

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 – TFO Tenter

SECTOR: TEXTILE

SUB-SECTOR: SPINNING

OCCUPATION: POST SPINNING

REFERENCE ID: TSC/ Q 0303

ALIGNED TO: NCO-2004 / 8261.25

Brief Job Description:

A Two For One Twister (TFO) tenter is responsible for carrying out tenting activities and ensuring minimum machine stoppage and achieving maximum production in TFO machine. He should be able to creel the paralleled yarn, piece the yarn on breakage, doff the doubled cone package, carry out cleaning and preventive maintenance activities thus producing defect free doubled yarn.

This job requires the individual to have thorough knowledge in process flow and material flow in a textile mill for yarn production and should be able to know the important functions and operations of a TFO machine

Personal Attributes: A TFO tenter should have good eyesight, hand-eye-leg coordination, motor skills and vision. He/she should also have good interpersonal skills.

Job Details	Qualifications Pack Code	TSC/Q0303		
	Job Role	TFO Tenter		
	Credits (NSQF)	TBD	Version number	1.0
	Sector	Textile	Drafted on	15/12/14
	Sub-sector	Spinning	Last reviewed on	25/02/15
	Occupation	Post-Spinning	Next review date	01/03/2016
	Job Role	TFO Tenter		
Role Description		A Two For One twister (TFO) tenter is responsible for carrying out tenting activities ensuring minimum machine stoppage and achieving maximum production.		
NSQF level		4		
Minimum Educational Qualifications		5 th standard, preferably		
Maximum Educational Qualifications		N/A		
Training (Suggested but not mandatory)		Not Applicable		
Experience		Preferably 1-2 years of work experience in a textile mill.		
National Occupational Standards (NOS)		Compulsory: <ol style="list-style-type: none"> TSC/ N0309 Taking charge of shift and handing over shift to TFO Tenter TSC/ N0310 Creeling and knotting/splicing the yarn TSC/ N0311 Carry out doffing activities TSC/ N0312 Carry out cleaning and maintenance activities TSC/ N9001 Maintaining 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 Optional: Not Applicable		
Performance Criteria		As described in the relevant OS units		

Table 1: Glossary of Key Terms

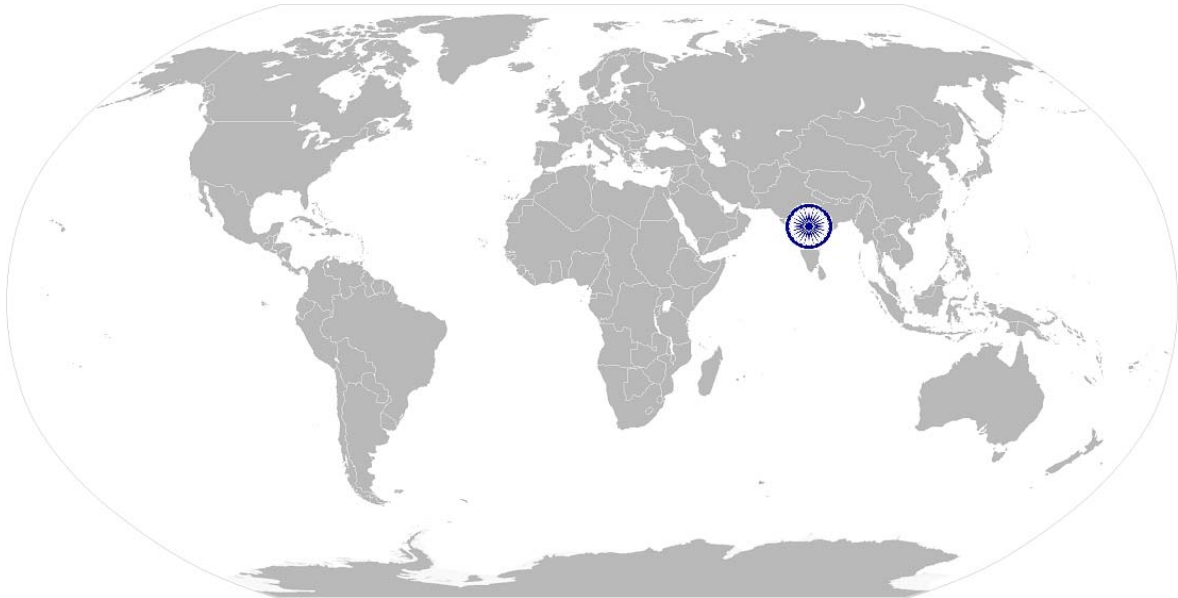
Definitions	Keywords /Terms	Description
	Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
	Sub-sector	Sub-sector is derived 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.
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 0309

Taking charge of shift and handing over shift to TFO Tenter

National Occupational Standard



Overview

This unit is about taking charge of shift from previous shift operator and relieving the responsibilities to the next shift operator.

TSC/N 0309 Taking charge of shift and handing over shift to TFO Tenter

National Occupational Standard

Unit Code	TSC/ N0309
Unit Title (Task)	Taking charge of shift and handing over shift to TFO Tenter
Description	This unit is about taking charge of shift from previous shift operator and relieving the responsibilities to the next shift operator
Scope	This unit/task covers the following: <ul style="list-style-type: none"> ▪ Taking charge of shift ▪ Handing over shift
Elements	Performance Criteria
Taking charge of shift	<p>To be able to competent ,you must be able to:</p> <p>PC1. reach the work place at least 10 - 15 minutes early</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 with respect to the quality, production, spare, safety or any other specific instruction etc.</p> <p>PC4. understand the count produced, colour coding followed in the TFO for his allocated number of spindles or machines</p> <p>PC5. ensure the technical details are mentioned on the display board of the TFO machine</p> <p>PC6. check for the availability of the paralleled cheese package</p> <p>PC7. check the availability of cheese package trolley with technical details mentioned regarding the count being produced</p> <p>PC8. check that the yarn passage and doubled yarn formation is proper</p> <p>PC9. check for the run outs and availability of the cheese package in the pot</p> <p>PC10. ensure all the spindles are running properly, if not enquire the reason for idle spindle and report to the superiors regarding the same</p> <p>PC11. check the condition of different running spindles</p> <p>PC12. ensure proper functioning of TFO machine parts and machine</p> <p>PC13. ensure all allocated spindles are running with uniform length of yarn on cone, variations if any should be discussed with operator and reported to superiors</p> <p>PC14. check the condition of running spindles and report damages, if any</p> <p>PC15. check the cleanliness of the machines and other work areas</p> <p>PC16. check whether any spare/raw material/ tool / yarn / any other materials are thrown under the machines or in the other work areas.</p> <p>PC17. ask the previous shift operator for any deviation in the above and bring the same to the knowledge of his/her shift superior and the superior of the previous shift</p> <p>PC18. ensure proper passage of yarn through pig tail guide to avoid twist variations and defective package</p> <p>PC19. ensure the waste collection boxes are empty while taking charge of shift</p> <p>PC20. ensure the work spot is clean</p> <p>PC21. ensure the OHTC is working properly</p> <p>PC22. take over the shift from the outgoing TFO tenter in a proper manner</p>
Handing over shift	PC23. provide the details regarding count produced, colour coding followed in the

TSC/N 0309 Taking charge of shift and handing over shift to TFO Tenter

	<p>TFO for his allocated number of spindles or machines</p> <p>PC24. provide all relevant information regarding the count produced, idle spindles, damaged machine parts if any</p> <p>PC25. get clearance from the incoming counterpart before leaving the work place</p> <p>PC26. report to his/ her shift superior and the incoming shift supervisor in case his/ her counterpart does not report for the incoming shift</p> <p>PC27. ensure the shift is properly handed over to the incoming shift operator</p> <p>PC28. 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 superior</p> <p>PC29. collect the waste from waste collection bags, weigh them and transport to storage area</p> <p>PC30. ensure that the work spot is clean</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 a spinning / textile mill</p> <p>KA2. safe working practices to be adopted in spinning / textile mill</p> <p>KA3. quality systems and other processes practiced in the spinning / textile mill</p> <p>KA4. reporting to the supervisor or higher authority in case of emergency</p> <p>KA5. color coding adopted for different counts in the spinning / textile mill</p>
B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. the importance of</p> <ul style="list-style-type: none"> types of fibres types of yarn yarn count importance of doubled yarn types of yarn defects <p>KB2. process flow in a spinning / textile mill</p> <p>KB3. material flow in a spinning / textile mill</p> <p>KB4. importance of mixing & count change</p> <p>KB5. functions of different parts of TFO machine</p> <p>KB6. importance of colour coding followed for different counts in spinning / textile mill</p> <p>KB7. guidelines for operating the TFO machine</p> <p>KB8. the functions of different signal lamps</p> <p>KB9. guidelines for taking charge of shift from previous shift operator</p> <p>KB10. guidelines for handing over the shift to the next shift operator</p> <p>KB11. knowledge of waste collection system & equipments used</p> <p>KB12. importance of cleanliness at workplace</p> <p>KB13. importance of material handling and types of material handling equipments used</p> <p>KB14. functions and methodology for operating different material handling equipments. Safety procedures to be followed in a TFO machine</p>

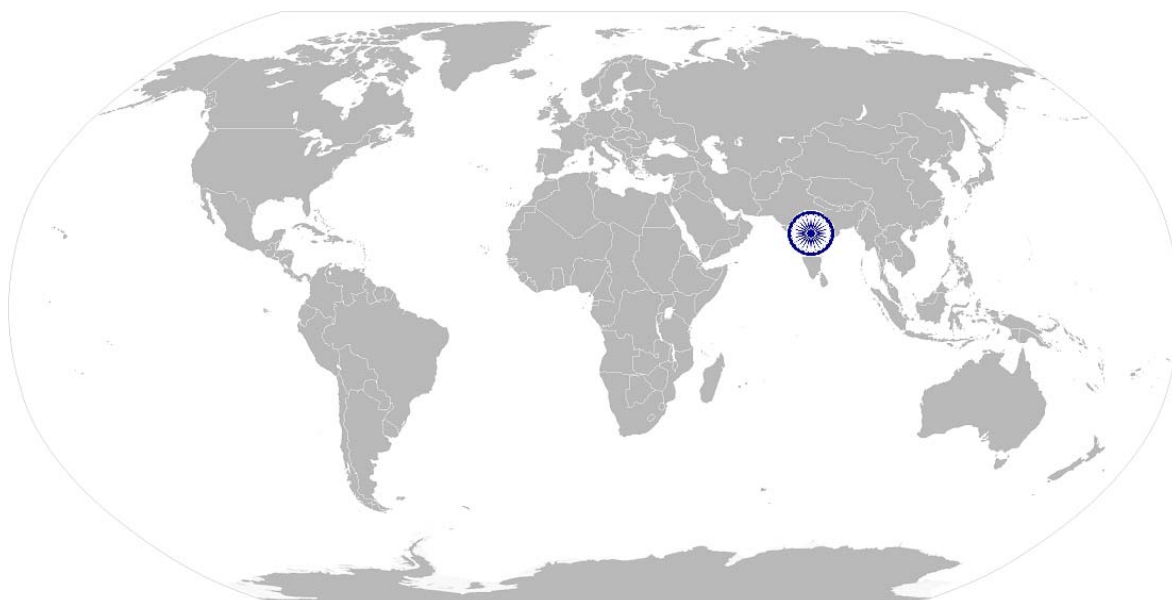
TSC/N 0309 Taking charge of shift and handing over shift to TFO Tenter

