







## **Model Curriculum**

# Textile ProcessingPreparatory Operator

SECTOR : TEXTILE

SUB-SECTOR: PROCESSING - TEXTILES

OCCUPATION : PRE - TREATMENT

REF ID OPERATIONS: TSC/Q5103, V 2.0

NSQF LEVEL 2















### Certificate

### CURRICULUM COMPLIANCE TO QUALIFICATION PACK - NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

### **TEXTILE SECTOR SKILL COUNCIL**

for the

### **MODEL CURRICULUM**

Complying to National Occupational Standards of Job Role/ Qualification Pack: ': <a href="mailto:Textile Processing Preparatory Operatoer">Textile Processing Preparatory Operatoer</a> 'QP No. 'TSC/Q 5103' <a href="mailto:NSQF">NSQF</a> Level 2'

Date of Issuance: ! \$@# · -•·

Valid up to: ! \$@# · -•·

\* Valid up to the next review date of the Qualification Pack

(Dr. Swapna Mishra)
Director (C&T)

(Textile Sector Skill Council)









## **TABLE OF CONTENTS**

1. Curriculum	01
2. Trainer Prerequisites	06
3 Annexure: Assessment Criteria	07









# **Textile Processing Preparatory Operator**

### **CURRICULUM / SYLLABUS**

This program is aimed at training candidates for the job of a "<u>Qualifications Pack – Textile Processing Preparatory Operator</u>", in the "<u>Textile</u>" Sector and aims at building the following key competencies amongst the learner

Program Name	Textile Processing Preparatory Operator					
Qualification Pack Name & Reference ID.		Textile Processing Preparatory Operator TSC/Q5103, version 2.0				
Version No.	2.0	Version Update Date	31.03.2022			
Pre-requisites to Training	Ability to read and write					
Training Outcomes	After completing this programme, participants will be able to:  Compulsory NOS  Maintain work area, tools and machines Gain knowledge on behavioral skill for team working Maintain health, safety and security at work place Comply with industry and organizational requirement  Elective 1 – Singeing & Desizing Perform taking charge of shift and handing over shift Operate the Singeing and Desizing machine Prepare the sample for check quality of processed fabric  Elective 2 - Continuous Bleaching Range Perform taking charge of shift and handing over shift Operate the Continuous Bleaching range machine					









S. No	Module Type	Module	Key Learning Outcomes	Equipment Required
1.	Compulsory	Follow machine, safety & organizational guidelines in Textile sector  Theory Duration (hh:mm) 25:00  Practical Duration (hh:mm) 50:00  Corresponding NOS Code TSC/N9015	<ul> <li>Differentiate various types of tools used for cleaning and maintenance.</li> <li>Explain the objectives of each cleaning tool used in production operation.</li> <li>Discuss the significance of safe handling procedures of tools and equipment.</li> <li>Brief the importance and written instructions on the allocated machines.</li> <li>Discuss the significance of minimizing the wastage of material, effort, and time.</li> <li>Prepare a draft schedule for cleaning and waste collection for the assigned job role.</li> <li>List the available types of material handling equipment and handling methods used in the production department.</li> <li>Discuss the types and importance of PPE used in the allotted production department.</li> <li>Demonstrate the procedure to handle materials, tools, PPE, and machines.</li> <li>Demonstrate identification of the appropriate tools and equipment for the respective job.</li> <li>Demonstrate the scheduled cleaning of machines and equipment.</li> <li>Demonstrate the inspection of machine guards</li> <li>Demonstrate the segregation of recyclable, non-recyclable, hazardous wastes</li> <li>Demonstrate the identification of abnormal sounds emanating from faulty/worn-out machine parts.</li> <li>Demonstrate handling of fire extinguishers.</li> </ul>	Material handling equipment, and tool kits of operational, cleaning maintenance activities, Seating arrangement for 25 people.
2.	Compulsory	Follow teamwork, adaptability and communication guidelines in Textile sector  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code TSC/N9016	<ul> <li>Discuss the importance of teamwork and following industry protocols at the workplace.</li> <li>Explain the limits and responsibilities for the assigned duties in the textile sector.</li> <li>Summarize emergency contact numbers, details of officials, reporting Protocols, and formats.</li> <li>List hierarchy of communication and communication etiquettes in the textile sector.</li> <li>Demonstrate the ability to work in a dynamic work environment by developing coping mechanisms, survival tactics, and traits of flexibility.</li> <li>Create a sample backup work plan for the shortage of manpower, raw materials, etc</li> </ul>	Video visuals of basic communications and team working, models of communicating and team working area at your job, Seating arrangement for 25 people









