and bring the same to the knowledge of the shift superior as well as that of the previous shift.	-	-	-	-
<b>PC10.</b> follow the process to take charge of the shift from the outgoing operator in a proper manner	-	-	-	-
Handing over shift to Singeing & desizing machine operator	9	10	-	11
<b>PC11.</b> ensure in providing the details regarding fabric quality as well as the process running on the machine	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine.	-	-	-	-
<b>PC13.</b> get clearance from the incoming counterpart before leaving the work area	-	-	-	-
<b>PC14.</b> report to your shift superiors as well as that of the incoming shift operator in case your counterpart doesn't report for the incoming shift	-	-	-	-
<b>PC15.</b> report to your shift superior about the quality / production / safety issues/ any other issue faced in your shift and leave the department only after getting necessary clearance	-	-	-	-
<b>PC16.</b> collect the wastes from waste collection bags, weigh them and transport to storage area	-	-	-	-
<b>PC17.</b> ensure the work spot is clean at the time of takeover	-	-	-	-
Carry out preparatory activities for operations in the machine	50	110	-	8
<b>PC18.</b> obtain clear instructions from the supervisor and understand the tasks mentioned in the work order	-	-	-	-
<b>PC19.</b> follow standard procedure to clean the machine properly including guide rolls, fabric spreader, tensioning rolls, burners, impregnation trough, squeezing& quenching rollers	-	-	-	-
<b>PC20.</b> follow proper technique to feed the fabric evenly, spread from the batch or trolley, using J box for continuous operation	-	-	-	-
<b>PC21.</b> follow the process to feed desizing chemicals in the trough and adjust the mangle pressure	-	-	-	-
<b>PC22.</b> ensure all safety devices are functioning properly including exhaust system	-	-	-	-
<b>PC23.</b> take the fabric out from the other end of the machine on a batching device or a trolley using proper tension while batching	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Operate the machine for specified tasks as per Work Order	50	110	-	5
<b>PC24.</b> set various parameters such as the flame width according to the width of the fabric to be singed	-	-	-	-
<b>PC25.</b> set the distance between flame burner and fabric	-	-	-	-
<b>PC26.</b> set the flame intensity according to the fabric structure and machine speed	-	-	-	-
<b>PC27.</b> set the drain temperature of water-cooled rollers	-	-	-	-
PC28. check that the fabric is evenly and uniformly dried before singeing	-	-	-	-
<b>PC29.</b> verify that the exhaust system is working properly	-	-	-	-
<b>PC30.</b> ensure all safety controls are in good working condition	-	-	-	-
Clean the machine on a regular basis and carryout preventive maintenance activities	50	110	-	5
<b>PC31.</b> ensure the machine is kept clean at all times, before loading, while running and after unloading the fabric	-	-	-	-
<b>PC32.</b> follow the preventive maintenance schedule & ensure the machine is running smoothly	-	-	-	-
PC33. check that all controls are functioning properly	-	-	-	-
<b>PC34.</b> ensure the right quality of water, steam and air is available	-	-	-	-
Preparing the desizing chemicals	18	30	-	5
<b>PC35.</b> dissolving and mixing the desizing chemicals as per the recipe	-	-	-	-
PC36. adjust the pH and temperature of the desizing solution	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC37.</b> feed the solution to the machine tank during the process	-	-	-	-
<b>PC38.</b> check the temperature, pH and reaction time in the desizing chamber	-	-	-	-
Checking the result & comparing with the standards	14	30	-	5
PC39. cut the sample after desizing	-	-	-	-
<b>PC40.</b> ensure to dry the sample and check the size content in the fabric	-	-	-	-
<b>PC41.</b> perform necessary comparison of the results with the standard	-	-	-	-
NOS Total	200	410	-	50







