

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR TEXTILE SECTOR

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack – Finishing Machine Operator (Zero-Zero/Compactor)

SECTOR: TEXTILE

SUB-SECTOR: PROCESSING

OCCUPATION:FINISHING

REFERENCE ID: TSC/ Q 5403

ALIGNED TO: NCO-2004 / 8264.86

Brief Job Description: A Finishing Machine Operator (Zero-Zero/Compactor) is responsible to do the specified job of finishing of fabric with proper control of parameters to get the desired effect on a Sanforizing Machine. He should be able to operate the machine, carry out routine cleaning & preventive maintenance activities to produce defect free fabric. 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 a Sanforizing machine

Personal Attributes: A Finishing Machine Operator (Zero-Zero/Compactor) should have good eyesight, motor skills and vision. He/she should also have good interpersonal skills.

Job Details	Qualifications Pack Code	TSC/Q 5403		
	Job Role	Finishing Machine Operator		
	Credits (NSQF)	TBD	Version number	1.0
	Sector	Textile	Drafted on	15/12/14
	Sub-sector	Processing	Last reviewed on	21/12/14
	Occupation	Finishing	Next review date	01/03/16
	Job Role	Finishing Machine Operator		
Role Description		to carry out the process of finishing of fabric using a sanforizing machine, as specified under job order		
NSQF level		4		
Minimum Educational Qualifications		10 th standard, preferably		
Maximum Educational Qualifications		N/A		
Training (Suggested but not mandatory)		Three to six months of training in textile processing.		
Experience		Preferably 1-2 years in textile processing		
National Occupational Standards (NOS)		<p>Compulsory:</p> <ol style="list-style-type: none"> TSC/ N5407 Taking charge of shift and handing over shift to Finishing Machine Operator (Zero-Zero/Compactor) TSC/N5408 Operating the Finishing Machine (Zero-Zero/Compactor) TSC/N5409 Check the quality of Finished fabric TSC/ N9001 Maintain work area, tools and machines TSC/ N9002 Working in a team TSC/ N9003 Maintain health, safety and security at workplace TSC/ N9004 Comply with industry and organizational requirement <p>Optional: Not Applicable</p>		
Performance Criteria		As described in the relevant OS units		

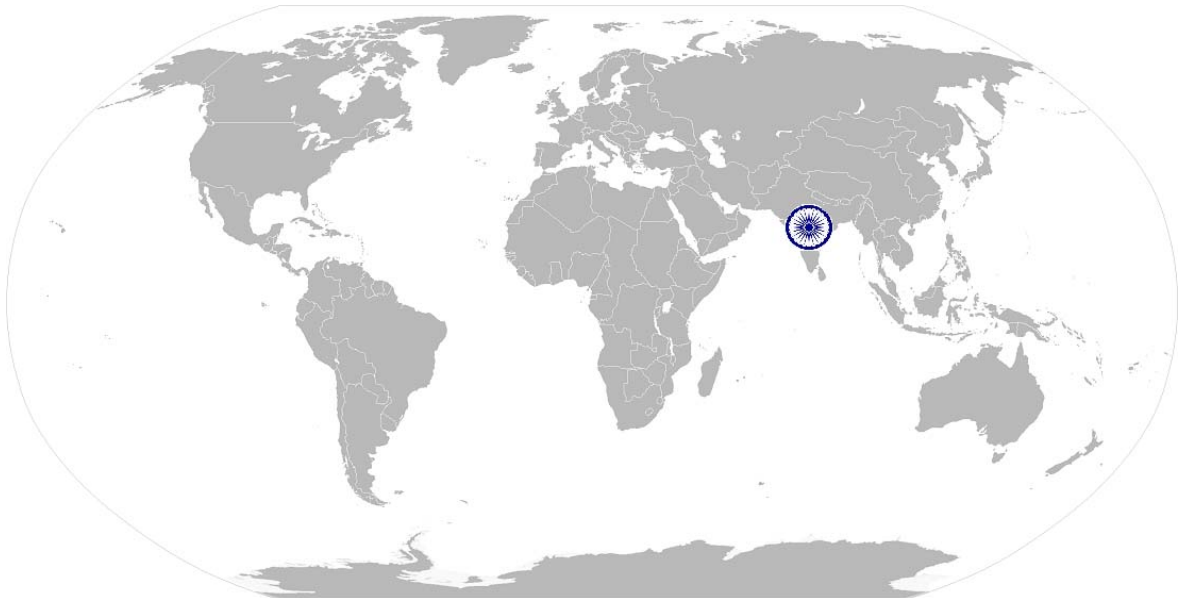
Table 1: Glossary of Key Terms

Definitions	Keywords /Terms	Description
	Sector	Sector is a conglomeration of different business operations having similar businesses 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.
	Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
	Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
	Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
	Sub-functions	Sub-functions are sub-activities essential to fulfill the achieving the objectives of the function.
	Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
	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 they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
	Performance Criteria	Performance Criteria 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 Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
	Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
	Unit Code	Unit Code is a unique identifier for an OS unit, which can be denoted with either an 'O' or 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 the 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 the quality of performance required.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization 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	Core Skills or Generic Skills are a group of skills that are key to learning and working 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.
Helpdesk	Helpdesk is an entity to which the customers will report their IT problems. IT Service Helpdesk Attendant is responsible for managing the helpdesk.
Keywords /Terms	Description
SSC	Sector Skill Council
OS	Occupational Standard(s)
NOS	National Occupational Standard(s)
QP	Qualifications Pack
NSQF	National Skill Qualifications Framework
NCO	National Classifications of Occupation
TBD	To Be Determined
TSC	Textile Sector Skill Council
NSDC	National Skill Development Corporation

**TSC/ N 5407 Taking charge of shift and handing over shift to Finishing Machine Operator
(Zero-Zero/Compactor)**

National Occupational Standard



Overview

This unit is about taking charge of shift from previous shift Finishing machine operator (zero-zero/compactor) and relieving the responsibilities to the next shift Finishing machine operator (zero-zero/compactor)

TSC/ N 5407 Taking charge of shift and handing over shift to Finishing Machine Operator (Zero-Zero/Compactor)

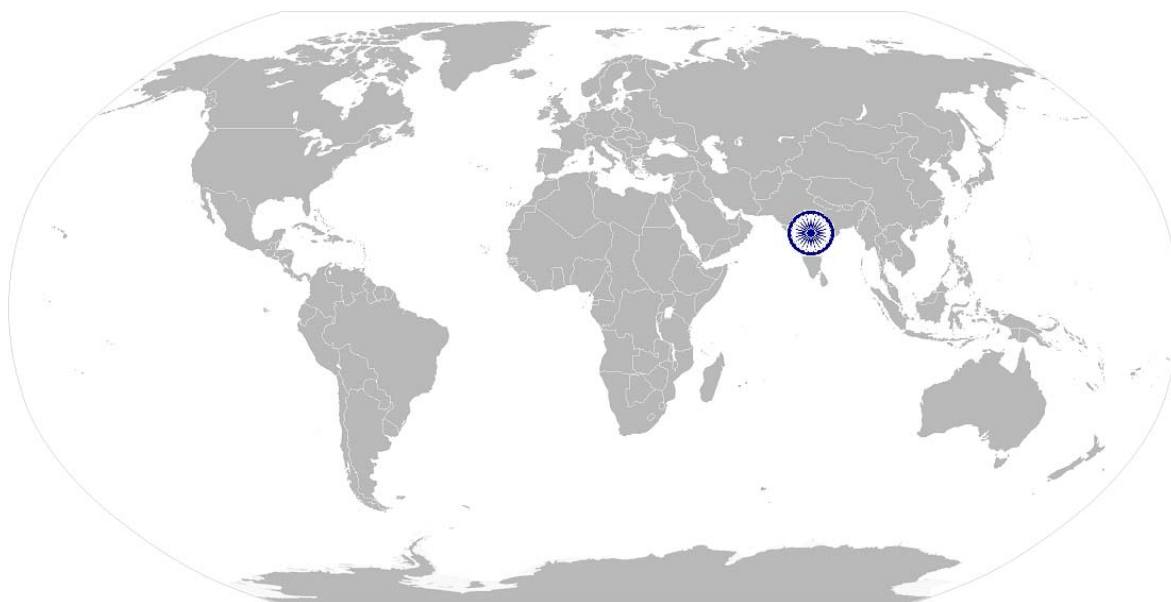
National Occupational Standard	Unit Code	TSC/ N5407
	Unit Title (Task)	Taking charge of shift and handing over shift to Finishing Machine Operator (Zero-Zero/Compactor)
	Description	This unit is about taking charge of shift from previous shift Finishing machine operator (zero-zero/compactor) and relieving the responsibilities to the next shift Finishing machine operator (zero-zero/compactor)
	Scope	This unit/task covers the following: <ul style="list-style-type: none"> Taking charge of shift from Finishing machine operator (zero-zero/compactor) Handing over shift to Finishing machine operator (zero-zero/compactor)
	Elements	Performance Criteria
	Taking charge of shift from Finishing machine operator (zero-zero/compactor)	<p>To be competent, you must be able to:</p> <p>PC1. come atleast 10 - 15 minutes earlier to the work place</p> <p>PC2. bring the necessary operational tools to the department</p> <p>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.</p> <p>PC4. Understand the fabric being processed & process running on the machine</p> <p>PC5. Ensure the technical details are mentioned on the job card display on the machine</p> <p>PC6. check for the availability of the spare trolley for unloading the fabric</p> <p>PC7. check the next batch to be processed is ready near the machine</p> <p>PC8. check the cleanliness of the machines & other work areas</p> <p>PC9. 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.</p> <p>PC10. take over the shift from the outgoing operator in a proper manner</p>
	Handing Over Shift to Finishing machine operator (zero-zero/compactor)	<p>PC11. Ensure in providing the details regarding fabric quality & the process running on the machine</p> <p>PC12. provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine.</p> <p>PC13. ensure the empty trolley is near the machine for unloading the fabric</p> <p>PC14. ensure the next lot to be processed is ready near the machine already stitched & arranged properly</p> <p>PC15. get clearance from the incoming counterpart before leaving the work spot</p> <p>PC16. 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</p> <p>PC17. the shift has to be properly handed over to the incoming shift operator</p> <p>PC18. 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</p> <p>PC19. collect the wastes from waste collection bags, weigh them and transport to</p>