	diam de la					
Sing	geing & cl dizing th pi do T ( E C	carryout shift hange, singeing and esizing activity in ne processing reparatory epartment.  Theory Duration (hh:mm) 60:00  Practical Duration (hh:mm) 150:00  corresponding NOS ode TSC/N5107	•	Gain knowledge ongeneral discipline Gain knowledge on basic skills of communication Understand the role of Singeing & Desizing machine operator  Perform tasks while taking charge of shift Familiar in faults identification Gain knowledge on machineparts & its function Gain knowledge on preparation activities of Singeing & Desizing machine  Perform Starting and feeding operation Perform machine settings regarding processing parameters Perform sample preparation for quality check Perform and check the processed sample matching withthe standard Learn general discipline	•	Singeing & Desizing Machine – 1 Nos Fabric – 500 mtrs Empty Fabric Rolls Or Suitable Trolleys – 1 Nos
Cont	tinuous sl aching co ge ra th pr de	SC/N5108: Carryout hift change, ontinuous bleaching ange production in the processing reparatory epartment  Theory Duration (hh:mm) 60:00  Practical Duration (hh:mm) 150:00  Forresponding NOS and TSC/N5108		Learn general discipline Perform basic skills of communication effectively Understand the role of Continuous Bleaching Range operator Perform tasks while taking charge of shift and handingover shift Perform faults identification and correction efficiently Maintain the trough, impregnator rolls clean Perform batch feeding Maintain the machine parameters as prescribedfor fabric quality Prepare the processingrecipe as prescribed Run the machine as perSOP Carryout maintenance activity within limits ofresponsibility Prepare sample for quality analysis Compare the prepared sample with the standardsample Carry out Whiteness indextest Make the batch ready forquality approval Understand the quality standards followed in theindustry Prepare the qualityanalysis report	•	Continuous Bleaching Range Machine – 1 Nos Fabric – 500 mtrs. Empty Fabric Rolls Or Suitable Trolleys – 1 Nos









5 Employability Skills (30 Hours)

**Theory Duration** (hh:mm) 12:00

Practical Duration (hh:mm) 18:00

- Discuss the importance of Employability Skills in meeting the job requirements.
- Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.
- Show how to practice different environmentally sustainable practices
- Discuss 21st century skills.
- Display positive attitude, self-motivation, problem solving, time management skills and continuous learning mindset in different situations.
- Use appropriate basic English sentences/ phrases while speaking
- Demonstrate how to communicate in a well -mannered way with others.
- Demonstrate working with others in a team
- Show how to conduct oneself appropriately with all genders and PwD
- Discuss the significance of reporting sexual harassment issues in time
- Discuss the significance of using financial products and services safely and securely.
- Explain the importance of managing expenses, income, and savings.
- Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws
- Show how to operate digital devices and use the associated applications and features, safely and securely
- Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely.
- Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges.
- Differentiate between types of customers
- Explain the significance of identifying customer needs and addressing them
- Discuss the significance of maintaining hygiene and dressing appropriately.
- · Create a biodata
- Use various sources to search and apply for jobs
- Discuss the significance of dressing up neatly and maintaining hygiene for an interview
- Discuss how to search and register for apprenticeship opportunities.