# **National Occupational Standards (NOS) Parameters**

NOS Code	TSC/N5107
NOS Name	Carryout shift change, singeing and desizing activity in the processing preparatory department
Sector	Textile
Sub-Sector	Processing - Textiles
Occupation	Pre Treatment Operations
NSQF Level	2
Credits	TBD
Version	1.0
Last Reviewed Date	NA
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022







# TSC/N5108: Carryout shift change, continuous bleaching range production in the processing preparatory department

# **Description**

This unit is about carryout shift change, continuous bleaching range production in the processing preparatory department

# Scope

The scope covers the following:

- Taking charge of shift from Continuous bleaching range operator
- Handing over the shift to Continuous bleaching range operator
- Carry out preparatory activities for operations of the machine
- Operating the machine for specified task as per work order
- Clean the machine on a regular basis& carryout preventive maintenance
- Taking out the sample after Bleaching & comparing it with the standard sample

#### **Elements and Performance Criteria**

#### Taking charge of shift from Continuous bleaching range operator

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

- **PC1.** come at least 10 15 minutes earlier to the work spot
- **PC2.** bring the necessary operational tools to the department
- **PC3.** meet the previous shift operator and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.
- **PC4.** understand the fabric being processed & process running on the machine
- **PC5.** ensure the technical details are mentioned on the job card display on the machine
- **PC6.** check for the availability of the spare trolley for unloading the fabric
- **PC7.** check the next batch to be processed is ready near the machine
- **PC8.** ensure the required chemicals are already weighed & prepared
- **PC9.** check the cleanliness of the machines & other work areas
- **PC10.** check whether any spare/raw material/ tool / yarn / any other materials are thrown under the machines or in the other work areas
- **PC11.** question the previous shift operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well that of the previous shift
- PC12. ensure the wastes collection boxes are empty while taking charge of shift
- **PC13.** take over the shift from the outgoing Continuous bleaching range operator in a proper manner

### Handing over shift to Continuous bleaching range operator

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

PC14. ensure in providing the details regarding fabric quality & the process running on the machine







- **PC15.** to provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine
- **PC16.** ensure the empty trolley is near the machine for unloading the fabric
- **PC17.** ensure the next lot to be processed is ready near the machine already stitched & arranged properly
- PC18. ensure the required chemicals for the next lot or next process are weighed & prepared
- PC19. get clearance from the incoming counterpart before leaving the work spot
- **PC20.** report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift
- PC21. ensure, the shift has to be properly handed over to the incoming shift operator
- **PC22.** report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/her shift and should leave the department only after getting concurrence for the same from his/ her superiors
- PC23. collect the wastes from waste collection bags, weigh them and transport to storage area
- PC24. ensure the work spot is clean

#### Carry out preparatory activities for operations of the machine

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

- PC25. understand the task mentioned in the work order
- PC26. ensure that the machine and its working area is clean
- PC27. clean the impregnator rolls & trough properly
- PC28. Ensure the suction slit is properly cleaned & free of any lint or loose threads
- PC29. clean all guide rolls in the reaction chambers & washing units
- **PC30.** ensure all guide rolls are free moving
- **PC31.** feed the fabric from the batch in the center of the machine
- PC32. ensure that all controls are working properly
- **PC33.** ensure fabric is crease-less and evenly fed onto the machine
- **PC34.** open steam valve & drain any condensate from the line
- **PC35.** ensure good quality of steam & air pressure is available
- **PC36.** ensure the safety devices are functioning properly
- PC37. ensure to use personal protective equipment such as mask, gloves, ear plugs & gum boots

#### Operating the machine for specified tasks as per Work Order

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

- **PC38.** know the operations of the machine
- PC39. read & understand the process being followed to do the task
- PC40. keep even tension on fabric throughout the process
- **PC41.** keep optimum pressure of the squeezer rolls to get good results
- **PC42.** set the required temp in all chambers
- **PC43.** open the steam valves & drain the condensate in all compartments
- **PC44.** dispense the chemicals in the mixing tank
- **PC45.** mix the chemicals properly & feed into the impregnator
- **PC46.** start the machine & take out fabric either on batch