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 comprehend written instructions
	Oral Communication (Listening and Speaking skills)
	SA3. communicate with supervisor appropriately SA4. talk to others and convey information effectively
B. Professional Skills	Problem Solving
	You need to know and understand how to: SB1. apply problem-solving approaches in different situations SB2. refer anomalies to the supervisor SB3. seek clarification on problems from others
	Attention to Detail
	You need to know and understand how to: SB1. apply good attention to detail SB2. check that your work is complete and free of errors You need to know and understand: SB3. procedure to patrol around the TFO machine SB4. procedure to identify yarn breakage or cheese exhaust SB5. procedure for operating different material handling tools and equipments SB6. procedure for patrolling around the TFO department and identifying worn out or damaged machine parts SB7. procedure to check the quality of paralleled cheese package, doubled yarn, proper functioning of machine parts in a TFO machine SB8. maintain neatness at work place

TSC/N 0309 Taking charge of shift and handing over shift to TFO Tenter

NOS Version Control

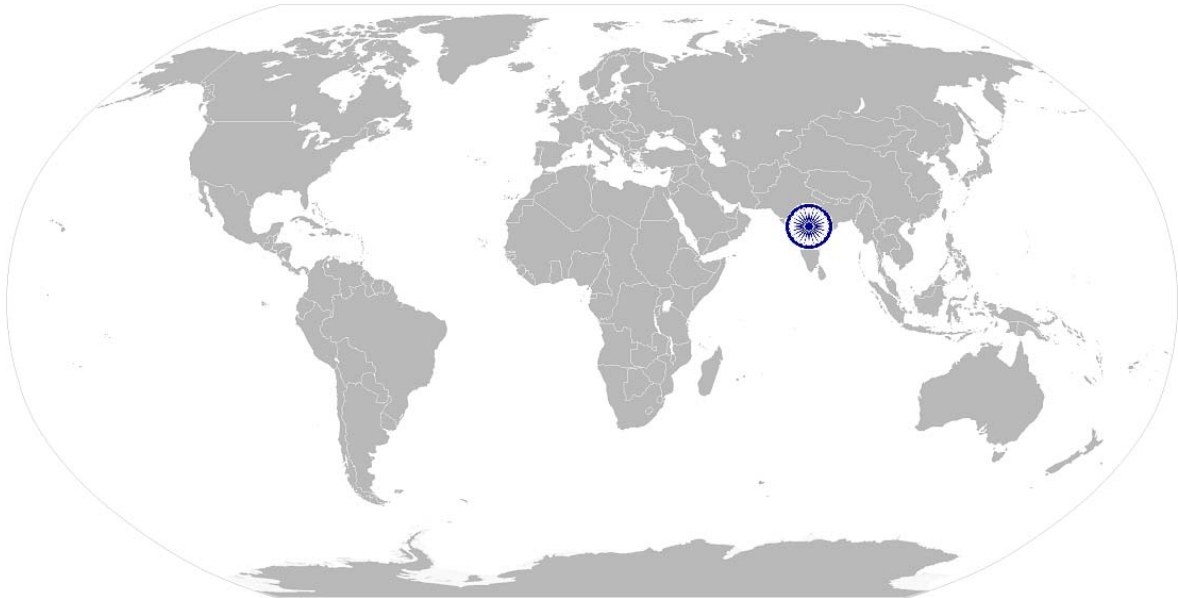
NOS Code	TSC/ N0309		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/14
Industry Sub-sector	Spinning	Last reviewed on	25/02/15
Occupation	Post-Spinning	Next review date	01/03/2016



TSC/N 0310

Creeling and knotting/splicing the yarn

National Occupational Standard



Overview:

This unit is about the procedure for creeling the paralleled cheese package and knotting/splicing the yarn in case of breakage.

TSC/N 0310

Creeling and knotting/splicing the yarn

Unit Code	TSC/ N0310
Unit Title (Task)	Creeling and knotting / splicing the yarn
Description	This unit is about the procedure for creeling the paralleled cheese package and knotting/splicing the yarn in case of breakage and package change
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> attending the machine for creeling creeling the cheese package attending the breaks and knotting/splicing the yarn
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Attending the machine for creeling	<p>To be competent, you must be able to:</p> <p>PC1. bring the paralleled cheese package in the cheese trolley from storage area</p> <p>PC2. ensure correct colour coded cheese is taken to TFO section for creeling</p> <p>PC3. identify cheese exhausts and remove the empty cheese</p> <p>PC4. ensure proper material handling of cheese and cheese trolley</p> <p>PC5. ensure colour coding of feed in the creel is correct</p> <p>PC6. ensure that minimum time is taken for attending the cheese exhaust or cheese change</p>
Creeling the cheese package	<p>PC7. ensure colour coding of feed in the creel is correct</p> <p>PC8. Lift the drop wire before taking empty cheese from inner pot</p> <p>PC9. lift the cheese spindle and properly mount the full cheese</p> <p>PC10. creel the cheese in the creel stand and ensure the cheese is properly fixed in the cheese pot</p> <p>PC11. take the flyer out and put it on pigtail guide rod</p> <p>PC12. turn the pigtail, else cut end cheese may be formed.</p> <p>PC13. clean the inner pot using cloth.</p> <p>PC14. after cleaning, take the tension variator out and replace it with full cheese</p> <p>PC15. re-fix the tension variator and flyer.</p> <p>PC16. take the yarn from cheese and pass through the flyer through wire</p> <p>PC17. ensure minimum time is taken for creeling the cheese package during exhaust or cheese change</p>
Attending the breaks and knotting/splicing the yarn	<p>PC18. patrol around the machine to ensure proper production of ply yarn</p> <p>PC19. ensure minimum time is taken for attending the breaks</p> <p>PC20. when there is any break, clean the cone (as specified length), ensure proper twist</p> <p>PC21. lift the drop wire</p> <p>PC22. take the flyer and tension variator out and store in a suitable place.</p> <p>PC23. take the cheese package and identify defects, if any</p> <p>PC24. remove defects in the cheese package, if any</p> <p>PC25. feed the cleaned cheese into the inner pot</p> <p>PC26. ensure defect free cheese is fed in the pot</p> <p>PC27. fix the flyer and tension variator in the correct position</p> <p>PC28. take the yarn from cheese and pass through the flyer through proper material</p>

TSC/N 0310

Creeling and knotting/splicing the yarn

	<p>handling tools</p> <p>PC29. stop the spindle by applying brake.</p> <p>PC30. insert the nylon wire/ or appropriate tool through the tension variator</p> <p>PC31. tie the yarn at the piecing wire properly</p> <p>PC32. Pull out the wire by holding the front end through the reserve disc</p> <p>PC33. take the yarn through pig tail guide</p> <p>PC34. release the brake</p> <p>PC35. ensure proper time is taken for tying / knotting/splicing the yarns, for inserting required amount of twist to the untwisted portion of yarn.</p> <p>PC36. cut the yarn passing through pre-take up roller in the cone</p> <p>PC37. engage the cradle</p> <p>PC38. engage the drop wire</p> <p>PC39. mark the brakes</p> <p>PC40. ensure releasing the brakes</p> <p>PC41. Knot/Splice the ends using knotter/splicer</p> <p>PC42. ensure the size of knot / splices minimal</p> <p>PC43. follow proper procedure for knotting/splicing the yarn</p> <p>PC44. while processing knotless yarn broken ends to be overlapped on the cone as instructed</p> <p>PC45. ensure proper material handling of cheese and cone package</p> <p>PC46. ensure proper yarn passage & tension variator position post knotting/splicing</p> <p>PC47. ensure proper procedure for operating material handing tools and knotting/splicing equipments</p> <p>PC48. ensure safety while carrying out creeling and knotting/splicing activities</p> <p>PC49. ensure cleanliness at work place</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 a spinning / textile mill</p> <p>KA2. safe working practices to be adopted in spinning / textile mill</p> <p>KA3. quality systems and other processes practiced in the spinning / textile mill</p> <p>KA4. reporting to the supervisor or higher authority in case of emergency</p> <p>KA5. color coding adopted for different counts in the spinning / textile mill</p>
B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. importance of types of fibres, types of yarn, yarn count, importance of yarn quality, types of yarn defects</p> <p>KB2. process flow in a spinning / textile mill</p> <p>KB3. material flow in a spinning / textile mill</p> <p>KB4. functions of different parts of TFO machine</p> <p>KB5. importance of colour coding followed for different counts in spinning / textile mill</p> <p>KB6. importance of creeling</p> <p>KB7. importance of knotting/splicing</p> <p>KB8. importance of attending breakages and knotting/splicing the yarn</p> <p>KB9. guidelines for creeling the cheese package in TFO</p>

TSC/N 0310

Creeling and knotting/splicing the yarn

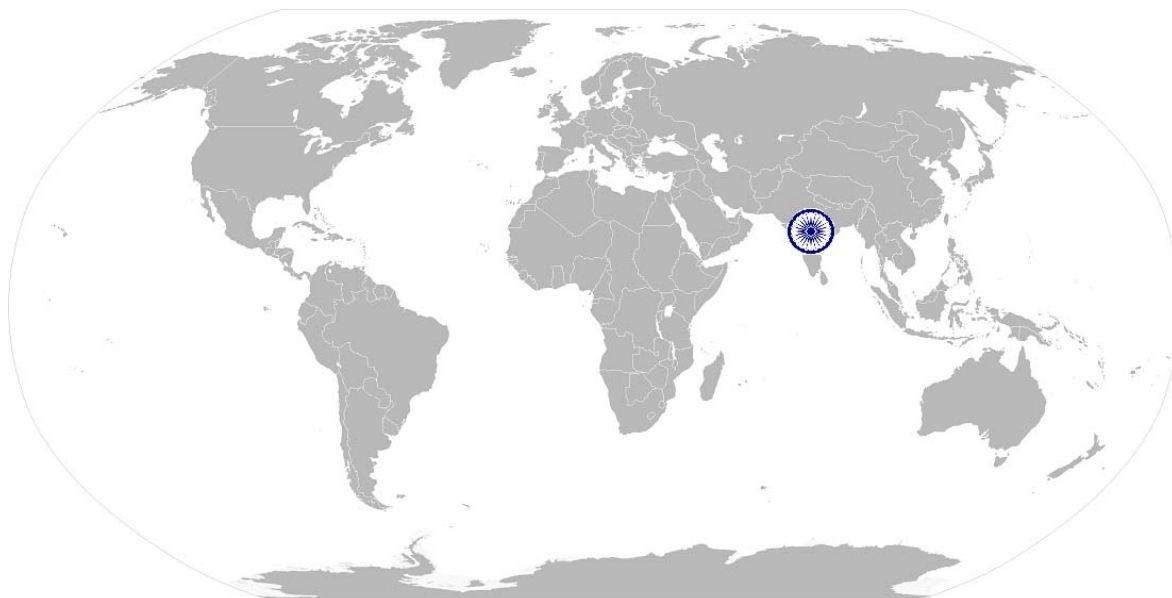
	<p>KB10. guidelines for knotting/splicing the yarn</p> <p>KB11. knowledge of waste collection system & equipments used</p> <p>KB12. importance of material handling</p> <p>KB13. types of material handling equipments used</p> <p>KB14. functions and methodology for operating different material handling equipments</p> <p>KB15. understanding the functions of different signal lamps</p> <p>KB16. safety procedures to be followed in a TFO machine</p> <p>KB17. importance of cleanliness at workplace</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. comprehend written instructions
	Oral Communication (Listening and Speaking skills)
	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
	SB2. refer anomalies to the supervisor
	SB3. seek clarification on problems from others
	Attention to Detail
	SB4. apply good attention to detail
	SB5. check your work is complete and free from errors
	You need to know and understand :
	SB6. procedure for patrolling around the TFO machine
	SB7. patrol around the TFO machine and identify yarn breakage or cheese exhaust
	SB8. procedure for material handling of cheese package and cheese trolley
	SB9. standard operating procedure for creeling the cheese package
	SB10. standard operating procedure for knotting/splicing the paralleled yarn
	SB11. procedure for removing the damages in cheese package surface
	SB12. procedure for operating different material handling tools and equipments
	SB13. maintain neatness at work place