Class room requirements: 25 people seating capacity with a screen and projector









Elective 1	Unique Equipment Required:
Duration:	Apron, head cap, nose mask, earplug, shoe, Fabric roll,
<b>T</b> I	Fabric trolley
Theory	
Duration	
102:00	
Practical	
Duration	
228:00	
Elective 2 Duration:	
Theory	
Duration	
102:00	
Practical	
Duration	
228:00	
220.00	

**Grand Total Course Duration: 330 Hours, 0 Minutes** 

(This syllabus/ curriculum has been approved by TSC: Textile Sector Skill Council)









# Trainer Prerequisites for Job role: "Textile Processing Preparatory Operator" mapped to Qualification Pack: "Textile Processing Preparatory Operator / TSC/Q5103, Version 2.0"

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "Textile Processing Preparatory Operator /TSC/Q5103, Version 2.0".
2	Personal Attributes	Aptitude for conducting training, and pre / post work to ensure competent, Employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organized and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	Basic Literacy & Numeracy
4a	Domain Certification	Certified for Job Role: " <u>Textile Processing Preparatory Operator</u> " mapped to QP: " <u>Textile Processing Preparatory Operator</u> " TSC Q5103, <u>Version 2.0</u> Minimum accepted score 80%.
4b	Platform Certification	Required that the Trainer is certified for MEP/Q 0102 Job Role: "Trainer" with at least 80% score
5	Experience	1 year of Specific sector & 4 years of Trainer experience

### **Employability Trainer Prerequisites**

Trainer Prerequisites							
Minimum Educational	Specialization	Relevant Industry Experience		Trainii	ng Experience	Remarks	
Qualification		Years Specialization		Years	Specialization		
Graduate/CITS	Any Discipline			2	Teaching Experience	Prospective ES trainer should:	
Current ITI Trainers	Employability Skills Training (3 days full- time course done between 2019-2022)					<ul> <li>have good communication skills</li> <li>be well versed in English</li> </ul>	
Certified current EEE trainers (155 hours)	from Management SSC (MEPSC)					<ul> <li>have digital skills</li> <li>have attention to detail</li> <li>be adaptable</li> </ul>	
Certified Trainer	Qualification Pack: Trainer (MEP/Q0102)					have willingness t learn	









### **Annexure: Assessment Criteria**

Job Role: Textile Processing Preparatory Operator

Qualification Pack: Textile Processing Preparatory Operator (TSC/Q5103)

Sector Skill Council: Textile Sector Skill Council

#### Guidelines for assessment :-

- 1. Criteria for assessment for each qualification pack will be created by the Sector Skill Council. Each performance criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for theory & skill practical for each PC.
- 2. The assessment for the theory part will be based on knowledge bank of question created by the SSC.
- 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)
- 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.
- 5. To pass the qualification pack, every trainee should score a minimum of 50%.
- 6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

Module	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	Maintaining the work area, tools and machines	10	10	-	6
	<ol> <li>handle materials, machinery, equipmentand tools as per standard procedure</li> </ol>	-	-	-	-
	<ol> <li>use appropriate material handling equipment and tools as per standar procedure</li> </ol>	-	-	-	-
	3. keep the equipment, machine an work area clean using appropriate cleaning tools asper standard procedure	-	-	-	-
	undertake minor routine maintenance ofequipment and tools as per standard maintenance procedure	-	-	-	-
	5. maintain record for defective and unsafeequipment and tools	-	-	-	-
	6. verify that machine guards are in place asper standard specifications	-	-	-	-
	7. follow specified ergonomics for the assignedjob role in textile sector	-	-	-	-
	8. collect and store worn-out spare parts atspecified location	-	-	-	-
	report the condition of worn out parts as perstandard procedure	-	-	-	-
	Greening and energy conservation in textile sector	7	10	-	6