- **PC47.** set the impregnator roller pressure to the optimum
- **PC48.** ensure the wiper roller are functioning properly
- PC49. ensure proper functioning of dosing pump & spraying of chemicals
- **PC50.** check that all control functions are working properly
- **PC51.** check ph & temp & other parameters in all compartments
- PC52. remove the air from the steamer
- **PC53.** set the machine speed & dwell time according to the fabric quality
- **PC54.** set the temp in all washing chambers
- PC55. ensuring proper functioning of flow meter & level controller
- **PC56.** set the drying temp of all drying cylinders
- PC57. ensure proper fabric batching tension for even & creaseless fabric winding
- **PC58.** ensure that all safety controls are functioning properly

#### Clean the machine on a regular basis and carryout preventive maintenance activities

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

- **PC59.** keep the machine clean at all times
- **PC60.** follow the preventive maintenance schedule & ensure the machine is running smoothly
- **PC61.** check that all controls are functioning properly
- **PC62.** ensure enough supply of utilities such as water, air & steam for proper functioning of machine
- **PC63.** stop the machine in case of any abnormal sound & report the matter to supervisor or concerned person
- **PC64.** check for any leakages of water, steam or air
- **PC65.** check steam, water and air pressure

## Taking out the sample after Bleaching & comparing it with the standard

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

- **PC66.** taking out the sample after bleaching near the first joint
- **PC67.** compare the sample with the standard
- **PC68.** check the sample for absorbency
- **PC69.** check the sample for whiteness index
- **PC70.** take the sample to your supervisor if the sample is not matching to the standard for decision

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** standard operating procedures (SOP) and regulations in a processing unit
- **KU2.** safe working practices to be adopted in processing unit
- **KU3.** guality systems and other processes practiced in the processing unit
- **KU4.** reporting to the supervisor or higher authority in case of emergency
- **KU5.** color coding adopted for different products in the processing unit
- **KU6.** understanding the importance of quality & productivity







- KU7. understanding various defects in the fabric due to yarn, weaving or processing
- **KU8.** reasons for various defects in the fabric due to processing & their remedy
- **KU9.** process flow in a processing unit
- KU10. material flow in a processing unit
- **KU11.** guidelines for operating the continuous bleaching range
- **KU12.** the functions of different signal lamps
- **KU13.** guidelines for taking charge of shift from previous shift Continuous bleaching range operator
- **KU14.** guidelines for handing over the shift to the next shift Continuous bleaching range operator
- KU15. importance of material handling and types of material handling equipments used.
- KU16. functions and methodology for operating different material handling tools
- **KU17.** knowledge of waste collection system & equipments used
- KU18. importance of cleanliness at workplace
- **KU19.** safety procedures to be followed in a continuous bleaching range
- KU20. personal hygiene and duty of care
- KU21. safe working practices and organisational procedures
- **KU22.** limits of your own responsibility
- **KU23.** ways of resolving problems within the work area
- **KU24.** the importance of effective communication with supervisors
- **KU25.** the lines of communication, authority and reporting procedures
- **KU26.** the organisations rules, codes and guidelines (including timekeeping)
- KU27. the company's quality standards
- **KU28.** the importance of complying with written instructions
- KU29. any abnormal sound/ noise should be reported to the concerned/ supervisor
- **KU30.** report to the supervisor if there is any major defect in fabric
- **KU31.** type of fiber, yarn and fabric- piece dyed or for printing
- KU32. knowledge of operation of various valves & traps
- **KU33.** knowledge of various chemicals for scouring & bleaching

#### **Generic Skills (GS)**

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

- **GS1.** write clear and short sentences
- **GS2.** comprehend written instructions
- **GS3.** communicate with supervisor appropriately
- **GS4.** talk to others to convey information effectively
- **GS5.** apply problem-solving approaches in different situations
- **GS6.** refer anomalies to the supervisor
- **GS7.** seek clarification on problems from others
- **GS8.** apply good attention to detail