TSC/ N 5407 Taking charge of shift and handing over shift to Finishing Machine Operator (Zero-Zero/Compactor)

	storage area PC20. Ensure the machine and its work place is clean
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. standard operating procedures (SOP) and regulations in a processing unit KA2. safe working practices to be adopted in processing unit KA3. quality systems and other processes practiced in the processing unit KA4. reporting to the supervisor or higher authority in case of emergency KA5. color coding adopted for different counts in the processing unit
B. Technical Knowledge	To be competent, you must be able to: KB1. understand the importance of quality & productivity KB2. understand various defects in the fabric due to yarn, weaving or processing KB3. understand reasons for various defects in the fabric due to processing & their remedy KB4. understand process flow in a processing unit KB5. understand material flow in a processing unit KB6. understand functions of various controls of the machine KB7. understand importance of material handling and types of material handling equipment being used KB8. understand importance of cleanliness at workplace KB9. understand functions and methodology for operating different material handling equipment KB10. understand the functions of various alarm signals KB11. follow guidelines for operating the machine KB12. follow guidelines for taking charge of shift from previous shift Finishing machine operator (zero-zero/compactor) KB13. follow guidelines for handing over the shift to the next shift Finishing machine operator (zero-zero/compactor) KB14. understand safety procedures to be followed while operating the machine
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	You need to know and understand how to: SA1. write clear and short sentences
	Reading Skills
	You need to know and understand how to: SA2. read and comprehend written instructions
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. communicate with supervisor appropriately SA4. talk to others to convey information effectively
B. Professional Skills	Problem Solving
	You need to know and understand how to: SB1. apply problem-solving approaches in different situations

TSC/ N 5407 Taking charge of shift and handing over shift to Finishing Machine Operator (Zero-Zero/Compactor)

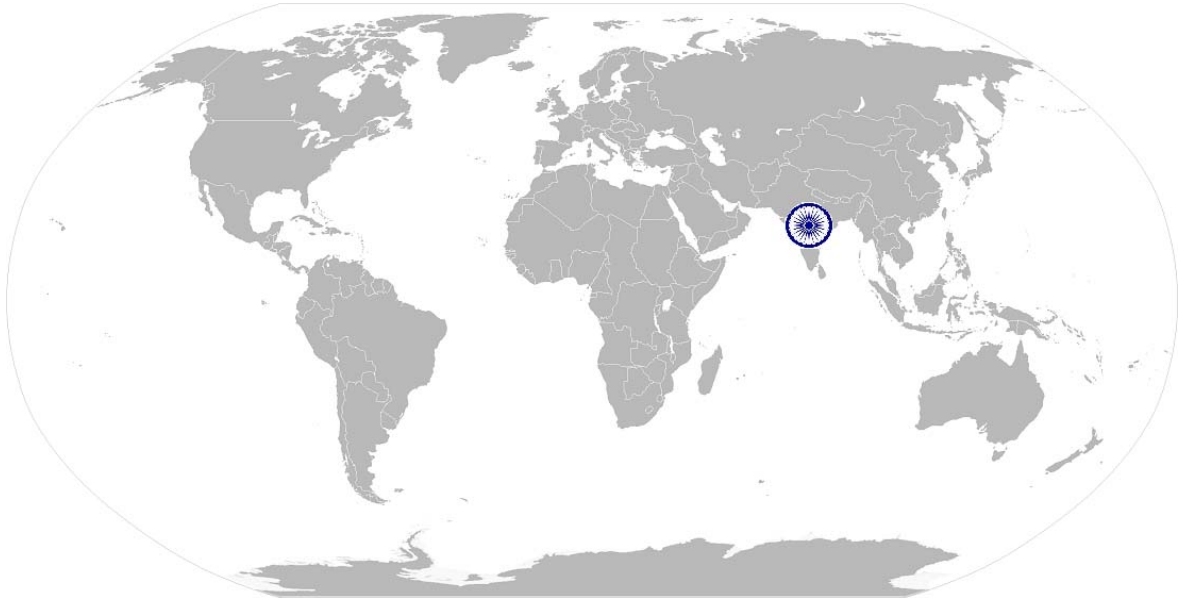
	SB2. refer anomalies to the supervisor
	SB3. seek clarification on problems from others
	Attention to Detail
	<p>You need to know and understand how to:</p> <p>SB4. apply good attention to detail</p> <p>SB5. check your work is complete and free from errors</p> <p>You need to know and understand how to:</p> <p>SB6. operate the machine</p> <p>SB7. operate various valves & traps</p> <p>SB8. operate different material handling tools and equipment</p> <p>SB9. check the quality of processed fabric</p> <p>SB10. maintain cleanliness at work place</p>



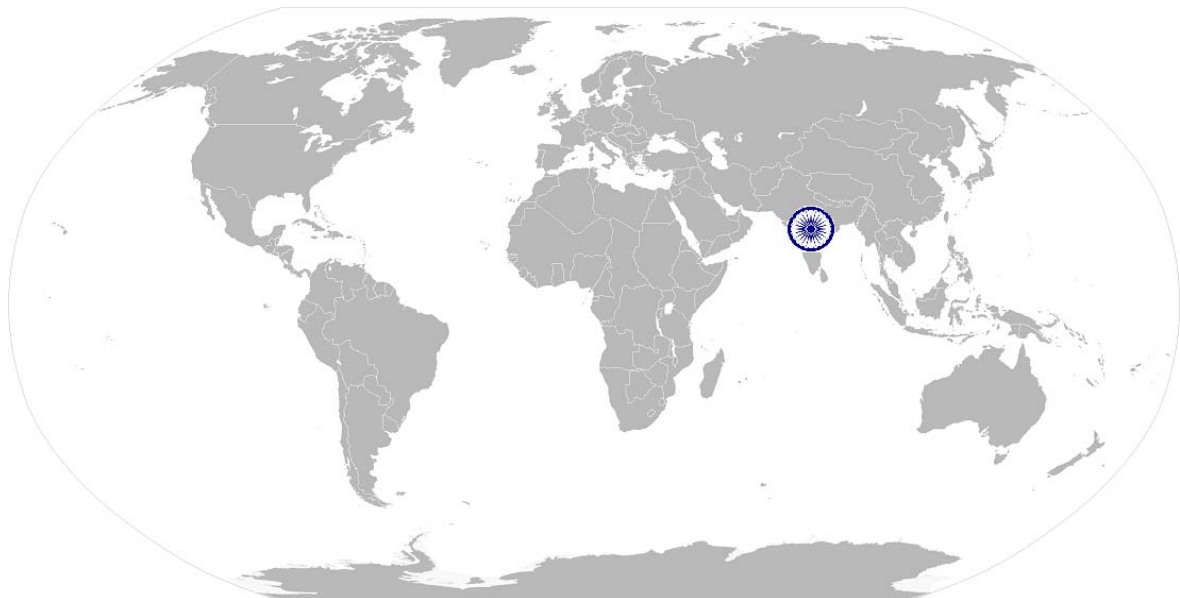
**TSC/ N 5407 Taking charge of shift and handing over shift to Finishing Machine Operator
(Zero-Zero/Compactor)**

NOS Version Control

NOS Code	TSC/ N 5407		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Finishing	Next review date	01/03/16



National Occupational Standard



Overview

This unit is about operating the Sanforizing Machine

TSC/N 5408

Operating the Sanforizing Machine

National Occupational Standard

Unit Code	TSC/ N5408
Unit Title (Task)	Operating the Sanforizing Machine
Description	This unit is about operating the Sanforizing Machine
Scope	This unit/task covers the following: <ul style="list-style-type: none"> Carry out preparatory activities in the machine Operate the machine for the specified task as per work order Clean the machine & carryout preventive maintenance activities
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Carry out preparatory activities for operations in the machine	<p>To be competent, you must be able to:</p> <p>PC1. understand the task mentioned in the work order</p> <p>PC2. read & understand the fabric parameters properly</p> <p>PC3. bring the fabric trolley or batch near the machine</p> <p>PC4. join the feeding cloth/ end piece to the fabric to be processed</p> <p>PC5. check for any unstitched or loose ends & join them</p> <p>PC6. check the width of the fabric before sanforizing</p> <p>PC7. ensure that the machine is clean</p> <p>PC8. feed the fabric from the batch/trolley in the center of the machine</p> <p>PC9. ensure fabric is crease-less and evenly spread into the machine</p> <p>PC10. open steam valve & drain the condensate from the line</p> <p>PC11. drain water from air line</p> <p>PC12. set the overfeed & the compression values as specified in the work order</p> <p>PC13. arrange empty trolley or batch for rolling at the exit end</p>
Operate the machine for specified tasks as per Work Order	<p>PC14. know the operations of the sanforizing machine</p> <p>PC15. read & understand the process being followed to do the task</p> <p>PC16. keep even tension on fabric throughout the process</p> <p>PC17. adjust the Rubber Felt compression to the desired level and in accordance with rubber felt supplier norms</p> <p>PC18. use selvedge uncurlers& fabric spreader rollers for feeding the fabric</p> <p>PC19. set the required temp of machine</p> <p>PC20. set the required pressure of compression roller on the felt</p> <p>PC21. start the machine & adjust the overfeed & compression to the optimum</p> <p>PC22. ensure that all safety devices are operational</p> <p>PC23. take out fabric either on batch or trolley from the other end</p> <p>PC24. check the width of the fabric after sanforizing</p> <p>PC25. check the fabric for feel, lustre & other parameters as specified</p> <p>PC26. adjust the machine speed or overfeed according to required finish</p> <p>PC27. keep next trolley or batch ready both at entry and exit</p> <p>PC28. use scray or j- box for continuous operation of machine</p> <p>PC29. record the shift production in the production register</p> <p>PC30. record all stoppages & breakdowns in the register</p>