10. segregate wastes such as recyclable, non-recyclable, hazardous as per standard protocol	-	-	-	-
11. optimize usage of material and resourcesincluding water, electricity in various tasks	-	-	-	-
12. switch off the machines and lights whennot in use	-	-	-	-
Health, safety and response to				
emergencies attextile sector	32	40	-	28
13. use Personal Protective Equipment (PPEs) like body protector, ear plugs, nose mask, headcap, etc. as per guidelines	-	-	-	-
14. identify abnormal sounds emanating fromfaulty or worn out machine parts and take appropriate action	-	-	-	-
15. avoid dependency on any type ofintoxicants	-	-	-	-
16. maintain social distance as per theinstruction at workplace	-	-	-	-
17. report hazardous material to superiors atworkplace	-	-	-	-
18. use the various appropriate fire extinguishers on different types of fires correctly	-	-	-	-
19. follow the specified steps in cas ofelectricity failure	-	-	-	-
20. lift heavy objects using correct liftingprocedures	-	-	-	-
21. recall emergency exits, safe spots, etc. ofworkplace	-	-	-	-
22. practice mock drills and evacuationprocedures organized by industry	-	-	-	-
23. assist others to reach to safe spots inemergency situations	-	-	-	-
24. provide basic first aid for injury t peersand report to superiors	-	-	-	-
25. interpret different signs, alarms and takeaction appropriately	-	-	-	-
26. follow the guidelines while working inhazards atmosphere	-	-	-	-
27. assist in designing the safety plans withpeers and superiors	-	-	-	-
28. follow the approved safety plans atworkplace	-	-	-	-
Organizational standards and policies	16	20	-	10
29. perform assigned duties as per organization's protocol within scheduled timeperiod	-	-	-	-
30. follow organization policies, quality standards, rules and regulations for working intextile	-	-	-	-









					,
	sector				
	31. motivate colleagues to follow operationalguidelines of organizatio	-	-	-	-
	32. wear specified uniform and follow etiquetteas per standard guidelines for the textile sector	-	-	-	-
	33. maintain hygienic working atmosphere asper protocol of the textile sector	-	-	-	-
	34. submit lost and found articles a perstandard protocol	-	-	-	-
	NOS Total	65	80	-	50
					ı
Module	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
TSC/N9016.	Teamwork, trust and	10	15	-	5
Follow	communication				
teamwork, adaptability	contribute to create a positive workenvironment in the team	-	-		-
and	2. carry out tasks as per instruction				
communicatio	receivedfrom superiors	-	-	-	-
n guidelines in	3. contribute to team work as per				
Textile sector	allocatedresponsibility to complete the task by using appropriate tools and methods	-	-	-	-
	build trust with team mates and superiors	-	-	-	-
	5. implement the ideas after superior'sapproval at work place	-	-	-	-
	communicate clearly with the teammembers as per standard protocol	-	-	-	-
	7. use suggested hand signs, voca soundsignals to convey the information in the production area		-	-	-
	8. listen effectively to the ideas and concernsof the peers	-	-	-	-
	<ol> <li>use correct and respectful terms whilecommunicating as per industry policy</li> </ol>		-	-	-
	10. express views proactively and effectively	-	-	-	-
	11. make efforts to resolve difference ofopinion with superiors and team members		•	•	-
	12. report to superior for problems identifiedin assigned duty	-	-	-	-
	13. report the daily performance to superiorin prescribed manner and formats	-	-	-	-
	Adaptability	5	5	-	5
	14. adapt to flexible work	-			-
	environment for theassigned task	-	-	-	-
	15. adapt to work with various members ofdifferent ethnicity, gender and PwD without biases	-	-	-	-









NOS Total	15	20	-	10
18. adopt new ideas after due approval fromsuperior for improving the productivity	-	-	-	-
17. plan the work-routine within the limits ofthe responsibility	-	-	-	-
16. consider opinions of colleagues fitters, superiors for the assigned tas		-	-	-

	Module	Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
1	ΓSC/N5107:	Taking charge of shift from Singeing & desizing machine operator	9	10		11
S	ingeing and	1. come at least 10 - 15 minutes earlier to the work place	-	-	-	-
	orocossina	2. bring the necessary operational tools to the department	-	-	-	-
F	preparatory department	3. meet the previous shift operator and discuss with him/ her regarding the issues faced by him with respect to the quality, production, spare, safety or any other specific instruction etc.	-	-	-	-
		4. understand the fabric being processed & process running on the machine	-	-	-	-
		5. ensure the technical details are mentioned on the job card display on the machine	-	-	-	-
		<ol><li>check for the availability of the spare trolley for unloading the fabric</li></ol>	-	-	-	-
		7. check the next batch to be processed is ready near the machine	-	-	-	-
		8. ensure the required chemicals are already weighed & prepared	-	-	-	-
		9. check the cleanliness of the machines & other work areas	-	-	-	-
		10. 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 as that of the previous shift.	-	-	-	-
		11. take over the shift from the outgoing operator in a proper manner	-	-	-	-
		Handing over shift to Singeing & desizing machine operator	9	10		11
		12. ensure in providing the details regarding fabric quality & the process running on the machine	-	-	-	-