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Taking charge of shift from Continuous bleaching range operator	9	10	-	11
<b>PC1.</b> come at least 10 - 15 minutes earlier to the work spot	-	-	-	-
<b>PC2.</b> bring the necessary operational tools to the department	-	-	-	-
<b>PC3.</b> meet the previous shift operator and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.	-	-	-	-
<b>PC4.</b> understand the fabric being processed & process running on the machine	-	-	-	-
<b>PC5.</b> ensure the technical details are mentioned on the job card display on the machine	-	-	-	-
<b>PC6.</b> check for the availability of the spare trolley for unloading the fabric	-	-	-	-
<b>PC7.</b> check the next batch to be processed is ready near the machine	-	-	-	-
<b>PC8.</b> ensure the required chemicals are already weighed & prepared	-	-	-	-
<b>PC9.</b> check the cleanliness of the machines & other work areas	-	-	-	-
<b>PC10.</b> check whether any spare/raw material/ tool / yarn / any other materials are thrown under the machines or in the other work areas	-	-	-	-
<b>PC11.</b> question the previous shift operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well that of the previous shift	-	-	-	-
<b>PC12.</b> ensure the wastes collection boxes are empty while taking charge of shift	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> take over the shift from the outgoing Continuous bleaching range operator in a proper manner	-	-	-	-
Handing over shift to Continuous bleaching range operator	9	10	-	11
<b>PC14.</b> ensure in providing the details regarding fabric quality & the process running on the machine	-	-	-	-
<b>PC15.</b> to provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine	-	-	-	-
<b>PC16.</b> ensure the empty trolley is near the machine for unloading the fabric	-	-	-	-
<b>PC17.</b> ensure the next lot to be processed is ready near the machine already stitched & arranged properly	-	-	-	-
<b>PC18.</b> ensure the required chemicals for the next lot or next process are weighed & prepared	-	-	-	-
<b>PC19.</b> get clearance from the incoming counterpart before leaving the work spot	-	-	-	-
<b>PC20.</b> report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift	-	-	-	-
<b>PC21.</b> ensure, the shift has to be properly handed over to the incoming shift operator	-	-	-	-
PC22. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/her shift and should leave the department only after getting concurrence for the same from his/ her superiors	-	-	-	-
<b>PC23.</b> collect the wastes from waste collection bags, weigh them and transport to storage area	-	-	-	-
PC24. ensure the work spot is clean	-	-	-	-
Carry out preparatory activities for operations of the machine	50	110	-	10