TSC/ N 5408

Operating the Sanforizing Machine

Clean the machine on a regular basis and carryout preventive maintenance activities	<p>PC31. cool down the machine before shutting down completely</p> <p>PC32. make sure the machine is kept clean at all times</p> <p>PC33. follow the preventive maintenance schedule & ensure the machine is running smoothly</p> <p>PC34. check that all controls are functioning properly</p> <p>PC35. ensure the right quality of water, steam & air is available for proper functioning of machine</p> <p>PC36. ensure there is no leakage in steam, air or water line</p> <p>PC37. oiling the moving parts of machine as specified in the operation manual</p> <p>PC38. stop the machine in case of any abnormal sound & report the matter to the concerned person & supervisor</p> <p>PC39. cool down the machine after completion of job</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. standard operating procedures (SOP) and regulations in processing unit</p> <p>KA2. procedure followed to get the final output in processing unit</p> <p>KA3. safe working practices to be adopted in processing unit</p> <p>KA4. how to report to the supervisor or higher authority about any grievances faced</p>
B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. guidelines for operations of sanforizing machine</p> <p>KB2. operations of various control functions of the machine</p> <p>KB3. process flow & material flow in a processing unit</p> <p>KB4. fabric construction & it's composition</p> <p>KB5. various types of defects in the fabric due to yarn, weaving & processing</p> <p>KB6. defects in the fabric due to finishing or sanforizing & their rectification</p> <p>KB7. standard parameters of shrinkage in various products</p> <p>KB8. methods to achieve optimum shrinkage in finished fabric</p> <p>KB9. importance of take over & handover</p> <p>KB10. reporting the matter to the concerned person & supervisor in case of any abnormal sound or noise</p> <p>KB11. report to the supervisor if there is any major defect in fabric</p> <p>KB12. use of correct cleaning tools such as blowers or vacuum cleaner to clean machine parts</p> <p>KB13. ensure continuous feeding of fabric using scray/ j- box</p> <p>KB14. effective use of tensioning devices</p> <p>KB15. functions of various hydraulic & pneumatic controls</p> <p>KB16. operation of various valves & traps etc.</p> <p>KB17. operation of various devices & tools</p> <p>KB18. use of batching devices for fabric roll up</p>
Skills (S)	
	<p>Reading Skills</p> <p>You need to know and understand how to:</p>

TSC/ N 5408

Operating the Sanforizing Machine

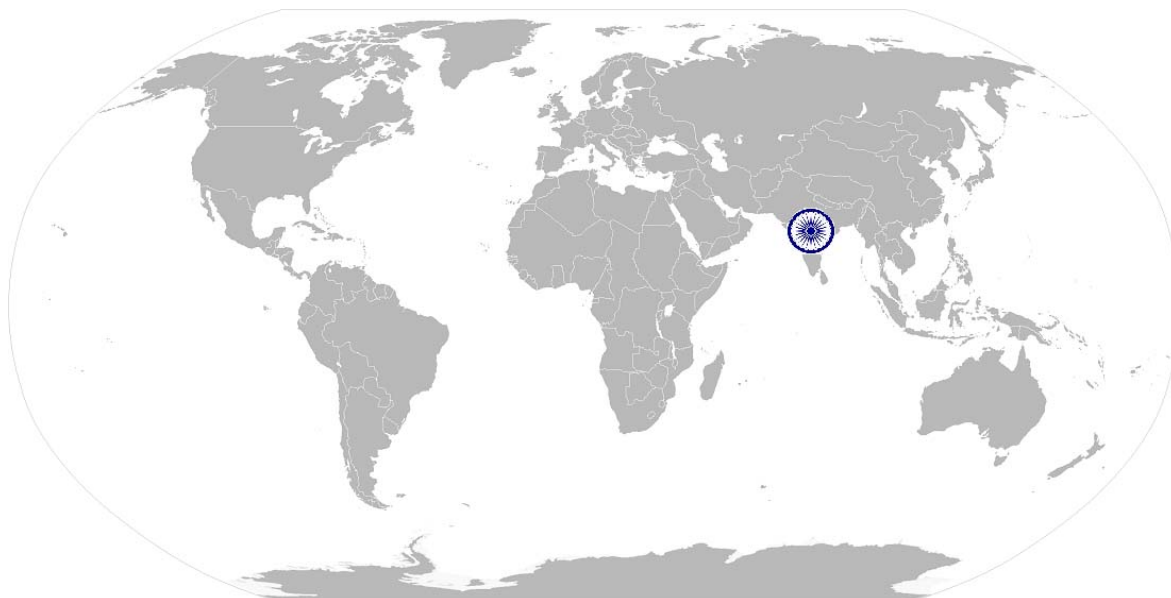
	SA1. read and comprehend written instructions
	SA2. read any application sent by other colleagues
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. communicate in local language orally SA4. communicate with supervisor appropriately SA5. talk to others to convey information effectively
C. Professional Skills	Problem Solving
	You need to know and understand how to: SB1. identify the real reason of problem faced SB2. apply problem-solving approaches in different situations SB3. refer anomalies to the supervisor SB4. seek clarification on problems from others
	Attention to Detail
	You need to know and understand how to: SB5. apply good attention to detail SB6. check your work is complete and free from errors SB7. make sure every kind of communication is error free You need to know and understand : SB8. various functions of sanforizing machine SB9. various faults due to yarn, weaving, dyeing, printing or finishing in the fabric SB10. product codes/ sort no/ quality details SB11. finish widths of various products SB12. length & weight of the batch SB13. use the correct tools for cleaning the machine SB14. use of various tools & equipments SB15. proper use of guide rolls & control sensors SB16. basic operation of sanforizing machine SB17. knowledge of plc control / control mechanism of the machine SB18. operations of various control switches & buttons SB19. various operations carried out on sanforizing machine SB20. efficient use of tensioning devices to get even width of the fabric SB21. optimum pressure for finishing processes for various products SB22. finishing temp of various products/ qualities SB23. use of various valves & traps SB24. functions of metal detector, seam detector & other sensors SB25. finishing of various fabric structures SB26. safety procedure while using steam, air or water line SB27. safety precautions while operating the machine

TSC/ N 5408

Operating the Sanforizing Machine

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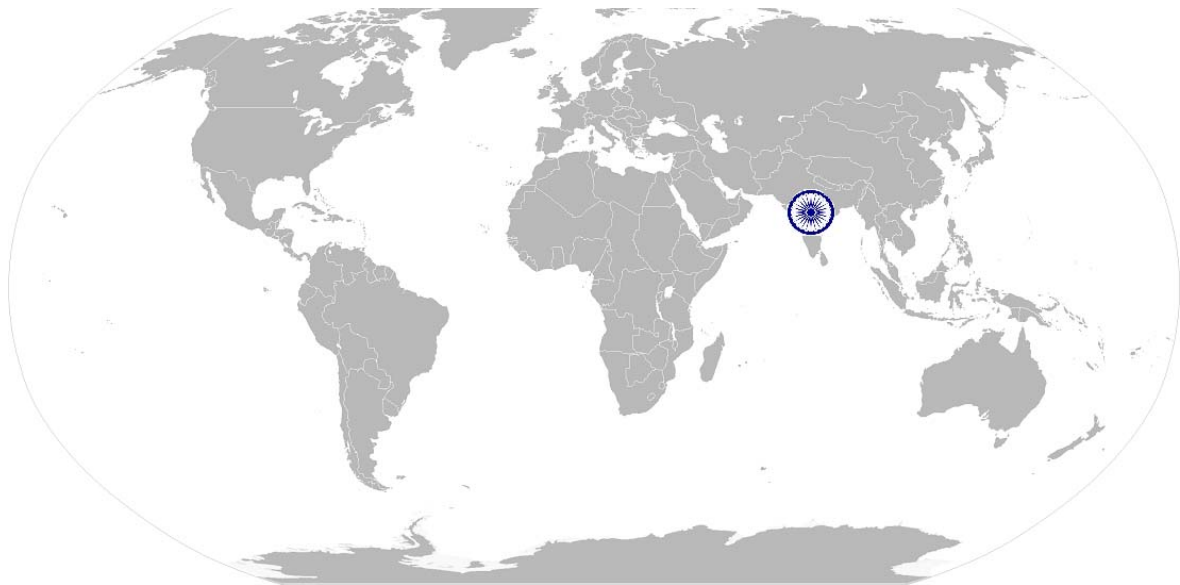
NOS Code	TSC/N 5408		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Finishing	Next review date	01/03/16



TSC/ N 5409

Checking the quality of finished fabric

National Occupational Standard



Overview

This unit is about checking the quality of finished fabric & comparing with the standard sample