TSC/N 0310

Creeling and knotting/splicing the yarn

NOS Version Control

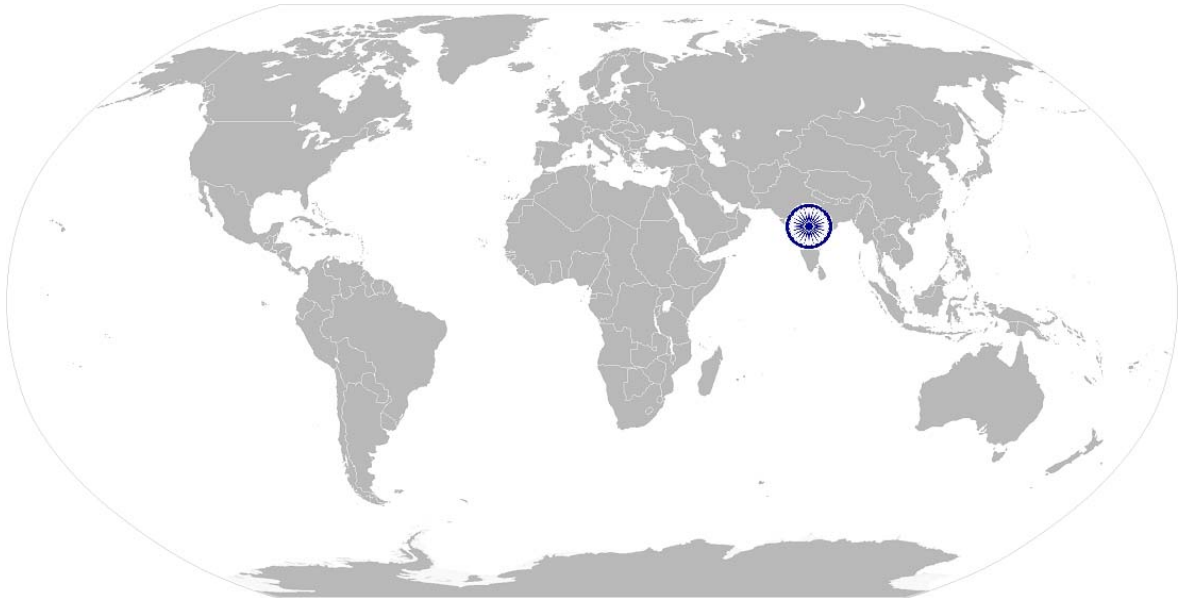
NOS Code	TSC/ N0310		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/14
Industry Sub-sector	Spinning	Last reviewed on	25/02/15
Occupation	Post-Spinning	Next review date	01/03/2016



TSC/N 0311

Carry out doffing activities

National Occupational Standard



Overview

This unit is about carrying out the doffing activities in a TFO machine.

TSC/N 0311

Carry out doffing activities

Unit Code	TSC/N 0311
Unit Title (Task)	Carry out doffing activities
Description	This unit is about carrying out the doffing activities in a TFO machine
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> identify the machine for carrying out doffing doffing the cone package weighing and storing the full cone package in storage area Restarting the machine after doffing
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Identify the machine for carrying out doffing	<p>To be competent, you must be able to:</p> <p>PC1. follow the plan as instructed by superiors for performing doffing activities at various machines in TFO department</p> <p>PC2. identify the machine in the TFO department which is ready for doffing</p> <p>PC3. ensure minimum time is taken for identifying the machine to carryout doffing activity</p> <p>PC4. ensure in confirming the machine with the superiors for carrying out doffing activity</p>
Doffing the cone package	<p>PC5. ensure the cone is wound up to the required length or weight of yarn on cone package</p> <p>PC6. check that the cone package is fully wound to the predetermined length or weight and start doffing</p> <p>PC7. before taking doffs take empty cone from empty cone peg stand and ensure count identification</p> <p>PC8. remove full cone from cone holder</p> <p>PC9. keep doffed cone in the peg trolley</p> <p>PC10. either stop the machine for doffing or doff the cone package while the machine is running as per the instructions of the supervisor</p> <p>PC11. ensure proper procedure is adopted for doffing the cone package</p> <p>PC12. ensure proper material handling of cone package</p> <p>PC13. ensure safety while carrying out doffing activity</p>
weighing and storing the full cone package in storage area	<p>PC14. weigh the cone package and ensure the required weight has been achieved</p> <p>PC15. fix the cone in the cone spindle and run it again till the cone reaches the predetermined weight as instructed by superiors</p> <p>PC16. place the cones in the cone trolley and store in the storage area as instructed</p> <p>PC17. reserve the empty paper cones in the reserve area for doffing</p> <p>PC18. move cone trolley to cone staking area and remove approx (as per prescribed length) of yarn, ensure normal twist before unloading cones to the floor</p>
Restarting the machine after doffing	<p>PC19. after doffing insert the empty cone</p> <p>PC20. ensure proper colour coded empty paper cone is mounted in the spindle.</p> <p>PC21. put tail end of minimum (as prescribed length) on the base of the empty cone before starting.</p> <p>PC22. do the necessary changes and follow the instructions of the superiors.</p>

TSC/N 0311

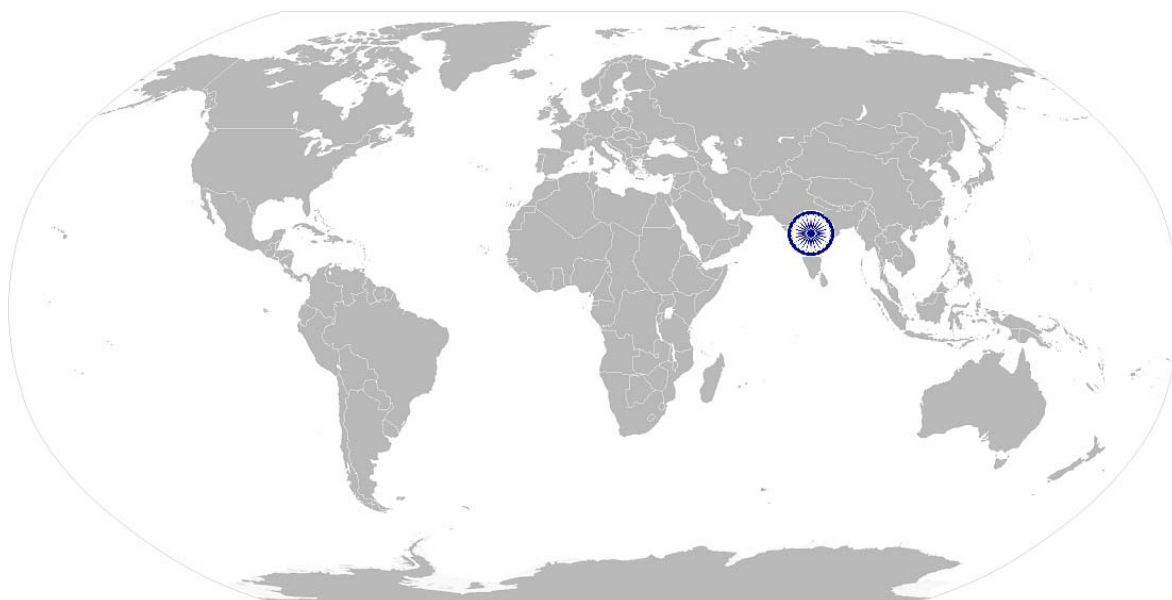
Carry out doffing activities

	<p>PC23. ensure the proper passage of yarn in the TFO machine</p> <p>PC24. take the empty cheese from inner pot, feed the full cheese (the yarn taken from cheese in clockwise direction) and pass the yarn through the flyer.</p> <p>PC25. fix the cone tightly on centring disc nose and base side</p> <p>PC26. release the brake</p> <p>PC27. insert the nylon wire/appropriate prescribed tool through the tension variator until it comes out through the exit of the spindle and the yarn from flyer tied with the tail end of the wire, pull out the wire through reserve disc, pig tail guide.</p> <p>PC28. engage the drop wire</p> <p>PC29. ensure releasing of brake , proper yarn passage & tension variator</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 a spinning / textile mill</p> <p>KA2. safe working practices to be adopted in spinning / textile mill</p> <p>KA3. quality systems and other processes practiced in the spinning / textile mill</p> <p>KA4. reporting to the supervisor or higher authority in case of emergency</p> <p>KA5. color coding adopted for different counts in the spinning / textile mill</p>
B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. process flow and material flow in a spinning / textile mill</p> <p>KB2. understand the types of yarn defects and reason for yarn breakage</p> <p>KB3. functions of different parts of a TFO machine</p> <p>KB4. functions of different signal lamps and control buttons</p> <p>KB5. knowledge about the schedule for carrying out doffing activity</p> <p>KB6. type of yarn defects</p> <p>KB7. importance of doffing</p> <p>KB8. importance of material handling</p> <p>KB9. functions of various tools and equipments used for doffing</p> <p>KB10. guidelines for carrying out doffing activity</p> <p>KB11. knowledge of waste collection system & material handling equipments used</p> <p>KB12. safety procedures to be followed in a TFO machine</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. comprehend written instructions
	Oral Communication (Listening and Speaking skills)
	<p>SA3. communicate with supervisor appropriately</p> <p>SA4. talk to others to convey information effectively</p> <p>You need to know and understand :</p> <p>SA5. standard operating procedure for carrying out doffing activity</p> <p>SA6. procedure to inspect the cone package and identify defects in cone</p>

TSC/N 0311

Carry out doffing activities

- SA7. procedure to identify the cone defects
- SA8. procedure to material handling cone and cone trolley
- SA9. procedure for deposit the waste.
- SA10. maintain neatness at work place