13. provide all relevant information				
regarding the stoppages or	-	-	-	-
breakdown in the machine, any damage to the fabric or machine.				
14. ensure the empty trolley is near	_	_	_	_
the machine for unloading the fabric	-	_		-
15. ensure the next lot to be processed is ready near the				
machine already stitched &	-	-	-	-
arranged properly				
16. ensure the required chemicals				
for the next lot or next process are	_	_	_	_
weighed & prepared				
17. get clearance from the incoming				
counterpart before leaving the work	-	-	-	-
spot				
18. 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				
19. ensure, the shift has to be				
properly handed over to the incoming shift operator	-	-	-	-
20. 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				
21. collect the wastes from waste				
collection bags, weigh them and	-	-	-	-
transport to storage area				
22. ensure the machine and its				
work place is clean	-	-	-	-
23. set the burner position	-	-	-	-
24. set selection of burners and				
adjust the flames				
Carry out preparatory activities	50	110	-	8
for operations in the machine	30	110		0
1. understand the task mentioned in				
the work order				
2. Clean the machine properly				
including guide rolls, fabric	-	-	-	-
spreader, tensioning rolls, burners,				
impregnation trough, squeezing&				
quenching rollers				
3. Feed the fabric evenly ,spread				
from the batch or trolley ,usingJ box	-	-	-	-
for continuous operation				
4. Feed desizing chemicals in the				
trough & adjust the mangle	-	-	-	-
pressure 5. Ensure all safety devices are				
functioning properly including	_	_	_	_
exhaust system	-	_	-	_
2		<u> </u>		l









IG Taka tha tahria aut tram athar			ı	
6. Take the fabric out from other				
end of machine on batching device	-	-	-	-
or trolley & start the machine				
Operate the machine for				
specified tasks as per Work	50	110		5
Order				
7. know the operations of the				
machine & the control system /	-	-	-	-
mechanism				
8. read & understand the process				
being followed to do the task	-	-	-	-
9. set the flame width according to				
the width of the fabric to be singed	_	_	_	_
		_	_	_
10. set the distance between flame				
burner and fabric	-	-	-	-
11. set the flame intensity according				
to the fabric structure	-	-	-	-
12. set the drain temp of water				
cooled rollers	-	-	-	-
13. fabric should be evenly &				
	_	_	_	_
uniformly dried before singeing	-	-	-	-
14. set the machine speed as				
specified	-	-	-	-
15. ensure the exhaust system is				
working properly	-	-	-	-
16. ensure all safety controls are in				
good working condition	-	-	-	-
Clean the machine on a regular				
basis and carryout preventive	50	110		5
maintenance activities				
17. make sure the machine is kept				
clean at all times ,before loading,	-	_	_	-
while running & after unloading the				
fabric				
18. follow the preventive	_	_	_	_
18. follow the preventive maintenance schedule & ensure the	-	-	-	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly	-	-	-	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are	-	-	-	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly	-	-	-	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water	-	-	-	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly		-		-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water	- - - 18	- - 30		- - - 5
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available Preparing the desizing chemicals	- - - 18	- 30		- - - 5
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing	- - - 18	- 30		- - - 5
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe	- - 18	- - 30		- - - 5
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of	- - 18	- - 30	-	- - 5
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution	- - 18 -	- - 30 -	-	- - - 5
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine	- - 18 -	- - 30 -		- - - 5
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank	- - 18 - -	- - 30 - -	- - - -	- - 5 - -
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank 4. check temperature, ph& reaction	- - 18 - -	- - 30 - -	- - -	- - 5 - -
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank	- - 18 - -	- - 30 - -	- - - -	- - 5 - -
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank 4. check temperature, ph& reaction time in the desizing chamber		-	- - - -	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank 4. check temperature, ph& reaction time in the desizing chamber  Checking the result & comparing	- - 18 - - -	- - 30 - - - - 30	- - - -	- - 5 - - - - 5
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank 4. check temperature, ph& reaction time in the desizing chamber		-	- - - -	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank 4. check temperature, ph& reaction time in the desizing chamber  Checking the result & comparing		-	- - - -	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank 4. check temperature, ph& reaction time in the desizing chamber  Checking the result & comparing with the standards 5. cut the sample after desizing		-	- - - - -	-
18. follow the preventive maintenance schedule & ensure the machine is running smoothly 19. check that all controls are functioning properly 20. ensure the right quality of water, steam & air is available  Preparing the desizing chemicals 1. dissolving & mixing the desizing chemicals as per the recipe 2. adjusting the ph & temp of desizing solution 3. feed the solution to the machine tank 4. check temperature, ph& reaction time in the desizing chamber  Checking the result & comparing with the standards		-	- - - - -	-