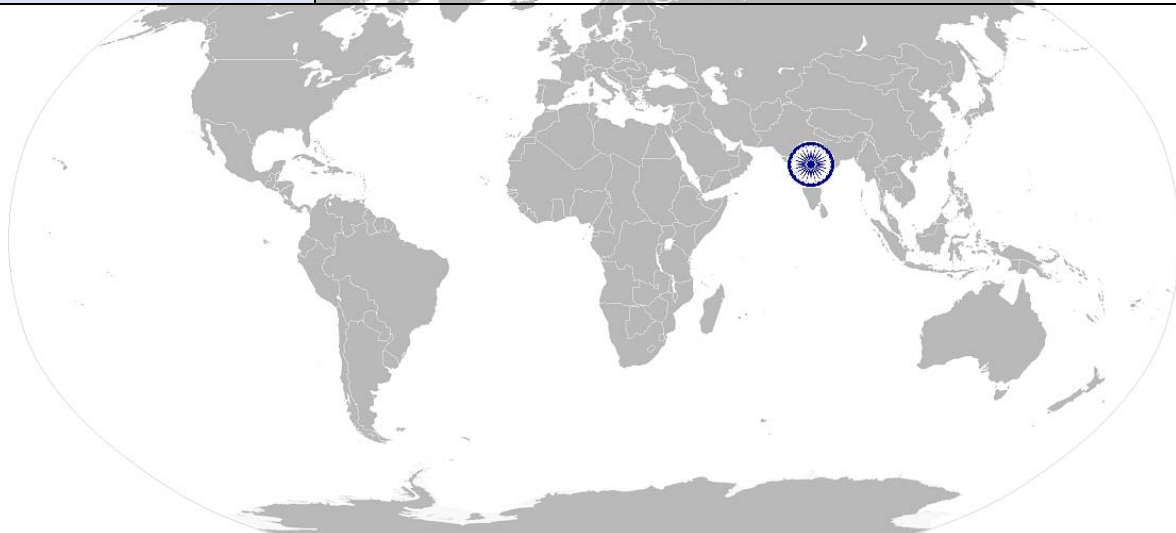
TSC/ N 5409

Checking the quality of finished fabric

Unit Code	TSC/N 5409
Unit Title (Task)	Checking the quality of Finished fabric
Description	This unit is about checking the quality of Finished fabric & comparing it with the standard
Scope	This unit/task covers the following: <ul style="list-style-type: none"> taking out the sample after sanforizing & comparing it with the standard sample
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Taking out the sample after sanforizing & comparing it with the standard	To be competent, you must be able to: PC1. Taking out the sample after sanforizing near the stitch PC2. Compare the sample with the standard PC3. Take the sample to your supervisor if the sample is not matching to the standard for decision
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. procedure followed to get the final output in processing unit KA2. standard operating procedures (SOP) and regulations in processing unit KA3. safe working practices to be adopted in processing unit KA4. how to report to the supervisor or higher authority about any grievances faced
B. Technical Knowledge	You need to know and understand: KB1. method of cutting the sample KB2. place to cut the sample KB3. correct size of sample KB4. use of correct cutting tools such as scissors / knife KB5. method of conditioning the sample before comparison KB6. recording the details of sample such as sort, batch no. KB7. should have good eye sight & matching skills KB8. take corrective action immediately to avoid waste of time & production loss in case sample is not matching to the standard
Skills (S)	
	Reading Skills
	You need to know and understand how to: SA1. read and comprehend written instructions SA2. read any application sent by other colleagues
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. communicate in local language orally SA4. communicate with supervisor appropriately SA5. talk to others to convey information effectively
C. Professional Skills	Problem Solving
	You need to know and understand how to:

TSC/ N 5409 Checking the quality of finished fabric

	SB1. identify the real reason of problem faced
	SB2. apply problem-solving approaches in different situations
	SB3. refer anomalies to the supervisor
	SB4. seek clarification on problems from others
	Attention to Detail
	You need to know and understand how to:
	SB5. apply good attention to detail
	SB6. check your work is complete and free from errors
	SB7. make sure every kind of communication is error free
	You need to know and understand how to:
	SB8. Adjustment of speed of machine
	SB9. Adjustment of machine temp or overfeed depending upon the required feel & luster in the fabric
	SB10. Adjustment of compression roller pressure
	SB11. Good matching & analytical skills
	SB12. Knowledge about the finished fabric feel & luster



TSC/ N 5409 Checking the quality of finished fabric

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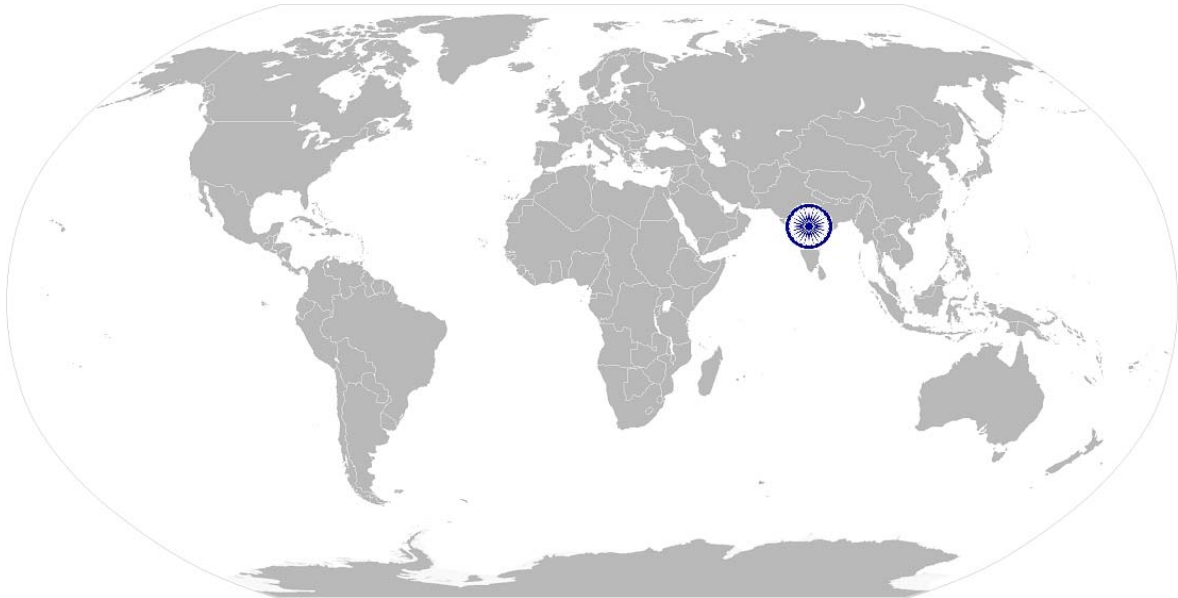
NOS Code	TSC/N 5409		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Finishing	Next review date	01/03/16



TSC/ N9001

Maintaining work area, tools and machine

National Occupational Standard



Overview

This unit is about maintaining work areas and activities to ensure tools and machines are maintained as per norms.

TSC/ N9001

Maintaining work area, tools and machine

National Occupational Standard	Unit Code	TSC/ N9001
	Unit Title (Task)	Maintaining work area, tools and machines
	Description	This unit provides performance criteria, knowledge & understanding and skills & abilities required to organise/ maintain work areas and activities to ensure tools and machines are maintained as per norms
	Scope	This unit/task covers the following: <ul style="list-style-type: none"> ▪ Maintain the work area, tools and machines
	Performance Criteria (PC) w.r.t. the Scope	
	Elements	Performance Criteria
	Maintain the work area, tools and machines	<p>To be competent, you must be able to:</p> <p>PC1. handle materials, machinery, equipment and tools with care and use them in the correct way</p> <p>PC2. use correct lifting and handling procedures</p> <p>PC3. use materials to minimize waste</p> <p>PC4. maintain a clean and hazard free working area</p> <p>PC5. maintain tools and equipment</p> <p>PC6. carry out running maintenance within agreed schedules</p> <p>PC7. carry out maintenance and/or cleaning within one's responsibility</p> <p>PC8. report unsafe equipment and other dangerous occurrences</p> <p>PC9. ensure that the correct machine guards are in place</p> <p>PC10. work in a comfortable position with the correct posture</p> <p>PC11. use cleaning equipment and methods appropriate for the work to be carried out</p> <p>PC12. dispose of waste safely in the designated location</p> <p>PC13. store cleaning equipment safely after use</p> <p>PC14. carry out cleaning according to schedules and limits of responsibility</p>
	Knowledge and Understanding (K)	
	A. Organizational Context (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. personal hygiene and duty of care</p> <p>KA2. standard operating procedures (SOP)</p> <p>KA3. limits of your own responsibility</p> <p>KA4. ways of resolving problems within the work area</p> <p>KA5. the production process and the specific work activities that relate to the whole process</p> <p>KA6. the importance of effective communication with supervisors</p> <p>KA7. the lines of communication, authority and reporting procedures</p> <p>KA8. the organisation's rules, codes and guidelines (including timekeeping)</p> <p>KA9. the company's quality standards</p> <p>KA10. the importance of complying with written instructions</p> <p>KA11. equipment operating procedures / supervisor's instructions</p>
	B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. work instructions and specifications and interpret them accurately</p> <p>KB2. relation between work role and the overall manufacturing process</p>

TSC/ N9001

Maintaining work area, tools and machine

	<p>KB3. hazards likely to be encountered when conducting routine maintenance</p> <p>KB4. the importance of taking action when problems are identified</p> <p>KB5. different ways of minimising waste</p> <p>KB6. the importance of running maintenance and regular cleaning</p> <p>KB7. effects of contamination on products i.e. machine oil, dirt, foreign materials</p> <p>KB8. common faults with equipment and the method to rectify</p> <p>KB9. maintenance procedures</p> <p>KB10. different types of cleaning equipment and substances and their use</p> <p>KB11. safe working practices for cleaning and the method of carrying them out</p>
Skills (S)	
A. Core Skills/ Generic Skills	Reading Skills
	You need to know and understand how to:
	SA1. comprehend written instructions
	SA2. read any application sent by other colleagues
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to:
	SA3. communicate effectively in local language
	SA4. communicate with supervisor appropriately
B. Professional Skills	SA5. talk to others to convey information effectively
	Problem Solving
	You need to know and understand how to:
	SB1. identify the real reason of problem faced
	SB2. apply problem-solving approaches in different situations
	SB3. refer anomalies to the supervisor
	SB4. seek clarification on problems from others
	Attention to Detail
	You need to know and understand how to:
	SB5. apply good attention to detail
	SB6. check your work is complete and free from errors
	SB7. make sure every kind of communication is error free
	You need to know and understand :
	SB8. communicate effectively
	SB9. apply leadership skills wherever required
	SB10. take initiative at the right place
	SB11. understand the requirement to be creative