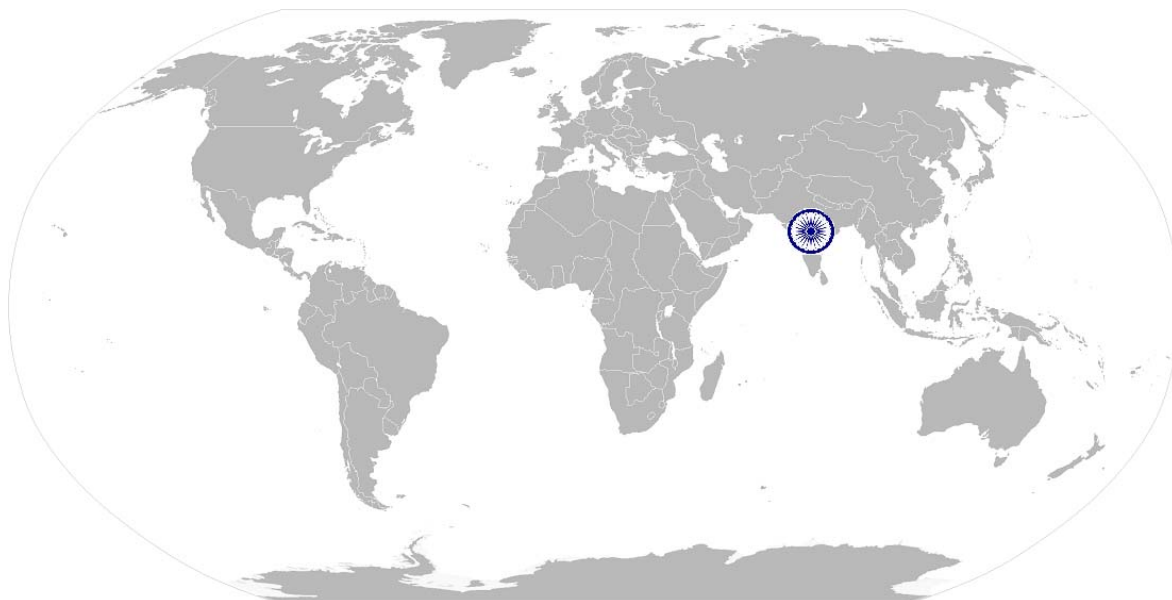


TSC/N 0311

Carry out doffing activities

NOS Version Control

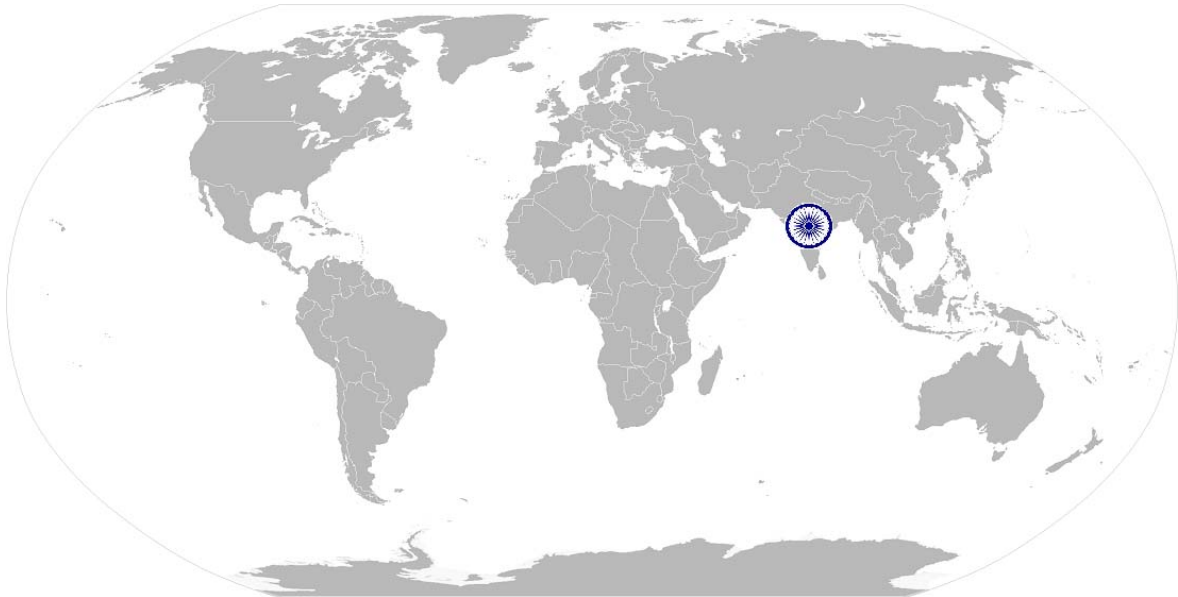
NOS Code	TSC/N 0311		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/14
Industry Sub-sector	Spinning	Last reviewed on	25/02/15
Occupation	Post- Spinning	Next review date	01/03/2016



TSC/N 0312

Carryout cleaning and maintenance activities

National Occupational Standard



Overview

This unit is about carrying out the cleaning and maintenance activities in a TFO machine.

TSC/N0312

Carryout cleaning and maintenance activities

Unit Code	TSC/ N0312
Unit Title (Task)	Carry out cleaning and maintenance activities
Description	This unit is about carrying out the tenting responsibilities in a Ring frame machine with auto doffer
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> ▪ carryout cleaning activities ▪ carryout maintenance activities ▪ other tenting responsibilities
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Carryout cleaning activities	<p>To be competent, you must be able to:</p> <p>PC1. schedule the cleaning activities</p> <p>PC2. carry out cleaning activities</p> <p>PC3. clean the creeling area</p> <p>PC4. ensure cleanliness in the yarn passage</p> <p>PC5. clean the inner pot using cloth</p> <p>PC6. ensure proper cleaning of different mechanisms in TFO machine</p> <p>PC7. deposit the yarn waste in the waste collection pocket provided to each tenter and finally deposit in the waste collection box</p> <p>PC8. remove the cleaned waste and store in a separate area</p> <p>PC9. clean the alley around the TFO machine using proper cleaning equipments</p> <p>PC10. ensure the waste collected from different parts of machine are deposited in the respective dustbins</p> <p>PC11. ensure the TFO department is neat and clean</p>
Carry out maintenance activities	<p>PC12. ensure proper functioning of machine</p> <p>PC13. check and verify the quality of different machine parts</p> <p>PC14. ensure taking care of yarn passage & tension variator position</p> <p>PC15. support fitter in removing the worn out parts and replace with new parts in TFO machine</p> <p>PC16. when the spindle tape is cut, immediately cut the yarn from the cheese and remove cone of respective tape. in case of 4 spindle drive 4 to be removed & in case of tangential all cones to be removed</p> <p>PC17. check TPI from relevant department (qad/SQC/R&D) to ensure proper twist and run</p> <p>PC18. remove and replace worn out parts</p> <p>PC19. oil various parts of TFO machine on need basis</p> <p>PC20. check top arm lifting</p> <p>PC21. check OHTC air blowing</p> <p>PC22. report to the supervisor and maintenance fitter if any problems are observed in the smooth functioning of the machine</p> <p>PC23. ensure the OHTC is working</p> <p>PC24. carry out preventive maintenance activities at specified intervals</p>
Other tenting	PC25. check the count board, cheese colour, cone tip colour and other given

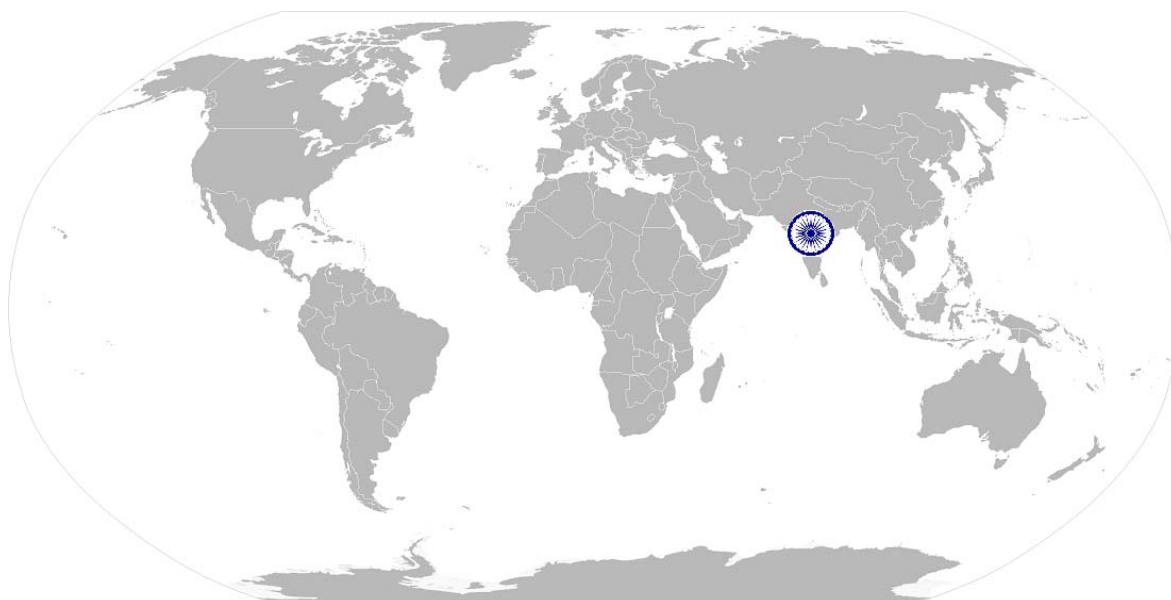
TSC/N 0312
Carryout cleaning and maintenance activities

responsibilities	instructions PC26. record the production details in the production report PC27. report to the supervisor in case of emergency stoppage of machine PC28. report to the supervisor and maintenance in charge if the operator had replaced the worn out machine part with a new one. PC29. support the maintenance team while machine is under maintenance PC30. ensure all details related to production are provided to the next shift operator while relieving PC31. ensure count wise storage of damaged cones in a separate area
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 spinning / textile mill KA2. safe working practices to be adopted KA3. quality systems and other processes practiced in the spinning / textile mill KA4. reporting to the supervisor or higher authority in case of emergency
B. Technical Knowledge	You need to know and understand: KB1. process flow and material flow in a spinning / textile mill KB2. functions of different parts of a TFO machine KB3. importance of yarn quality KB4. importance of cleaning KB5. schedule for cleaning KB6. types and functions of various cleaning tools and equipments KB7. guidelines for cleaning the various parts in TFO machine KB8. operational schedule for cleaning different parts of TFO machine KB9. guidelines for carrying out routine preventive maintenance activities KB10. types of end breaks and reason for end breaks KB11. knowledge of various types of oil used for preventive maintenance KB12. understanding the safety precautions to be followed in a TFO department
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. comprehend written instructions
	Oral Communication (Listening and Speaking skills)
	SA3. communicate with supervisor appropriately SA4. talk to others to convey information effectively You need to know and understand : SA5. procedure for operating the various cleaning tools and equipments SA6. procedure for cleaning the creeling area

TSC/N 0312

Carryout cleaning and maintenance activities

- SA7. procedure for cleaning the different mechanisms in TFO machine
- SA8. procedure for proper material handling of cleaning equipments and maintenance tools
- SA9. procedure to identify and remove worn out parts in TFO
- SA10. procedure to replace the worn out parts with a new machine part
- SA11. procedure for carrying out preventive maintenance activities
- SA12. procedure for oiling different parts of TFO machine
- SA13. maintain neatness at work place