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC25.</b> understand the task mentioned in the work order	-	-	-	-
<b>PC26.</b> ensure that the machine and its working area is clean	-	-	-	-
PC27. clean the impregnator rolls & trough properly	-	-	-	-
PC28. Ensure the suction slit is properly cleaned & free of any lint or loose threads	_	-	-	-
PC29. clean all guide rolls in the reaction chambers & washing units	-	-	-	-
PC30. ensure all guide rolls are free moving	-	-	-	-
<b>PC31.</b> feed the fabric from the batch in the center of the machine	-	-	-	-
PC32. ensure that all controls are working properly	-	-	-	-
<b>PC33.</b> ensure fabric is crease-less and evenly fed onto the machine	-	-	-	-
<b>PC34.</b> open steam valve & drain any condensate from the line	-	-	-	-
<b>PC35.</b> ensure good quality of steam & air pressure is available	-	-	-	-
<b>PC36.</b> ensure the safety devices are functioning properly	-	-	-	-
PC37. ensure to use personal protective equipment such as mask, gloves, ear plugs & gum boots	-	-	-	-
Operating the machine for specified tasks as per Work Order	50	110	-	8
PC38. know the operations of the machine	-	-	-	-
<b>PC39.</b> read & understand the process being followed to do the task	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC40.</b> keep even tension on fabric throughout the process	-	-	-	-
<b>PC41.</b> keep optimum pressure of the squeezer rolls to get good results	-	-	-	-
PC42. set the required temp in all chambers	-	-	-	-
<b>PC43.</b> open the steam valves & drain the condensate in all compartments	-	-	-	-
PC44. dispense the chemicals in the mixing tank	-	-	-	-
<b>PC45.</b> mix the chemicals properly & feed into the impregnator	-	-	-	-
<b>PC46.</b> start the machine & take out fabric either on batch	-	-	-	-
<b>PC47.</b> set the impregnator roller pressure to the optimum	-	-	-	-
<b>PC48.</b> ensure the wiper roller are functioning properly	-	-	-	-
<b>PC49.</b> ensure proper functioning of dosing pump & spraying of chemicals	-	-	-	-
<b>PC50.</b> check that all control functions are working properly	-	-	-	-
<b>PC51.</b> check ph & temp & other parameters in all compartments	-	-	-	-
PC52. remove the air from the steamer	-	-	-	-
PC53. set the machine speed & dwell time according to the fabric quality	-	-	-	-
PC54. set the temp in all washing chambers	-	-	-	-
<b>PC55.</b> ensuring proper functioning of flow meter & level controller	-	-	-	-
PC56. set the drying temp of all drying cylinders	-	-	-	-
<b>PC57.</b> ensure proper fabric batching tension for even & creaseless fabric winding	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC58.</b> ensure that all safety controls are functioning properly	-	-	-	-
Clean the machine on a regular basis and carryout preventive maintenance activities	41	85	-	5
PC59. keep the machine clean at all times	-	-	-	-
<b>PC60.</b> follow the preventive maintenance schedule & ensure the machine is running smoothly	-	-	-	-
<b>PC61.</b> check that all controls are functioning properly	-	-	-	-
<b>PC62.</b> ensure enough supply of utilities such as water, air & steam for proper functioning of machine	-	-	-	-
<b>PC63.</b> stop the machine in case of any abnormal sound & report the matter to supervisor or concerned person	-	-	-	-
<b>PC64.</b> check for any leakages of water, steam or air	-	-	-	_
PC65. check steam, water and air pressure	-	-	-	-
Taking out the sample after Bleaching & comparing it with the standard	41	85	-	5
<b>PC66.</b> taking out the sample after bleaching near the first joint	-	-	-	-
PC67. compare the sample with the standard	-	-	-	-
PC68. check the sample for absorbency	-	-	-	-
PC69. check the sample for whiteness index	-	-	-	-
<b>PC70.</b> take the sample to your supervisor if the sample is not matching to the standard for decision	-	-	-	-
NOS Total	200	410	-	50







# **National Occupational Standards (NOS) Parameters**

NOS Code	TSC/N5108
NOS Name	Carryout shift change, continuous bleaching range production in the processing preparatory department
Sector	Textile
Sub-Sector	Processing - Textiles
Occupation	Pre Treatment Operations
NSQF Level	2
Credits	TBD
Version	1.0
Last Reviewed Date	NA
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022

# Assessment Guidelines and Assessment Weightage

## **Assessment Guidelines**

- 1.Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
- 6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Minimum Aggregate Passing % at QP Level: 50







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

# **Assessment Weightage**

# Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N9015.Follow machine, safety, and organizational guidelines in textile sector	65	80	-	50	195	20
TSC/N9016.Follow teamwork, adaptability, and communication guidelines in textile sector	15	20	-	10	45	5
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	0	0	50	5
Total	100	130	0	60	290	30

Elective: 1 Singeing & Desizing

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N5107.Carryout shift change, singeing and desizing activity in the processing preparatory department	200	410	-	50	660	70
Total	200	410	-	50	660	70

Elective: 2 Continuous Bleaching Range







National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N5108.Carryout shift change, continuous bleaching range production in the processing preparatory department	200	410	-	50	660	70
Total	200	410	-	50	660	70







# **Acronyms**

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







# **Glossary**

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.







Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
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.