TSC/ N9001

Maintaining work area, tools and machine

NOS Version Control

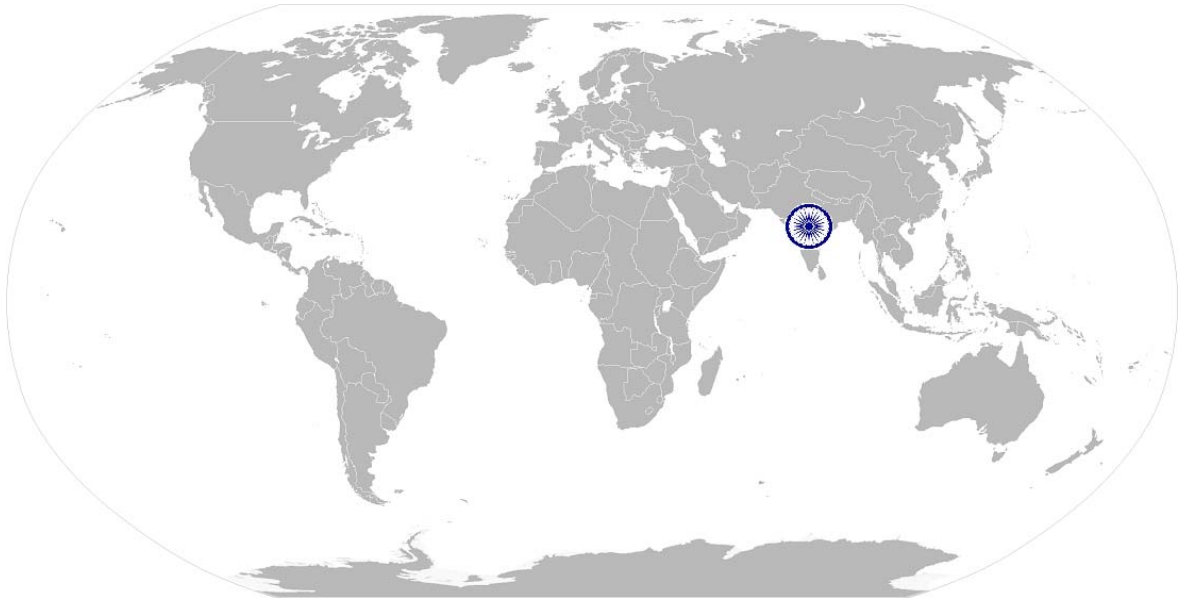
NOS Code	TSC/ N9001		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Finishing	Next review date	01/03/16



TSC/ N9002

Working in a team

National Occupational Standard



Overview

This unit is about working as part of a team in the textile industry.

TSC/ N9002

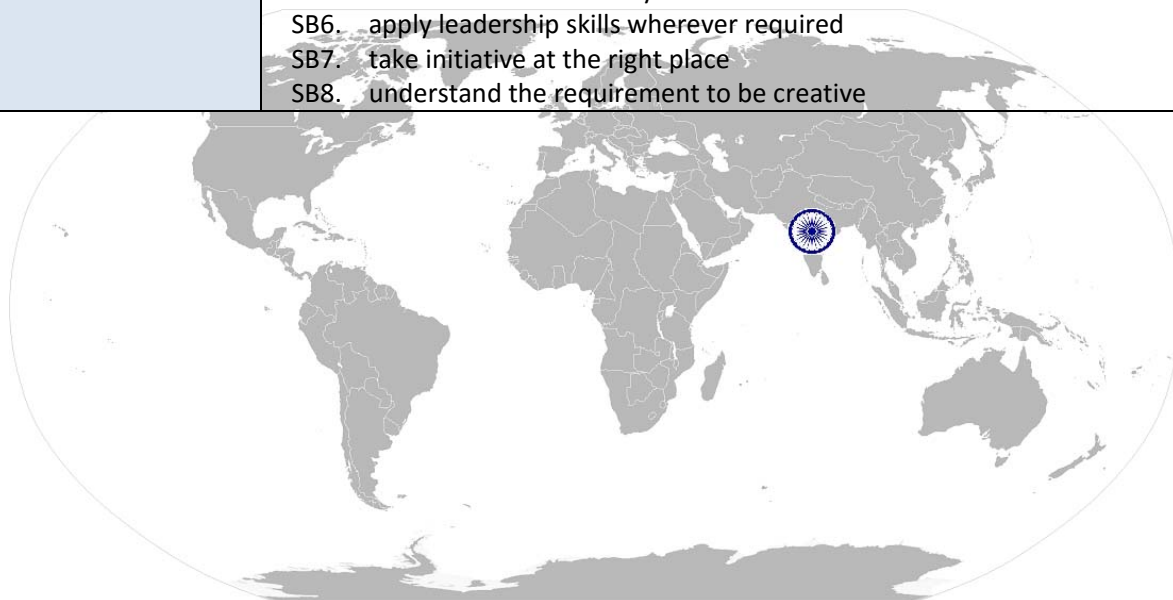
Working in a team

Unit Code	TSC/ N9002
Unit Title (Task)	Working in a team
Description	This unit is about working as a team member in the textile industry
Scope	This unit/task covers the following: <ul style="list-style-type: none"> commitment and trust communication adaptability creative freedom
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Commitment and trust	To be competent, you must be able to: PC1. be accountable to the own role in whole process PC2. perform all roles with full responsibility PC3. be effective and efficient at workplace
Communication	PC4. properly communicate about company policies PC5. report all problems faced during the process PC6. talk politely with other team members and colleagues PC7. submit daily report of own performance
Adaptability	PC8. adjust in different work situations PC9. give due importance to others' point of view PC10. avoid conflicting situations
Creative freedom	PC11. develop new ideas for work procedures PC12. improve upon the existing techniques to increase process efficiency
Knowledge and Understanding (K)	
A. Organizational Context	You need to know and understand: KA1. standard operating procedures (SOP) and regulations in a processing unit KA2. procedure followed to get the final output in the processing unit KA3. safe working practices to be adopted in processing unit KA4. reporting to the supervisor or higher authority about any grievances faced
B. Technical Knowledge	KB1. the importance of the previous and next step of the process KB2. process flow in a processing unit and the concerned workers KB3. material flow in a processing unit and the required person KB4. functions of different parts of the machine KB5. tools and equipments used KB6. guidelines for operating the machine KB7. safety procedures to be followed in the machine
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills You need to know and understand how to: SA1. write clear and short sentences SA2. write daily work report SA3. write grievance complaint application
	Reading Skills

TSC/ N9002

Working in a team

B. Professional Skills	SA4. comprehend written instructions
	SA5. read any application sent by other colleagues
	Oral Communication (Listening and Speaking skills)
	SA6. communicate with supervisor appropriately
	SA7. talk to co-workers to convey information effectively
	Problem Solving
	You need to know and understand how to:
	SB1. identify the real reason of problem faced
	SB2. be able to find the most effective solution to the problems faced
	Attention to Detail
	SB3. apply good attention to detail
	SB4. ensure every kind of communication is error free
	You need to know and understand how to:
	SB5. communicate effectively
	SB6. apply leadership skills wherever required
	SB7. take initiative at the right place
	SB8. understand the requirement to be creative

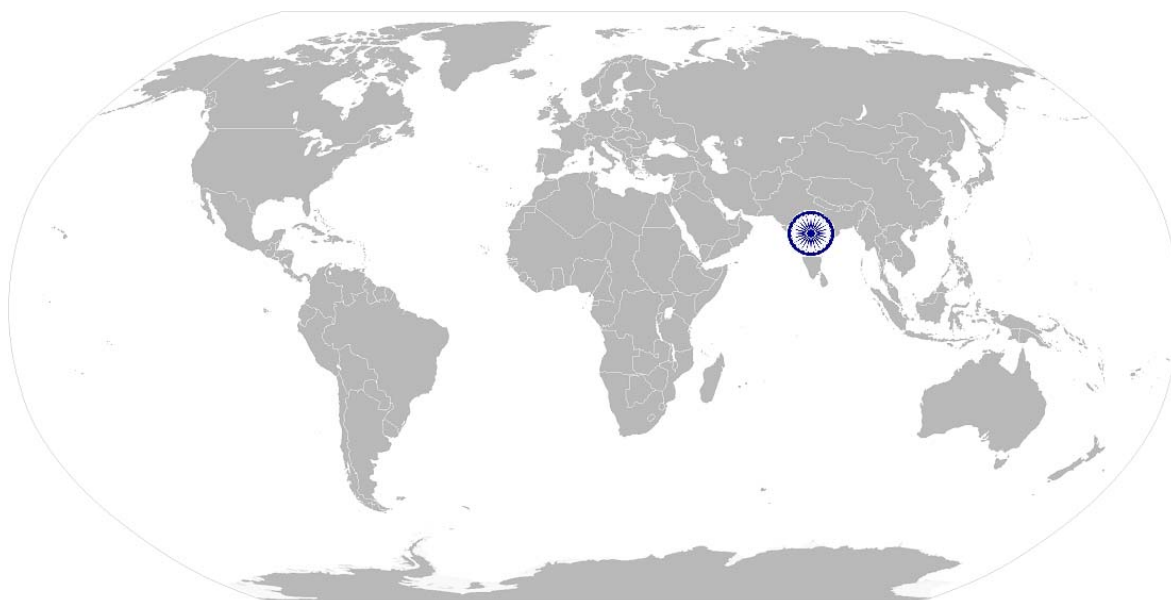


TSC/ N9002

Working in a team

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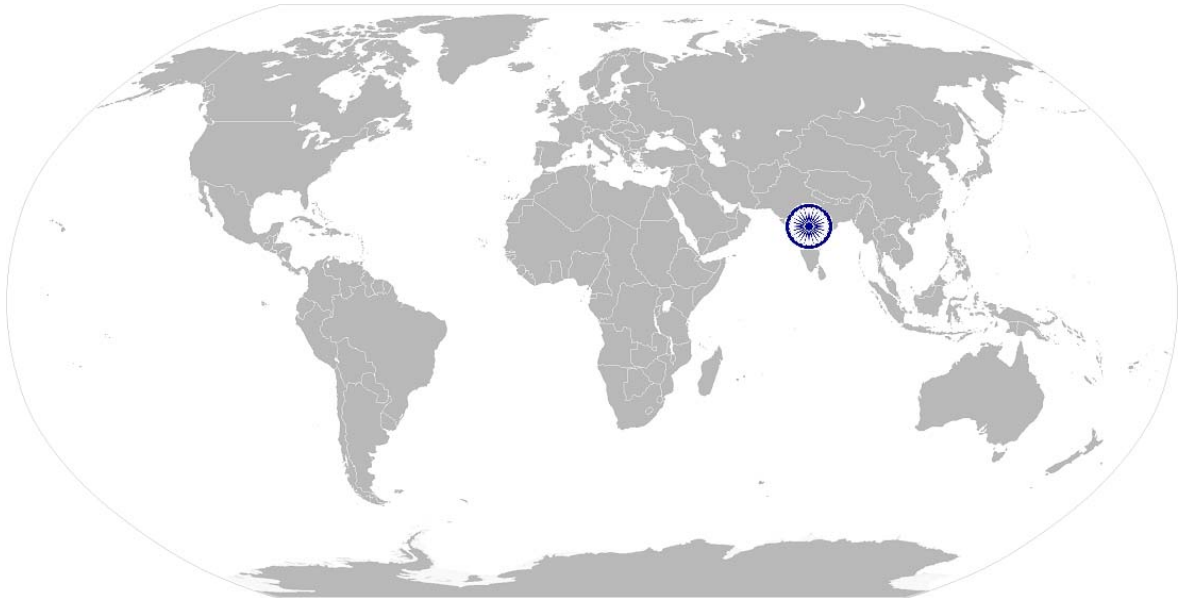
NOS Code	TSC/ N9002		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Finishing	Next review date	01/03/16



TSC/ N9003

Maintain health, safety and security at work place

National Occupational Standard



Overview

This unit is about maintaining health, safety, and security standards at workplace.