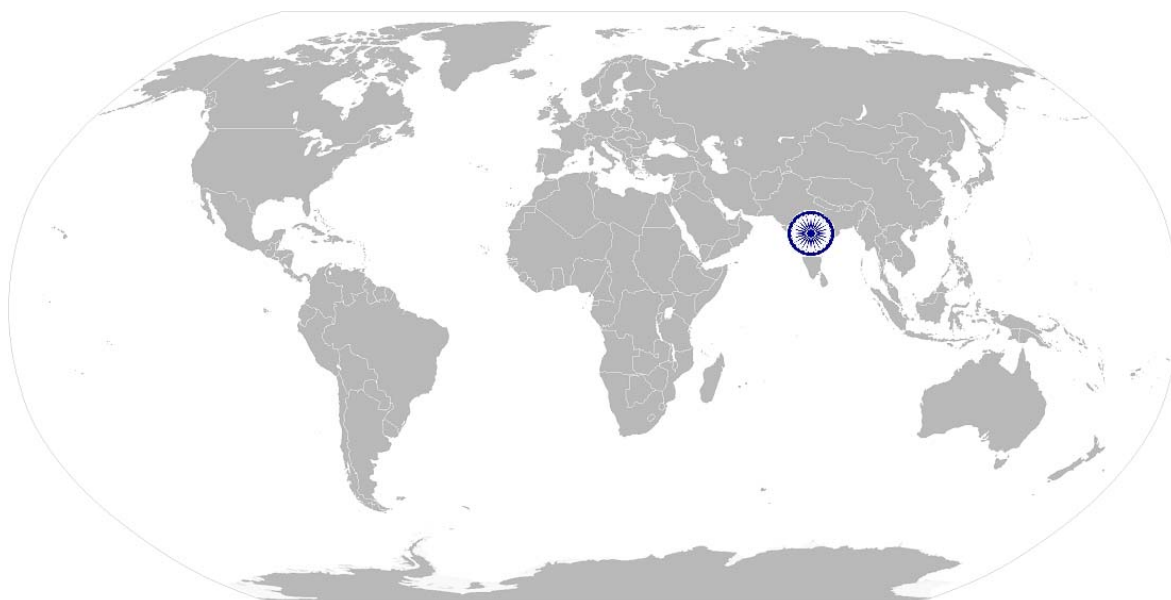


TSC/N 0312

Carryout cleaning and maintenance activities

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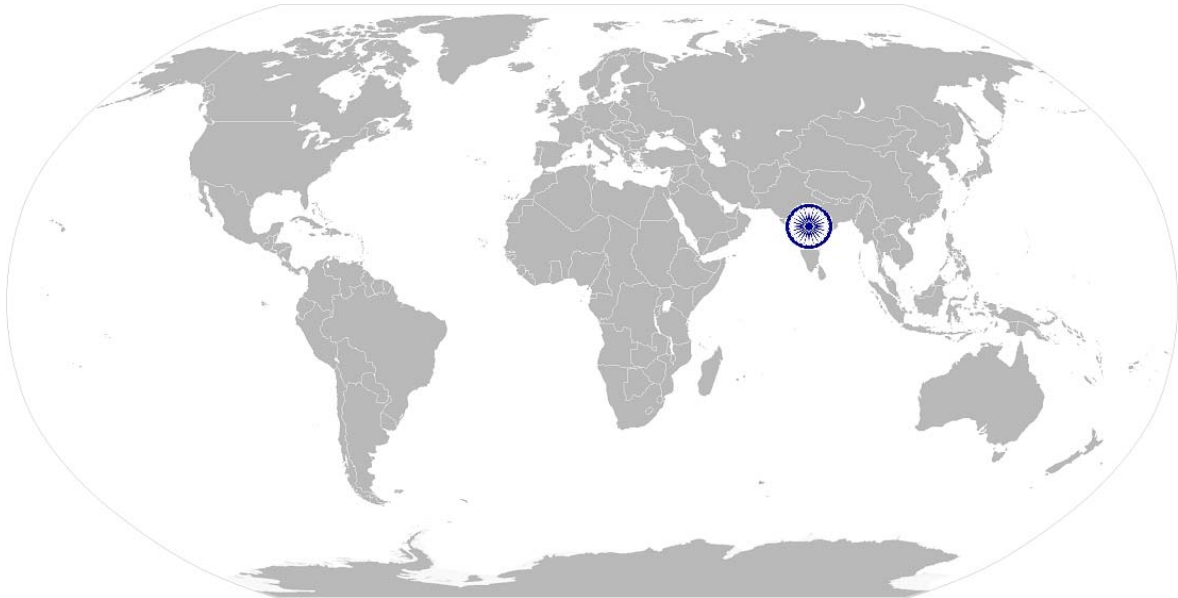
NOS Code	TSC/N 0312		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/14
Industry Sub-sector	Spinning	Last reviewed on	25/02/15
Occupation	Post-Spinning	Next review date	01/03/2016



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 organize/ 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. safe working practices and organizational standard operating procedures</p> <p>KA3. limits of your own responsibility</p> <p>KA4. ways of resolving with 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 organization'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

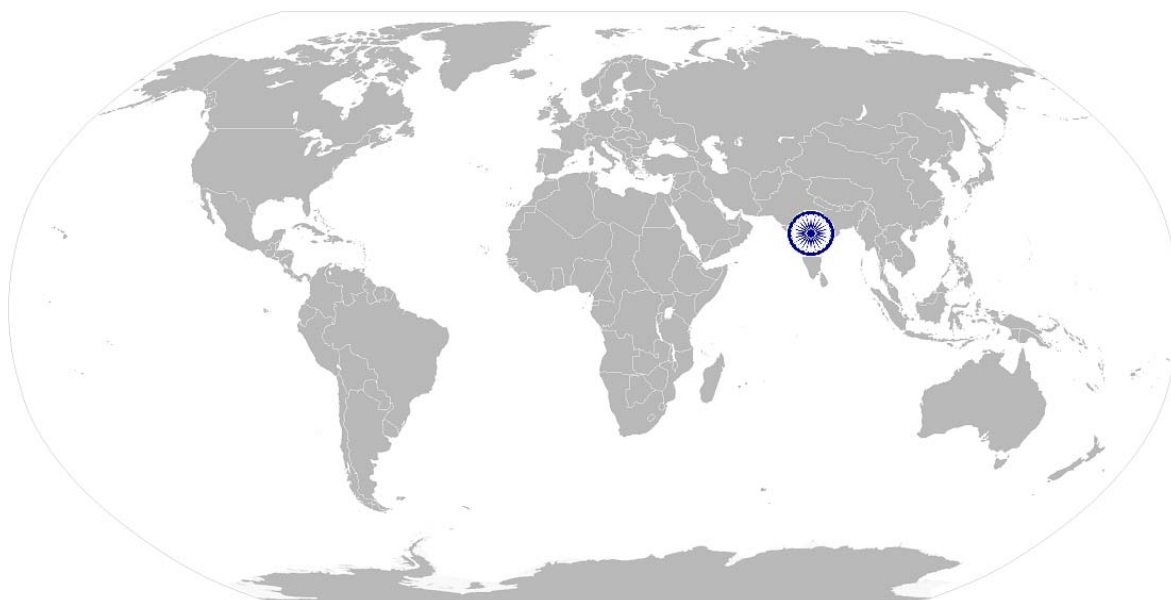
	<p>KB3. hazards likely to be encountered when conducting routine maintenance</p> <p>KB4. the importance of taking action when problems are identified</p> <p>KB5. different ways of minimizing waste</p> <p>KB6. the importance of running maintenance and regular cleaning</p> <p>KB7. effects of contamination 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

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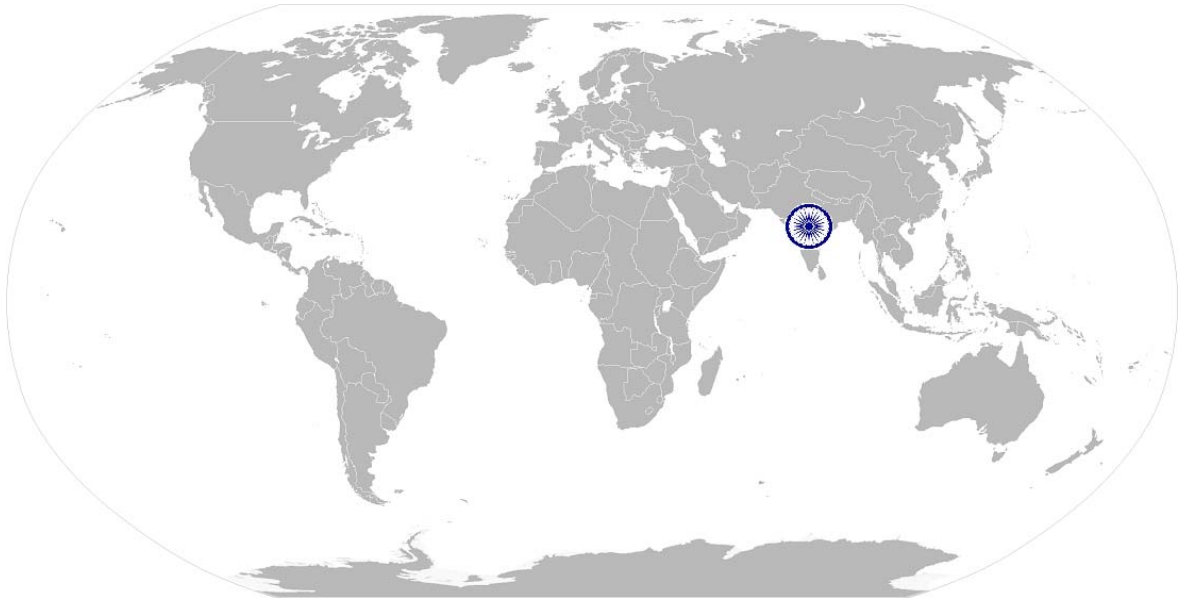
NOS Code	TSC/ N9001		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/14
Industry Sub-sector	Spinning	Last reviewed on	25/02/15
Occupation	Post-Spinning	Next review date	01/03/2016