	7. compare the results with the				
	standard	-	-	-	-
	NOS Total	200	410		50
Module	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	Taking charge of shift from		40		44
	Continuous bleaching range operator	9	10		11
,	1. come at least 10 - 15 minutes				
	earlier to the work spot	_	_	_	_
	bring the necessary operational				
production in	tools to the department	-	-	-	-
the processing	3. meet the previous shift operator				
preparatory	and discuss with him/ her regarding	-	-	-	-
department	the issues faced by them with				
	respect to the quality, production,				
	spare, safety or any other specific				
	instruction etc.				
	understand the fabric being processed & process running on				
	the machine	-	-	-	_
	5. ensure the technical details are				
	mentioned on the job card display	-	_	_	_
	on the machine				
	6. check for the availability of the				
	spare trolley for unloading the fabric	-	-	-	-
	7. check the next batch to be				
	processed is ready near the	-	-	-	-
	machine				
	8. ensure the required chemicals				
	are already weighed & prepared	-	-	-	-
	9. check the cleanliness of the				
	machines & other work areas	-	-	-	-
	10. check whether any spare/raw material/ tool / yarn / any other				
	materials are thrown under the	-	-	-	-
	machines or in the other work areas				
	11. 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				
	12. ensure the wastes collection				
	boxes are empty while taking	-	-	-	-
	charge of shift				
	13. take over the shift from the				
	outgoing Continuous bleaching	-	-	-	-
	range operator in a proper manner				
	Handing over shift to Continuous	9	10		11
	bleaching range operator				
	14. ensure in providing the details regarding fabric quality & the	_			
	process running on the machine	-	-	-	_
	15. to provide all relevant				
	information regarding the	_	_		









stoppages or breakdown in the machine, any damage to the fabric or machine				
16. ensure the empty trolley is near the machine for unloading the fabric	-	-	-	-
17. ensure the next lot to be processed is ready near the machine already stitched & arranged properly	-	-	-	-
18. ensure the required chemicals for the next lot or next process are weighed & prepared	-	-	-	-
<ol> <li>get clearance from the incoming counterpart before leaving the work spot</li> </ol>	-	-	-	-
20. 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	-	-	-	-
21. ensure, the shift has to be properly handed over to the incoming shift operator	-	-	-	-
22. 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	-	-	-	-
23. collect the wastes from waste collection bags, weigh them and transport to storage area	-	-	-	-
24. ensure the work spot is clean	-	-	-	-
Carry out preparatory activities for operations of the machine	50	110		10
<ol> <li>understand the task mentioned in the work order</li> </ol>	-	-	-	-
ensure that the machine and its working area is clean	-	-	-	-
clean the impregnator rolls & trough properly	-	-	-	-
<ol> <li>Ensure the suction slit is properly cleaned &amp; free of any lint or loose threads</li> </ol>	-	-	-	-
5. clean all guide rolls in the reaction chambers & washing units	-	-	-	-
6. ensure all guide rolls are free moving	-	-	-	-
7. feed the fabric from the batch in the center of the machine	-	-	-	-
ensure that all controls are working properly	-	-	-	-
9. ensure fabric is crease-less and evenly fed onto the machine	-	-	-	-