TSC/ N9003

Maintain health, safety and security at work place

Unit Code	TSC/ N9003
Unit Title (Task)	Maintain health, safety and security at work place
Description	This unit provides performance criteria, knowledge & understanding and skills & abilities required to comply with health, safety and security requirements at the workplace and covers procedures to prevent, control and minimize risk to self and others.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> comply with health, safety and security requirements at work recognizing the hazards planning the safety techniques implementing the programs
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Comply with health, Safety and security requirements at work	<p>To be competent, operator must be able to:</p> <p>PC1. comply with health and safety related instructions applicable to the workplace</p> <p>PC2. use and maintain personal protective equipment such as “ear plug”, “ nose mask “, “ head cap” etc., as per protocol</p> <p>PC3. carry out own activities in line with approved guidelines and procedures</p> <p>PC4. maintain a healthy lifestyle and guard against dependency on intoxicants</p> <p>PC5. follow environment management system related procedures</p> <p>PC6. identify and correct (if possible) malfunctions in machinery and equipment</p> <p>PC7. report any service malfunctions that cannot be rectified</p> <p>PC8. store materials and equipment in line with organisational requirements</p> <p>PC9. safely handle and remove waste</p> <p>PC10. minimize health and safety risks to self and others due to own actions</p> <p>PC11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks</p> <p>PC12. monitor the workplace and work processes for potential risks and threat</p> <p>PC13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned</p> <p>PC14. report hazards and potential risks/ threats to supervisors or other authorized personnel</p> <p>PC15. participate in mock drills/ evacuation procedures organized at the workplace</p> <p>PC16. undertake first aid, fire-fighting and emergency response training, if asked to do so</p> <p>PC17. take action based on instructions in the event of fire, emergencies or accidents</p> <p>PC18. follow organisation procedures for shutdown and evacuation when required</p>
Recognizing the hazards	<p>PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry</p> <p>PC20. recognise other possible security issues existing in the workplace</p>
Planning the safety	PC21. recognise different measures to curb the hazards

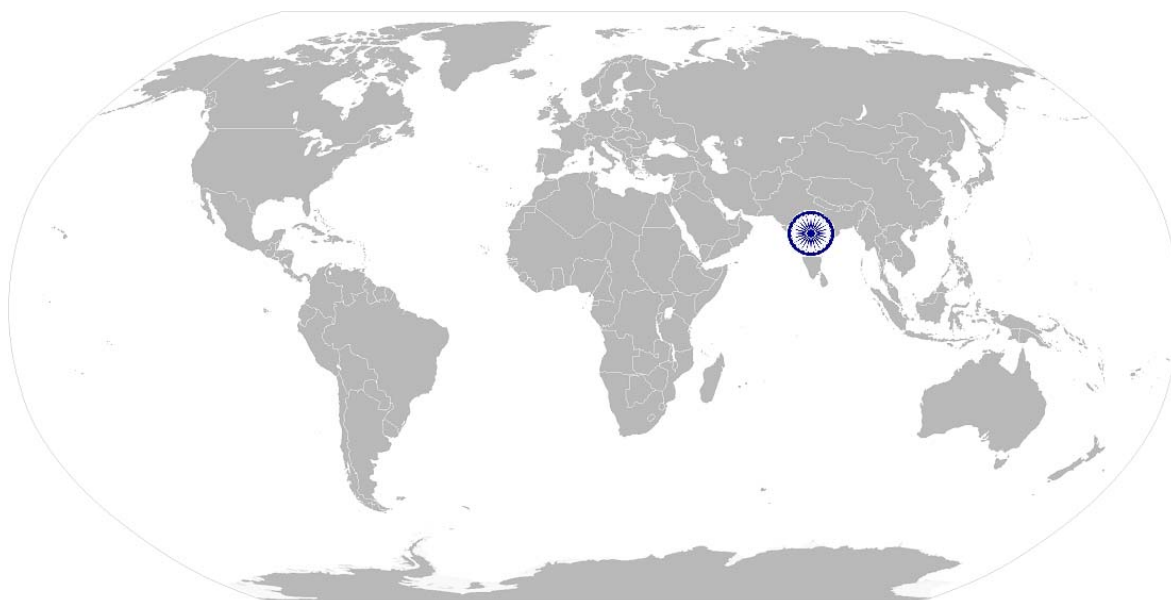
TSC/ N9003
Maintain health, safety and security at work place

techniques	
Implementing the programs	PC22. communicate the safety plan to everyone PC23. attach disciplinary rules with the implementation
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. standard operating procedures (SOP) and regulations in a processing unit</p> <p>KA2. safe working practices to be adopted in processing unit</p> <p>KA3. quality systems and other processes practiced in the processing unit</p> <p>KA4. health and safety related practices applicable at the workplace</p> <p>KA5. potential hazards, risks and threats based on nature of operations</p> <p>KA6. organizational procedures for safe handling of equipment and machine operations</p> <p>KA7. potential risks due to own actions and methods to minimize these</p> <p>KA8. environmental management system related procedures at the workplace</p> <p>KA9. layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points</p> <p>KA10. potential accidents and emergencies and response to these scenarios</p> <p>KA11. reporting protocol and documentation required</p> <p>KA12. details of personnel trained in first aid, fire-fighting and emergency response</p> <p>KA13. actions to take in the event of a mock drills/ evacuation procedures or actual accident, emergency or fire</p>
B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. occupational health and safety risks and methods</p> <p>KB2. personal protective equipment and method of use</p> <p>KB3. identification, handling and storage of hazardous substances</p> <p>KB4. proper disposal system for waste and by-products</p> <p>KB5. signage related to health and safety and their meaning</p> <p>KB6. importance of sound health, hygiene and good habits</p> <p>KB7. ill-effects of alcohol, tobacco and drugs</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	You need to know and understand how to:
	SA1. write clear and short sentences
	Reading Skills
	SA2. read and understand the company instructions SA3. read and understand work instructions SA4. read and understand the safety guidelines
	Oral Communication (Listening and Speaking skills)
	SA5. listen to others attentively SA6. respond to emergencies, accidents or fire at the workplace SA7. evacuate the premises and help others in need while doing so SA8. the value of physical fitness, personal hygiene and good habits SA9. talk with others politely
B. Professional Skills	Decision Making
	SB1. identify correct safety measure for particular hazard

TSC/ N9003

Maintain health, safety and security at work place

	SB2. make required safety plans as and when required
	SB3. raise alarm in case of emergency
	Analytical Thinking
	SB4. know the use of correct safety measure whenever required
	Attention to Detail
	SB5. be attentive to details SB6. be careful to avoid occurrence of hazards You need to know and understand : SB7. maintenance of neatness at work SB8. procedure for reporting unwanted behavior