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

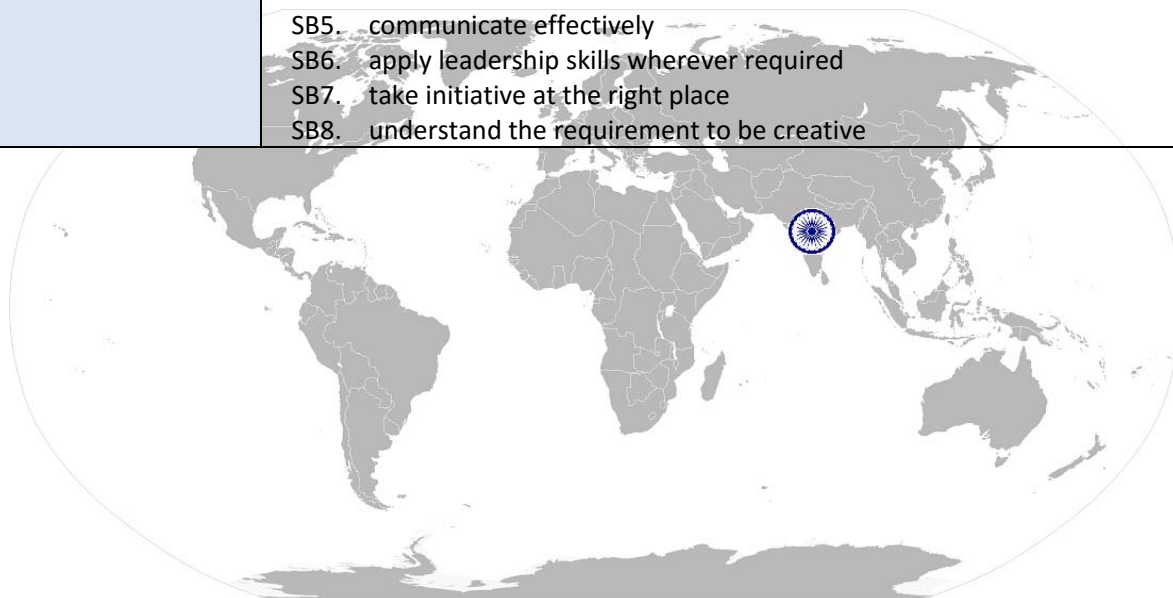
Working in a team

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	<p>This unit/task covers the following:</p> <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	<p>To be competent, you must be able to:</p> <p>PC1. be accountable to the own role in whole process</p> <p>PC2. perform all roles with full responsibility</p> <p>PC3. be effective and efficient at workplace</p>
Communication	<p>PC4. properly communicate about company policies</p> <p>PC5. report all problems faced during the process</p> <p>PC6. talk politely with other team members and colleagues</p> <p>PC7. submit daily report of own performance</p>
Adaptability	<p>PC8. adjust in different work situations</p> <p>PC9. give due importance to others' point of view</p> <p>PC10. avoid conflicting situations</p>
Creative freedom	<p>PC11. develop new ideas for work procedures</p> <p>PC12. improve upon the existing techniques to increase process efficiency</p>
Knowledge and Understanding (K)	
A. Organizational Context	<p>You need to know and understand:</p> <p>KA1. standard operating procedures (SOP) and regulations in a spinning / textile mill</p> <p>KA2. procedure followed to get the final output in the mill</p> <p>KA3. safe working practices to be adopted in spinning mill</p> <p>KA4. reporting to the supervisor or higher authority about any grievances faced</p>
B. Technical Knowledge	<p>KB1. the importance of the previous and next step of the process</p> <p>KB2. process flow in a spinning / textile mill and the concerned workers</p> <p>KB3. material flow in a spinning / textile mill and the required person</p> <p>KB4. functions of different parts of the machine</p> <p>KB5. tools and equipments used</p> <p>KB6. guidelines for operating the machine</p> <p>KB7. safety procedures to be followed in the machine</p>
Skills (S)	
A. Core Skills/ Generic Skills	<p>Writing Skills</p> <p>You need to know and understand how to:</p> <p>SA1. write clear and short sentences</p> <p>SA2. write daily work report</p> <p>SA3. write grievance complaint application</p>

TSC/ N9002

Working in a team

	Reading 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
B. Professional Skills	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

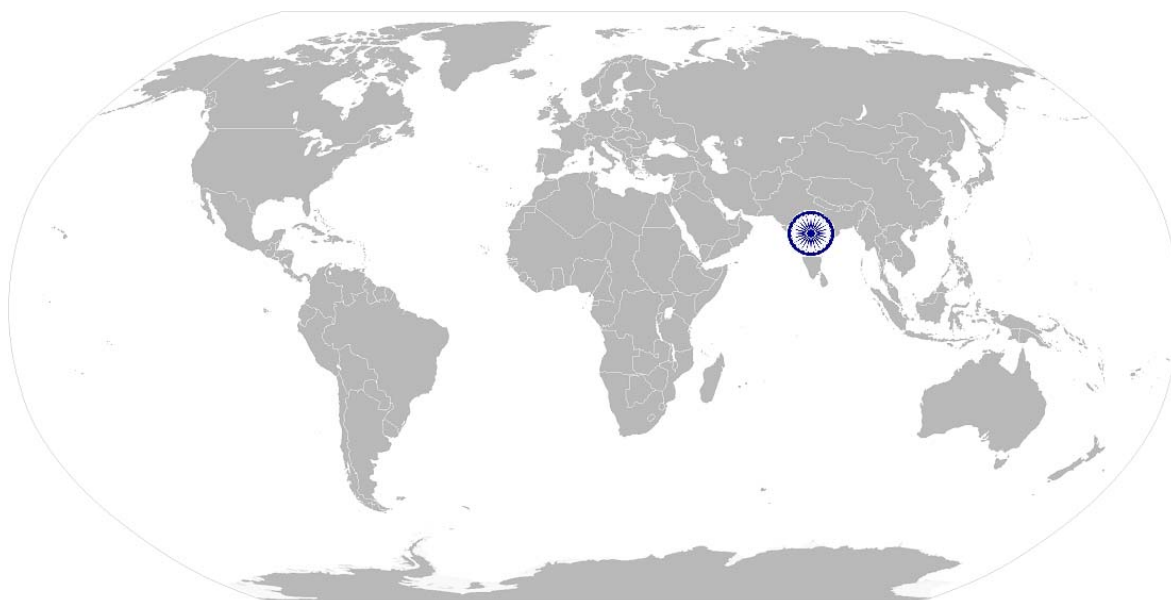


TSC/ N9002

Working in a team

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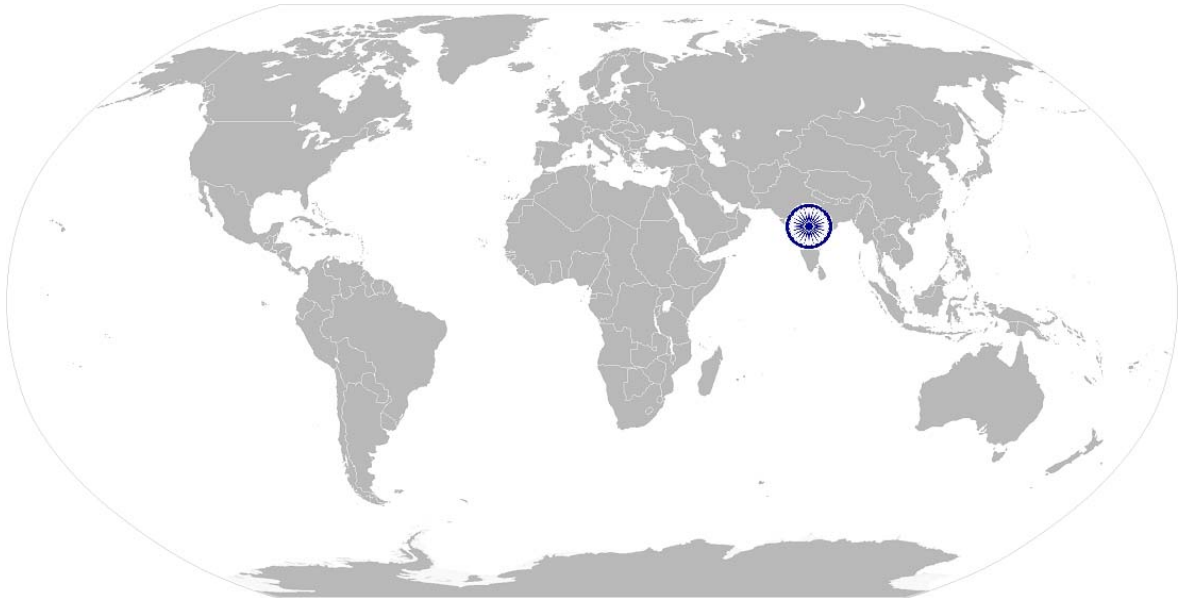
NOS Code	TSC/ N9002		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/14
Industry Sub-sector	Spinning	Last reviewed on	25/02/15
Occupation	Post-Spinning	Next review date	01/03/2016



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 techniques	PC21. recognise different measures to curb the hazards

TSC/ N9003

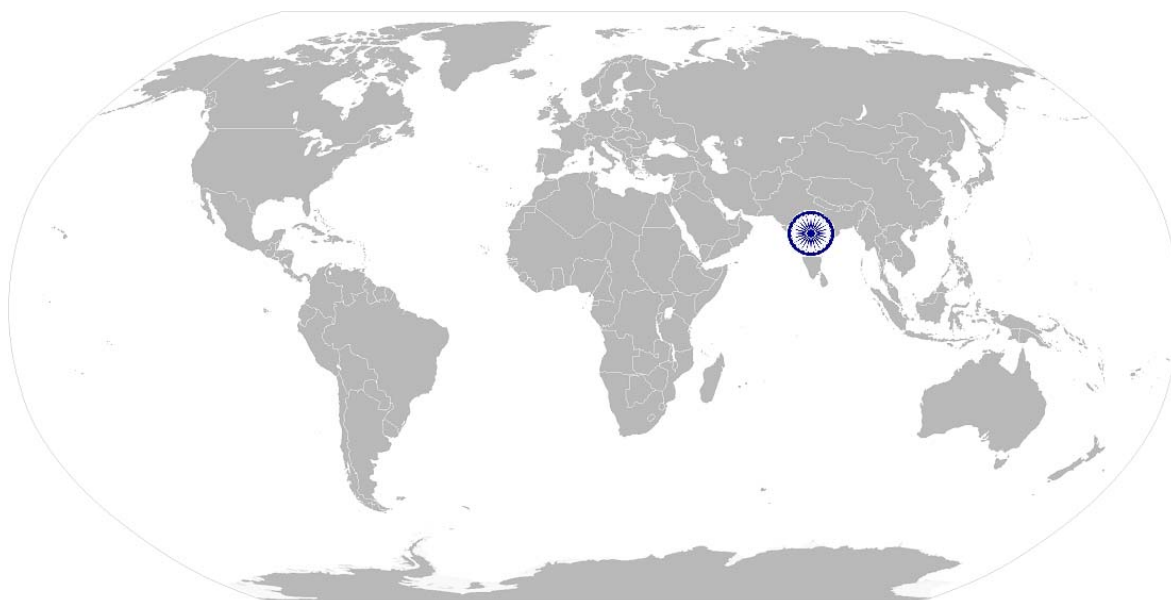
Maintain health, safety and security at work place

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 spinning / textile mill</p> <p>KA2. safe working practices to be adopted in spinning / textile mill</p> <p>KA3. quality systems and other processes practiced in the spinning / textile mill</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
	<p>You need to know and understand how to:</p> <p>SA1. write clear and short sentences</p>
	Reading Skills
	<p>You need to know how to:</p> <p>SA2. read and understand the company instructions</p> <p>SA3. read and understand the local language</p> <p>SA4. read and understand the safety guidelines</p>
	Oral Communication (Listening and Speaking skills)
	<p>SA1. listen to others attentively</p> <p>SA2. respond to emergencies, accidents or fire at the workplace</p> <p>SA3. evacuate the premises and help others in need while doing so</p> <p>SA4. the value of physical fitness, personal hygiene and good habits</p> <p>SA5. talk with others politely</p>
B. Professional Skills	Decision Making

TSC/ N9003

Maintain health, safety and security at work place

	SB1. identify correct safety measure for particular hazard
	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 how to:
	SB7. maintain neatness at work
	SB8. procedure for reporting unwanted behavior