	ı	1	T	T
10. open steam valve & drain any condensate from the line	-	-	-	-
11. Ensure good quality of steam & air pressure is available	-	-	-	-
12. Ensure the safety devices are functioning properly	-	-	-	-
13. Ensure to use personal protective equipments such as mask, gloves, ear plugs & gum boots	-	-	-	-
Operating the machine for specified tasks as per Work Order	50	110		8
14. know the operations of the machine	-	-	-	-
15. read & understand the process being followed to do the task	-	-	-	-
16. keep even tension on fabric throughout the process	-	-	-	-
17. keep optimum pressure of the squeezer rolls to get good results	-	-	-	-
18. set the required temp in all chambers	-	-	-	-
19. open the steam valves & drain the condensate in all compartments	-	-	-	-
20. dispense the chemicals in the mixing tank	-	-	-	-
21. mix the chemicals properly & feed into the impregnator	-	-	-	-
22. start the machine & take out fabric either on batch	-	-	-	-
23. set the impregnator roller pressure to the optimum	-	-	-	•
24. ensure the wiper roller are functioning properly	-	-	-	•
25. ensure proper functioning of dosing pump & spraying of chemicals	-	-	-	-
26. check that all control functions are working properly	-	-	-	-
27. check ph& temp & other parameters in all compartments	-	-	-	-
28. remove the air from the steamer	-	-	-	-
29. set the machine speed & dwell time according to the fabric quality	-	-	-	-
30. set the temp in all washing chambers	-		-	-
31. ensuring proper functioning of flow meter & level controller	-	-	-	-
32. set the drying temp of all drying cylinders	-	-	-	-









33. ensure proper fabric batching tension for even & creaseless fabric winding	-	-	-	-
34. Ensure that all safety controls are functioning properly	-	-	-	-
Clean the machine on a regular basis and carryout preventive maintenance activities	41	85		5
35. keep the machine clean at all times	-	-	-	-
36. follow the preventive maintenance schedule & ensure the machine is running smoothly	-	-	-	-
37. check that all controls are functioning properly	-	-	-	-
38. ensure enough supply of utilities such as water, air & steam for proper functioning of machine	-	-	-	-
39. stop the machine in case of any abnormal sound & report the matter to supervisor or concerned person		-	-	-
40. check for any leakages of water, steam or air	-	-	-	-
41. Check steam, water and air pressure	-	-	-	-
Taking out the sample after Bleaching & comparing it with the standard	41	85		5
taking out the sample after bleaching near the first joint	-	-	-	-
compare the sample with the standard	-	-	-	-
3. check the sample for absorbency	-	-	_	-
4. check the sample for whiteness index	-	-	-	-
5. 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)		Total	Out	Marks Allocation		
	Performance Criteria (PC)	Marks	Out	Theory Marks	Practical Marks	Viva Marks
9.	Introduction to Employability Skills			1	1	-
DGT/VSQ/N0101 - Employability Skills	understand the significance of employability skills in meeting the job requirements					
	Constitutional values – Citizenship			1	1	-
	2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices.					
	Becoming a Professional in the 21st Century			1	3	-
	3. 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	-
	4. speak with others using some basic English phrases or sentences					
	Communication Skills			1	1	-
	follow good manners while communicating with others					
	6. work with others in a team					
	7. communicate and behave appropriately with all genders and PwD			1	1	-
	8. report any issues related to sexual harassment					
	Financial and Legal Literacy			3	4	-
	9. use various financial products and services safely and securely					
	10. calculate income, expenses, savings etc.					
	11. approach the concerned authorities for any exploitation as per legal rights and laws	_				









Essential Digital Skills		4	6	-
12. operate digital devices and use its				
features and applications securely				
and safely				
13. use internet and social media				
platforms securely and safely				
Entrepreneurship		3	5	-
14. identify and assess opportunities				
for potential business				
15. identify sources for arranging				
money and associated financial				
and legal challenges				
Customer Service		2	2	-
16. identify different types of				
customers				
17. identify customer needs and				
address them appropriately.				
18. follow appropriate hygiene and				
grooming standards.				
Getting ready for apprenticeship &		1	3	
Jobs		1	3	-
19. create a basic biodata				
20. search for suitable jobs and apply				
21. identify and register apprenticeship				
opportunities as per requirement				
NOS Total	50	20	30	-
Grand Total	1610	500	950	160







### **Textile Sector Skill Council**

15th Floor, Nirmal Tower, Barakhamba Road, New Delhi-110 001