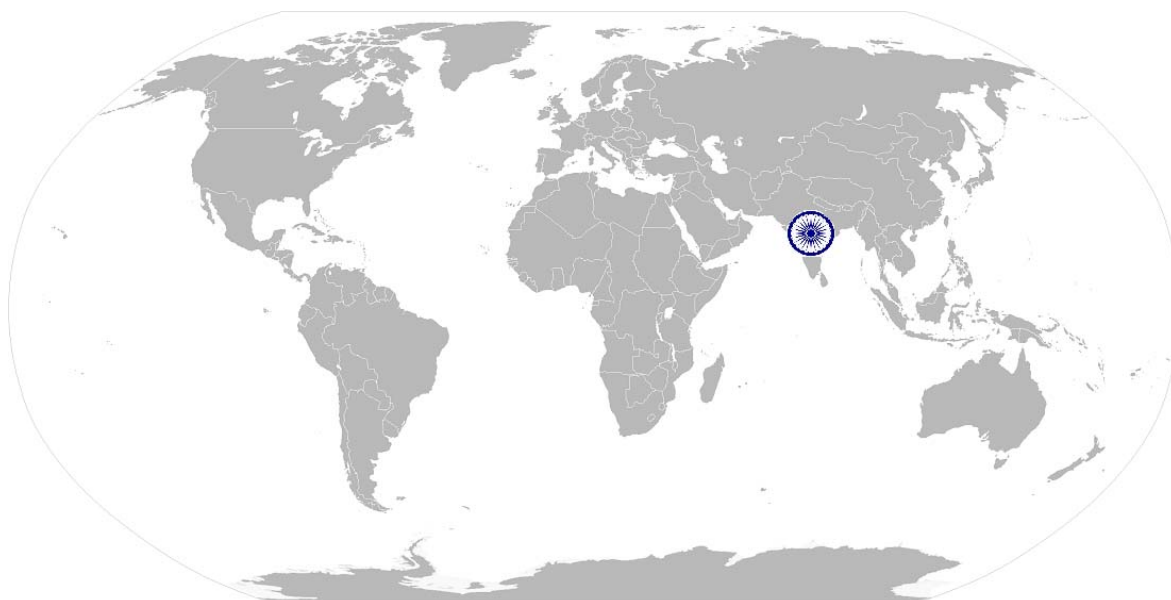


TSC/ N9003

Maintain health, safety and security at work place

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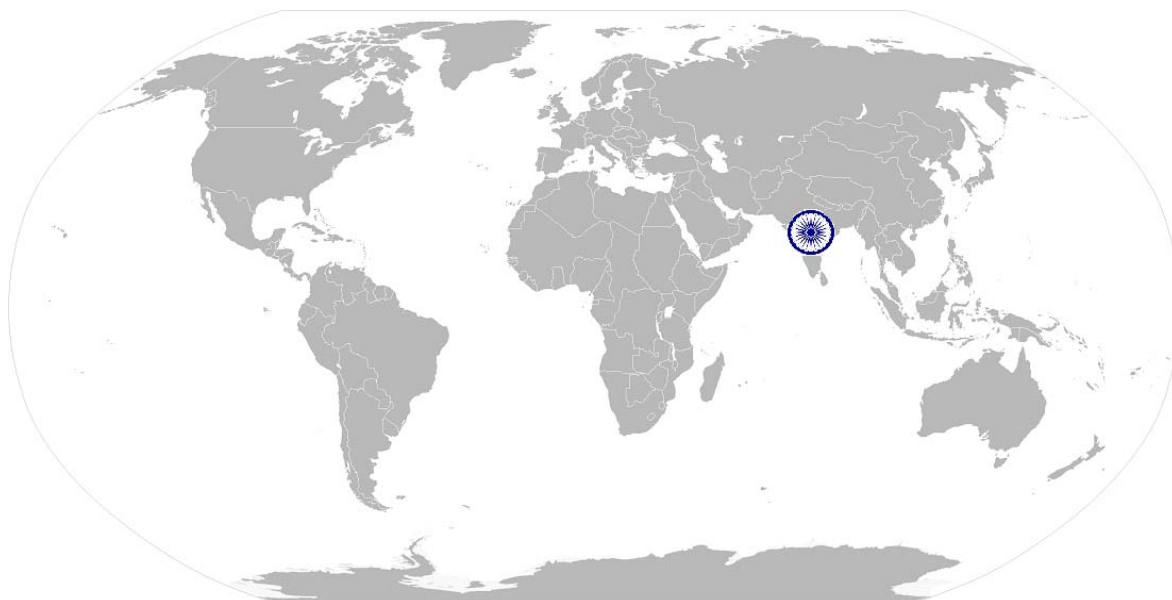
NOS Code	TSC/ N9003		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Finishing	Next review date	01/03/16



TSC/ N9004

Comply with industry and organizational requirements

National Occupational Standard



Overview

This unit is about knowing, understanding, and complying with the requirements of the organization and the textile industry.

TSC/ N9004

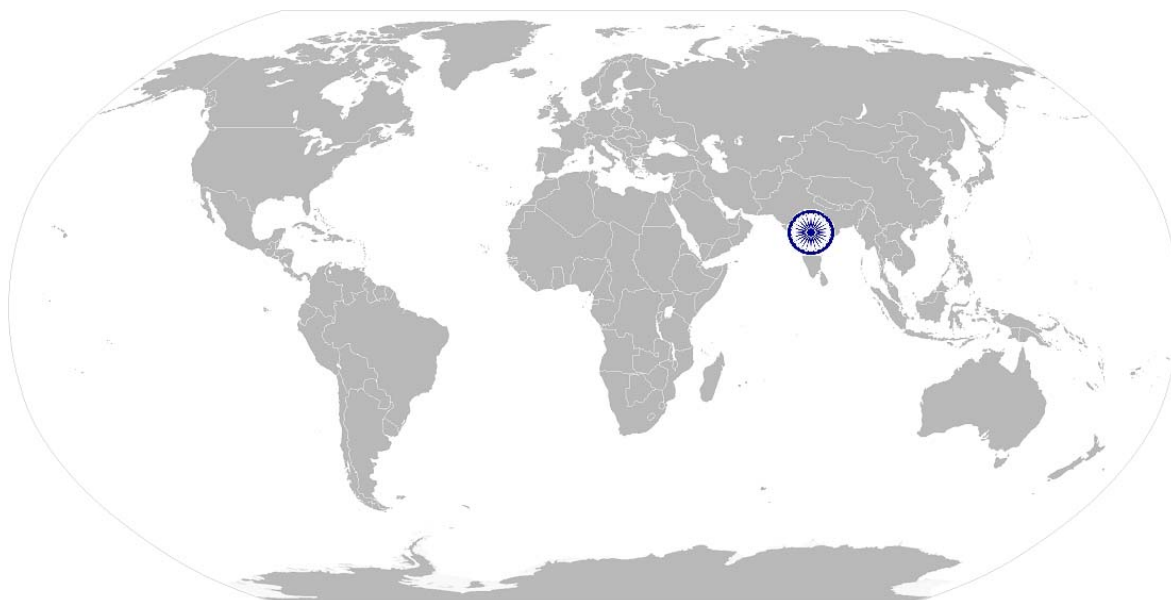
Comply with industry and organizational requirements

National Occupational Standard	Unit Code	TSC/ N9004
	Unit Title (Task)	Comply with industry and organizational requirements
	Description	This unit is about knowing, understanding, and complying with the requirements of the organization and the textile industry
	Scope	This unit/task covers the following: <ul style="list-style-type: none"> self development team work organizational standards industry standards
	Performance Criteria (PC) w.r.t. the Scope	
	Elements	Performance Criteria
	Self- development	To be competent, you must be able to: PC1. perform own duties effectively PC2. take responsibility for own actions PC3. be accountable towards the job role and assigned duties PC4. take initiative and innovate the existing methods PC5. focus on self-learning and improvement
	Team work	PC6. co-ordinate with all the team members and colleagues PC7. communicate politely PC8. avoid conflicts and miscommunication
	Organisational standards	PC9. know the organisational standards PC10. implement them in your performance PC11. motivate others to follow them
	Industry standards	PC12. know the industry standards PC13. align them with organisation standards
Knowledge and Understanding (K)		
A. Organizational Context (Knowledge of the company/ organization and its processes)		You need to know and understand: KA1. standard operating procedures (SOP) and regulations in a processing unit KA2. reporting to the supervisor or higher authority KA3. knowledge of organisational standards KA4. knowledge of industry standards
B. Technical Knowledge		You need to know and understand: KB1. process and material flow in a processing unit KB2. importance of complying with the standards KB3. guidelines for cleaning the various parts of machine
Skills (S)		
A. Core Skills/ Generic Skills		Writing Skills
		You need to know and understand how to: SA1. write clear and short sentences
		Reading Skills

TSC/ N9004

Comply with industry and organizational requirements

	You need to know and understand how to: SA2. read the given instructions SA3. comprehend written instructions
	Oral Communication (Listening and Speaking skills)
	SA4. talk effectively with others SA5. put forward your point SA6. listen to others you need to know and understand : SA7. Organizational requirements SA8. your responsibilities at the workplace SA9. procedure to comply with the industry standards

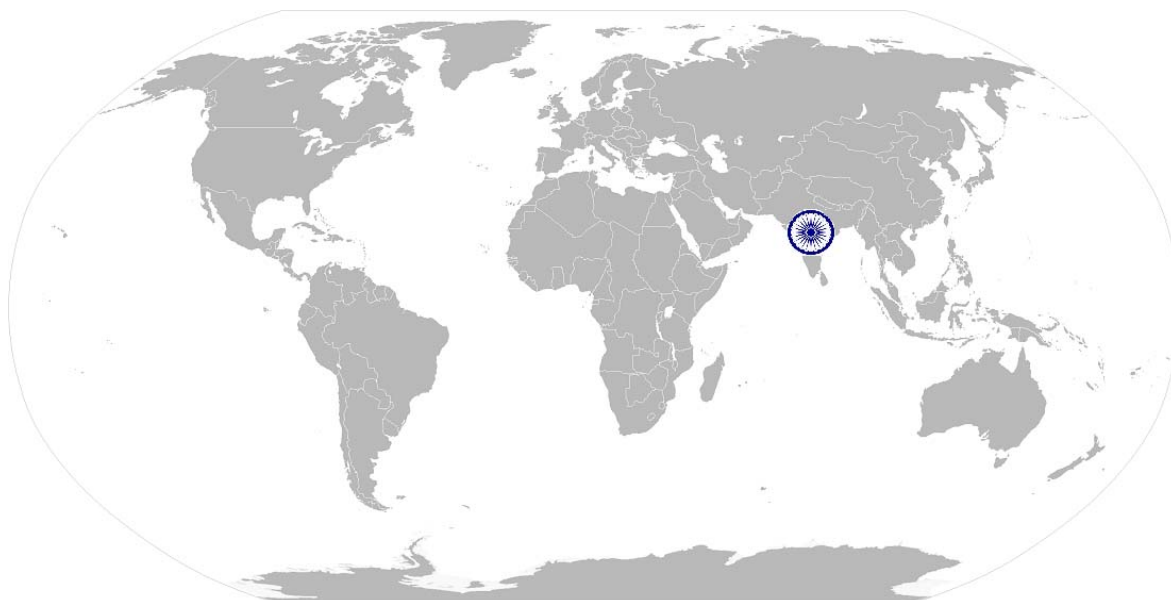


TSC/ N9004

Comply with industry and organizational requirements

NOS Version Control

NOS Code	TSC/N 9004		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Finishing	Next review date	01/03/16



Assessment Criteria

Job Role: Finishing Machine Operator
Qualification Pack: TSC/Q 5403
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 evaluations for skill practical for every student at each examination/training centre (as per assessment criteria below).
4. To pass the qualification pack, every trainee should score a minimum of 80%.