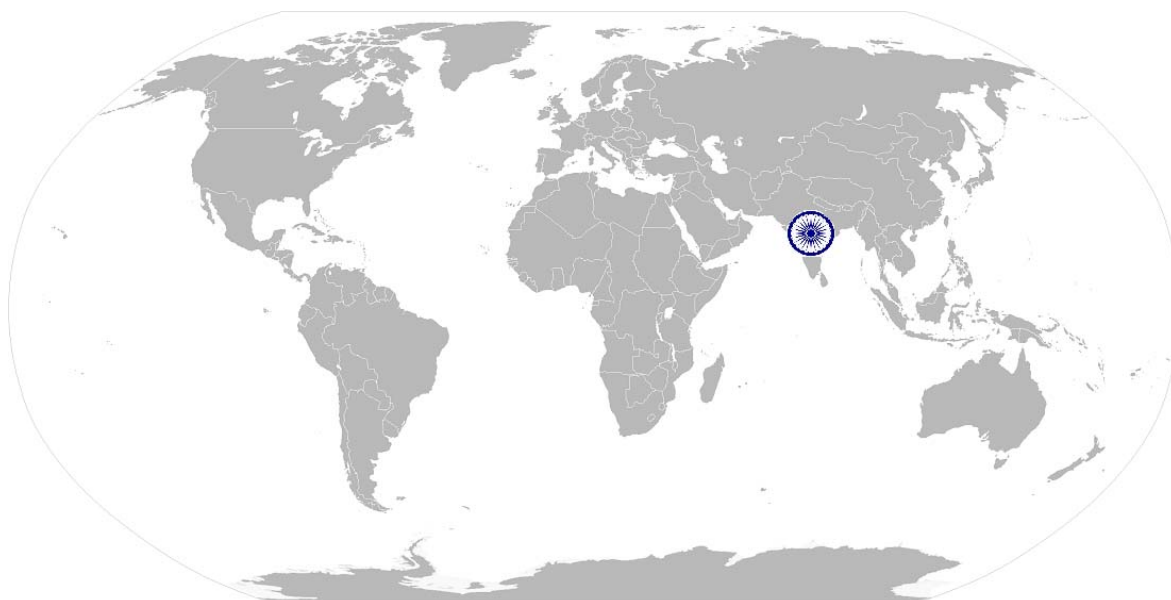


TSC/ N9003

Maintain health, safety and security at work place

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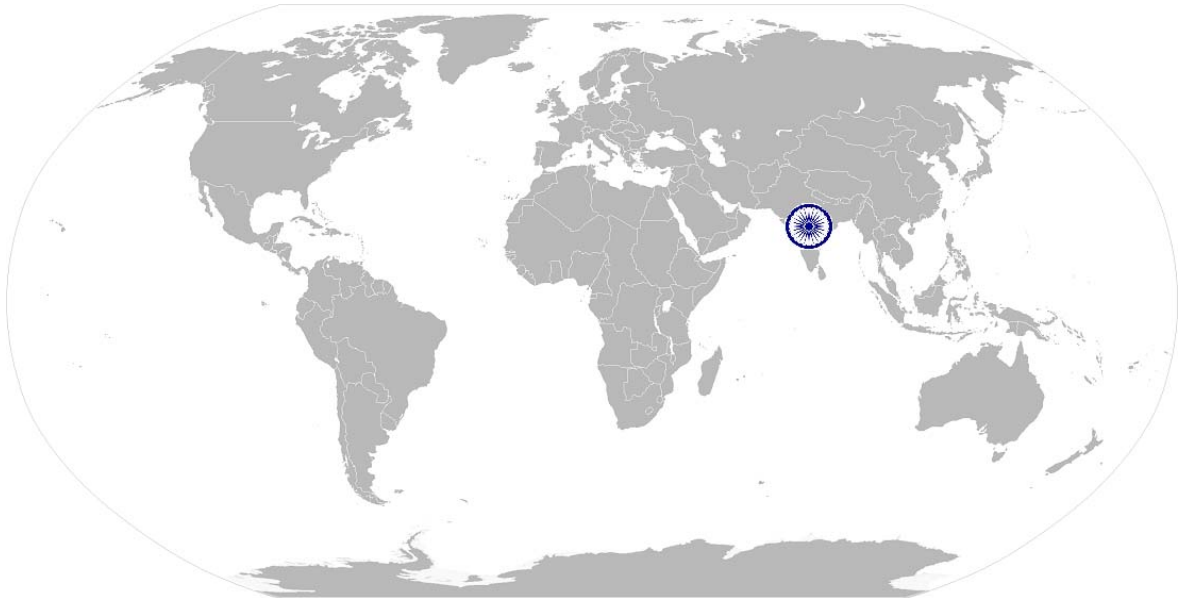
NOS Code	TSC/ N9003		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/14
Industry Sub-sector	Spinning	Last reviewed on	25/02/15
Occupation	Post-Spinning	Next review date	01/03/2016



TSC/ N9004

Comply with industry and organizational requirements

National Occupational Standard



Overview

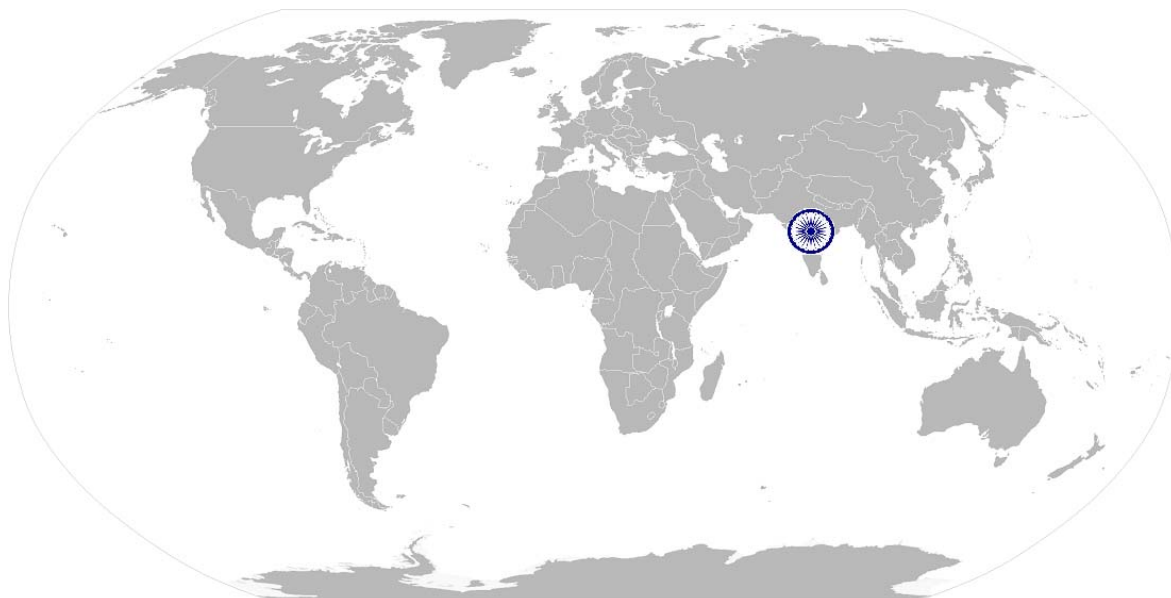
This unit is about knowing, understanding, and complying with the requirements of the organization and the textile industry

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
	Organizational 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 spinning / textile mill KA2. reporting to the supervisor or higher authority KA3. knowledge of organization standards KA4. knowledge of industry standards
B. Technical Knowledge		You need to know and understand: KB1. process flow and material flow in a spinning / textile mill 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

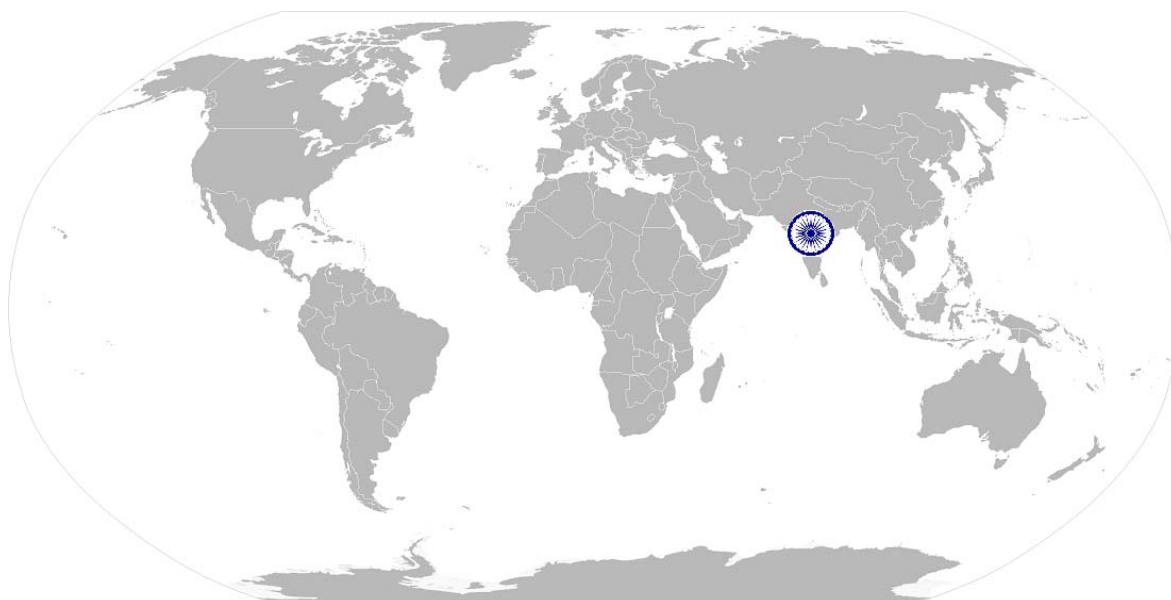
	You need to know and understand how to:
	SA2. read the given instructions
	SA3. comprehend written instructions
	Oral Communication (Listening and Speaking skills)
	SA4. talk effectively with others
	SA5. put forward your point
	SA6. listen to others
	you need to know and understand :
	SA7. Organizational 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	15/12/14
Industry Sub-sector	Spinning	Last reviewed on	25/02/15
Occupation	Post-Spinning	Next review date	01/03/2016



Assessment criteria

Job Role: TFO Tenter Qualification Pack: TFO Tenter (TSC/ Q 0303) 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		
				Theory	Skills Practical	Viva
1.TSC/N0309 (Taking charge of shift and handing over shift to TFO Tenter)	PC1. reach the work place at least 10 - 15 minutes early	100	2	1	1	0
	PC2. bring the necessary operational tools to the department		3	1	1	1
	PC3. meet the previous shift operator and discuss with him/ her regarding the issues faced with respect to the quality, production, spare, safety or any other specific instruction etc.		4	1	1	2
	PC4. understand the count produced, colour coding followed in the TFO for his allocated number of spindles or machines		4	1	1	2
	PC5. ensure the technical details are mentioned on the display board of the TFO machine		3	1	1	1
	PC6. check for the availability of the paralleled cheese package		3	1	1	1
	PC7. check the availability of cheese package trolley with technical details mentioned regarding the count being produced		4	1	2	1

Assessment criteria

PC8. check that the yarn passage and doubled yarn formation is proper	3	1	1	1
PC9. check for the run outs and availability of the cheese package in the pot	4	1	2	1
PC10. ensure all the spindles are running properly, if not enquire the reason for idle spindle and report to the superiors regarding the same	4	1	2	1
PC11. check the condition of different running spindles	4	1	3	0
PC12. ensure proper functioning of TFO machine parts and machine	3	1	1	1
PC13. ensure all allocated spindles are running with uniform length of yarn on cone, variations if any should be discussed with operator and reported to superiors	4	1	2	1
PC14. check the condition of running spindles and report damages, if any	3	1	1	1
PC15. check the cleanliness of the machines and other work areas	3	1	1	1
PC16. check whether any spare/raw material/ tool / yarn / any other materials are thrown under the machines or in the other work areas.	4	1	2	1
PC17. ask the previous shift operator for any deviation in the above and bring the same to the knowledge of his/ her shift superior and the superior of the previous shift	3	1	1	1
PC18. ensure proper passage of yarn through pig tail guide to avoid twist variations and defective package	4	1	2	1
PC19. ensure the waste collection boxes are empty while taking charge of shift	4	1	2	1
PC20. ensure the work spot is clean	2	1	1	0
PC21. ensure the OHTC is working properly	3	1	1	1
PC22. take over the shift from the	4	2	1	1