National Occupational Standards (NOS)	Performance Criteria (PC)	Total Marks	Out Of	Marks Allocation		
				Practical	Theory	Viva
1. TSC/ N5407 Taking charge of shift and handing over shift to Finishing Machine Operator (Zero-Zero/Compactor)	PC1. come atleast 10 - 15 minutes earlier to the work place	50	2	1	1	0
	PC2. bring the necessary operational tools to the department		3	2	1	0
	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.		3	2	1	0
	PC4. Understand the fabric being processed & process running on the machine		2	1	1	0
	PC5. Ensure the technical details are mentioned on the job card display on the machine		2	2	0	0
	PC6. check for the availability of the spare trolley for unloading the fabric		2	2	0	0
	PC7. check the next batch to be processed is ready near the machine		2	1	1	0
	PC8. check the cleanliness of the machines & other work areas		2	0	1	1

Assessment Criteria

	PC9. 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 as of the previous shift.	2	1	1	0
	PC10. take over the shift from the outgoing operator in a proper manner	2	1	1	0
	PC11. Ensure in providing the details regarding fabric quality & the process running on the machine	3	2	1	0
	PC12. provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine.	5	2	2	1
	PC13. ensure the empty trolley is near the machine for unloading the fabric	2	1	1	0
	PC14. ensure the next lot to be processed is ready near the machine already stitched & arranged properly	3	2	0	1
	PC15. get clearance from the incoming counterpart before leaving the work spot	2	1	1	0
	PC16. 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	2	1	0	1
	PC17. the shift has to be properly handed over to the incoming shift operator	4	3	0	1
	PC18. 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	2	1	1	0
	PC19. collect the wastes from waste collection bags, weigh them and transport to storage area	3	1	1	1

Assessment Criteria

	PC20. Ensure the machine and its work place is clean		2	1	1	0
	Total		50	28	16	6
		Weightage %		56%	32%	12%
2. TSC/ N5408 Operating the Sanforizing Machine	PC1. understand the task mentioned in the work order	120	3	2	1	0
	PC2. read & understand the fabric parameters properly		5	2	2	1
	PC3. bring the fabric trolley or batch near the machine		4	3	0	1
	PC4. join the feeding cloth/ end piece to the fabric to be processed		5	2	2	1
	PC5. check for any unstitched or loose ends & join them		4	2	1	1
	PC6. check the width of the fabric before sanforizing		5	2	2	1
	PC7. ensure that the machine is clean		4	2	2	0
	PC8. feed the fabric from the batch/trolley in the center of the machine		5	3	1	1
	PC9. ensure fabric is crease-less and evenly spread into the machine		4	2	2	0
	PC10. open steam valve & drain the condensate from the line		3	2	1	0
	PC11. drain water from air line		4	2	2	0
	PC12. set the overfeed & the compression values as specified in the work order		5	3	0	2
	PC13. arrange empty trolley or batch for rolling at the exit end		4	2	1	1
	PC14. know the operations of the sanforizing machine		4	2	2	0
	PC15. read & understand the process being followed to do the task		3	2	1	0
	PC16. keep even tension on fabric throughout the process		5	4	0	1
	PC17. adjust the Rubber Felt compression to the desired level and in accordance with rubber felt supplier norms		2	2	0	0
	PC18. use selvage uncurlers & fabric spreader rollers for feeding the		4	4	0	0

Assessment Criteria

	fabric				
	PC19.set the required temp of machine	3	3	0	0
	PC20.set the required pressure of compression roller on the felt	5	2	2	1
	PC21.start the machine & adjust the overfeed & compression to the optimum	4	3	0	1
	PC22.ensure that all safety devices are operational	4	2	1	1
	PC23.take out fabric either on batch or trolley from the other end	3	3	0	0
	PC24.check the width of the fabric after sanforizing	5	2	2	1
	PC25.check the fabric for feel, lustre & other parameters as specified	4	3	0	1
	PC26.adjust the machine speed or overfeed according to required finish	4	2	1	1
	PC27.keep next trolley or batch ready both at entry and exit	1	1	0	0
	PC28.use scray or j- box for continuous operation of machine	2	0	2	0
	PC29.record the shift production in the production register	1	1	0	0
	PC30.record all stoppages & breakdowns in the register	2	1	0	1
	PC31.cool down the machine before shutting down completely	1	1	0	0
	PC32.make sure the machine is kept clean at all times	1	1	0	0
	PC33.follow the preventive maintenance schedule & ensure the machine is running smoothly	1	1	0	0
	PC34.check that all controls are functioning properly	1	1	0	0
	PC35. ensure the right quality of water, steam & air is available for proper functioning of machine	1	1	0	0
	PC36.ensure there is no leakage in steam, air or water line	1	0	0	1
	PC37.oiling the moving parts of machine as specified in the operation manual	1	0	1	0
	PC38.stop the machine in case of any	1	0	1	0

Assessment Criteria

	abnormal sound & report the matter to the concerned person & supervisor					
	PC39. cool down the machine after completion of job		1	1	0	0
	Total		120	72	30	18
		Weightage%		60%	25%	15%
3. TSC/N 5409 Checking the quality of Finished fabric	PC1. Taking out the sample after sanforizing near the stitch	30	10	5	3	2
	PC2. Compare the sample with the standard		10	6	2	2
	PC3. Take the sample to your supervisor if the sample is not matching to the standard for decision		10	6	2	2
	Total		30	17	7	6
		Weightage%		57%	23%	20%
4. TSC/ N9001 Maintain work area, tools and machines	PC1. handle materials, machinery, equipment and tools with care and use them in the correct way	50	4	2	1	1
	PC2. use correct lifting and handling procedures		4	2	2	0
	PC3. use materials to minimize waste		3	2	1	0
	PC4. maintain a clean and hazard free working area		3	2	1	0
	PC5. maintain tools and equipment		4	3	0	1
	PC6. carry out running maintenance within agreed schedules		4	2	1	1
	PC7. carry out maintenance and/or cleaning within one's responsibility		3	2	1	0
	PC8. report unsafe equipment and other dangerous occurrences		3	1	2	0
	PC9. ensure that the correct machine guards are in place		4	3	1	0
	PC10. work in a comfortable position with the correct posture		4	3	1	0
	PC11. use cleaning equipment and methods appropriate for the work to be carried out		4	2	1	1
	PC12. dispose of waste safely in the designated location		3	2	1	0
	PC13. store cleaning equipment safely after use		4	3	0	1
	PC14. carry out cleaning according to		3	3	0	0

Assessment Criteria

	schedules and limits of responsibility					
	Total		50	32	13	5
		Weightage%		64%	26%	10%
5.TSC/ N9002 Working in a team	PC1. be accountable to the own role in whole process	50	4	2	1	1
	PC2. perform all roles with full responsibility		4	2	0	2
	PC3. be effective and efficient at workplace		6	4	2	0
	PC4. properly communicate about company policies		4	3	0	1
	PC5. report all problems faced during the process		3	2	0	1
	PC6. talk politely with other team members and colleagues		4	2	1	1
	PC7. submit daily report of own performance		5	5	0	0
	PC8. adjust in different work situations		3	2	1	0
	PC9. give due importance to others' point of view		4	2	0	2
	PC10. avoid conflicting situations		2	1	1	0
	PC11. develop new ideas for work procedures		6	4	2	0
	PC12. improve upon the existing techniques to increase process efficiency		5	2	1	2
	Total		50	31	9	10
		Weightage%		62%	18%	20%
6. TSC/ N9003 Maintain health, safety and security at workplace	PC1. comply with health and safety related instructions applicable to the workplace	50	2	1	1	0
	PC2. use and maintain personal protective equipment such as "ear plug", " nose mask ", " head cap" etc., as per protocol		2	1	1	0
	PC3. carry out own activities in line with approved guidelines and procedures		3	1	1	1
	PC4. maintain a healthy lifestyle and guard against dependency on intoxicants		2	2	0	0
	PC5. follow environment management		2	1	1	0

Assessment Criteria

	system related procedures					
	PC6. identify and correct (if possible) malfunctions in machinery and equipment	2	1	1	0	
	PC7. report any service malfunctions that cannot be rectified	3	3	0	0	
	PC8. store materials and equipment in line with organisational requirements	2	1	1	0	
	PC9. safely handle and remove waste	2	1	1	0	
	PC10. minimize health and safety risks to self and others due to own actions	2	1	0	1	
	PC11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks	2	1	0	1	
	PC12. monitor the workplace and work processes for potential risks and threat	2	1	1	0	
	PC13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned	2	1	1	0	
	PC14. report hazards and potential risks/ threats to supervisors or other authorized personnel	2	2	0	0	
	PC15. participate in mock drills/ evacuation procedures organized at the workplace	2	1	1	0	
	PC16. undertake first aid, fire-fighting and emergency response training, if asked to do so	2	2	0	0	
	PC17. take action based on instructions in the event of fire, emergencies or accidents	2	2	0	0	
	PC18. follow organisation procedures for shutdown and evacuation when required	2	1	1	0	
	PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry	2	1	0	1	
	PC20. recognise other possible security issues existing in the workplace	2	1	1	0	

Assessment Criteria

	PC21. recognise different measures to curb the hazards		3	1	1	1
	PC22. communicate the safety plan to everyone		2	1	0	1
	PC23. attach disciplinary rules with the implementation		3	1	1	1
	Total		50	29	14	7
		Weightage %		58%	28%	14%
7. TSC/ N9004 Comply with industry and organisational requirements	PC1. perform own duties effectively	50	4	2	1	1
	PC2. take responsibility for own actions		4	2	2	0
	PC3. be accountable towards the job role and assigned duties		3	2	0	1
	PC4. take initiative and innovate the existing methods		4	2	1	1
	PC5. focus on self-learning and improvement		4	3	1	0
	PC6. co-ordinate with all the team members and colleagues		3	2	0	1
	PC7. communicate politely		4	4	0	0
	PC8. avoid conflicts and miscommunication		4	2	1	1
	PC9. know the organisational standards		3	3	0	0
	PC10. implement them in your performance		4	2	1	1
	PC11. motivate others to follow them		4	2	2	0
	PC12. know the industry standards		5	3	1	1
	PC13. align them with organisation standards		4	2	1	1
	Total		50	31	11	8
		Weightage %		62%	22%	16%
Grand Total			400	240	100	60