Assessment criteria

	outgoing TFO tenter in a proper manner					
	PC23. provide the details regarding count produced, colour coding followed in the TFO for his allocated number of spindles or machines		4	2	0	2
	PC24. provide all relevant information regarding the count produced, idle spindles, damaged machine parts if any		4	2	0	2
	PC25. get clearance from the incoming counterpart before leaving the work place		4	1	0	3
	PC26. report to his/ her shift superior and the incoming shift supervisor in case his/ her counterpart does not report for the incoming shift		3	1	1	1
	PC27. ensure the shift is properly handed over to the incoming shift operator		4	1	1	2
	PC28. 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 superior		3	1	1	1
	PC29. collect the waste from waste collection bags, weigh them and transport to storage area		2	1	1	0
	PC30. ensure that the work spot is clean		1	0	0	1
	Total		100	32	35	33
	Weightage %			32%	35%	33%
2. TSC/N0310 (Creeling and knotting / splicing the yarn)	PC1. bring the paralleled cheese package in the cheese trolley from storage area	200	4	1	3	0
	PC2. ensure correct colour coded cheese is taken to TFO section for creeling		4	1	2	1
	PC3. identify cheese exhausts and remove the empty cheese		4	1	2	1
	PC4. ensure proper material handling of cheese and cheese trolley		4	1	2	1
	PC5. ensure colour coding of feed in the		3	1	1	1

Assessment criteria

	creel is correct					
	PC6. ensure that minimum time is taken for attending the cheese exhaust or cheese change	3	1	1	1	
	PC7. ensure colour coding of feed in the creel is correct	3	1	1	1	
	PC8. Lift the drop wire before taking empty cheese from inner pot	4	2	2	0	
	PC9. lift the cheese spindle and properly mount the full cheese	4	2	2	0	
	PC10. creel the cheese in the creel stand and ensure the cheese is properly fixed in the cheese pot	4	1	2	1	
	PC11. take the flyer out and put it on pigtail guide rod	4	1	2	1	
	PC12. turn the pigtail, else cut end cheese may be formed.	5	1	3	1	
	PC13. clean the inner pot using cloth.	5	2	3	0	
	PC14. after cleaning, take the tension variator out and replace it with full cheese	5	2	2	1	
	PC15. re-fix the tension variator and flyer.	4	2	2	0	
	PC16. take the yarn from cheese and pass through the flyer through wire	5	2	3	0	
	PC17. ensure minimum time is taken for creeling the cheese package during exhaust or cheese change	4	1	2	1	
	PC18. patrol around the machine to ensure proper production of ply yarn	4	1	2	1	
	PC19. ensure minimum time is taken for attending the breaks	3	1	1	1	
	PC20. when there is any break, clean the cone (as specified length), ensure proper twist	4	1	2	1	
	PC21. lift the drop wire	4	1	3	0	
	PC22. take the flyer and tension variator out and store in a suitable place.	4	1	3	0	
	PC23. take the cheese package and identify defects, if any	4	1	2	1	
	PC24. remove defects in the cheese package, if any	5	1	3	1	
	PC25. feed the cleaned cheese into the inner pot	5	1	3	1	

Assessment criteria

PC26. ensure defect free cheese is fed in the pot	4	1	2	1
PC27. fix the flyer and tension variator in the correct position	4	1	2	1
PC28. take the yarn from cheese and pass through the flyer through proper material handling tools	5	2	2	1
PC29. stop the spindle by applying brake.	4	1	2	1
PC30. insert the nylon wire/ or appropriate tool through the tension variator	4	1	2	1
PC31. tie the yarn at the piecing wire properly	4	2	1	1
PC32. Pull out the wire by holding the front end through the reserve disc	5	2	3	0
PC33. take the yarn through pig tail guide	5	2	3	0
PC34. release the brake	4	2	1	1
PC35. ensure proper time is taken for tying / knotting/splicing the yarns, for inserting required amount of twist to the untwisted portion of yarn.	5	2	2	1
PC36. cut the yarn passing through pre-take up roller in the cone	4	1	2	1
PC37. engage the cradle	4	1	2	1
PC38. engage the drop wire	4	1	2	1
PC39. mark the brakes	3	1	2	0
PC40. ensure releasing the brakes	5	1	3	1
PC41. Knot/Splice the ends using knotter/splicer	5	1	3	1
PC42. ensure the size of knot / splices minimal	4	2	2	0
PC43. follow proper procedure for knotting/splicing the yarn	4	1	2	1
PC44. while processing knotless yarn broken ends to be overlapped on the cone as instructed	4	1	2	1
PC45. ensure proper material handling of cheese and cone package	3	1	1	1
PC46. ensure proper yarn passage & tension variator position post knotting/splicing	4	1	2	1
PC47. ensure proper procedure for operating material handling tools and knotting/splicing equipments	3	1	1	1

Assessment criteria

	PC48. ensure safety while carrying out creeling and knotting/splicing activities		4	1	2	1
	PC49. ensure cleanliness at work place		3	1	1	1
	Total		200	62	101	37
	Weightage %			31%	50.50%	18.50%
3.TSC/N0311 (Carry out doffing activities)	PC1. follow the plan as instructed by superiors for performing doffing activities at various machines in TFO department	120	4	1	1	2
	PC2. identify the machine in the TFO department which is ready for doffing		5	1	2	2
	PC3. ensure minimum time is taken for identifying the machine to carryout doffing activity		4	1	2	1
	PC4. ensure in confirming the machine with the superiors for carrying out doffing activity		4	1	2	1
	PC5. ensure the cone is wound up to the required length or weight of yarn on cone package		4	1	2	1
	PC6. check that the cone package is fully wound to the predetermined length or weight and start doffing		5	2	2	1
	PC7. before taking doffs take empty cone from empty cone peg stand and ensure count identification		4	1	2	1
	PC8. remove full cone from cone holder		4	1	2	1
	PC9. keep doffed cone in the peg trolley		4	1	2	1
	PC10. either stop the machine for doffing or doff the cone package while the machine is running as per the instructions of the supervisor		4	1	2	1
	PC11. ensure proper procedure is adopted for doffing the cone package		4	1	2	1
	PC12. ensure proper material handling of cone package		4	1	2	1
	PC13. ensure safety while carrying out doffing activity		5	2	2	1
	PC14. weigh the cone package and ensure the required weight has been achieved		5	1	3	1

Assessment criteria

PC15. fix the cone in the cone spindle and run it again till the cone reaches the predetermined weight as instructed by superiors	4	1	2	1
PC16. place the cones in the cone trolley and store in the storage area as instructed	4	1	2	1
PC17. reserve the empty paper cones in the reserve area for doffing	3	1	1	1
PC18. move cone trolley to cone staking area and remove approx (as per prescribed length) of yarn, ensure normal twist before unloading cones to the floor	4	1	2	1
PC19. after doffing insert the empty cone	4	1	2	1
PC20. ensure proper colour coded empty paper cone is mounted in the spindle.	3	1	1	1
PC21. put tail end of minimum (as prescribed length) on the base of the empty cone before starting.	4	1	2	1
PC22. do the necessary changes and follow the instructions of the superiors.	5	2	2	1
PC23. ensure the proper passage of yarn in the TFO machine	4	1	2	1
PC24. take the empty cheese from inner pot, feed the full cheese (the yarn taken from cheese in clockwise direction) and pass the yarn through the flyer.	4	1	2	1
PC25. fix the cone tightly on centring disc nose and base side	4	1	2	1
PC26. release the brake	4	1	2	1
PC27. insert the nylon wire/appropriate prescribed tool through the tension variator until it comes out through the exit of the spindle and the yarn from flyer tied with the tail end of the wire, pull out the wire through reserve disc, pig tail guide.	5	2	2	1
PC28. engage the drop wire	4	1	2	1
PC29. ensure releasing of brake , proper yarn passage & tension variator	4	1	2	1
Total	120	33	56	31

Assessment criteria

	Weightage %			27%	47%	26%
4.TSC/N0312 (Carryout cleaning and maintenance activities)	PC1. schedule the cleaning activities	130	5	2	1	2
	PC2. carry out cleaning activities		5	1	3	1
	PC3. clean the creeling area		4	1	2	1
	PC4. ensure cleanliness in the yarn passage		4	1	2	1
	PC5. clean the inner pot using cloth		3	1	1	1
	PC6. ensure proper cleaning of different mechanisms in TFO machine		4	1	2	1
	PC7. deposit the yarn waste in the waste collection pocket provided to each tenter and finally deposit in the waste collection box		5	2	3	0
	PC8. remove the cleaned waste and store in a separate area		4	1	2	1
	PC9. clean the alley around the TFO machine using proper cleaning equipments		4	1	2	1
	PC10. ensure the waste collected from different parts of machine are deposited in the respective dustbins		4	1	2	1
	PC11. ensure the TFO department is neat and clean		3	1	1	1
	PC12. ensure proper functioning of machine		3	1	1	1
	PC13. check and verify the quality of different machine parts		4	1	2	1
	PC14. ensure taking care of yarn passage & tension variator position		4	1	2	1
	PC15. support fitter in removing the worn out parts and replace with new parts in TFO machine		4	1	2	1
	PC16. when the spindle tape is cut, immediately cut the yarn from the cheese and remove cone of respective tape. in case of 4 spindle drive 4 to be removed & in case of tangential all cones to be removed		5	1	3	1
	PC17. check TPI from relevant department (qad/SQC/R&D) to ensure proper twist and run		5	2	2	1
	PC18. remove and replace worn out parts		4	1	2	1
	PC19. oil various parts of TFO machine on		4	1	2	1

Assessment criteria

	need basis					
	PC20. check top arm lifting	4	1	2	1	
	PC21. check OHTC air blowing	4	1	2	1	
	PC22. report to the supervisor and maintenance fitter if any problems are observed in the smooth functioning of the machine	6	2	1	3	
	PC23. ensure the OHTC is working	3	1	1	1	
	PC24. carry out preventive maintenance activities at specified intervals	4	1	2	1	
	PC25. check the count board, cheese colour, cone tip colour and other given instructions	4	1	2	1	
	PC26. record the production details in the production report	4	1	2	1	
	PC27. report to the supervisor in case of emergency stoppage of machine	5	2	1	2	
	PC28. report to the supervisor and maintenance in charge if the operator had replaced the worn out machine part with a new one.	5	2	1	2	
	PC29. support the maintenance team while machine is under maintenance	4	1	2	1	
	PC30. ensure all details related to production are provided to the next shift operator while relieving	5	2	1	2	
	PC31. ensure count wise storage of damaged cones in a separate area	4	1	2	1	
	Total	130	38	56	36	
	Weightage %		29%	43%	28%	
5.TSC/N9001 (Maintaining work area, tools and machines)	PC1. handle materials, machinery, equipment and tools with care and use them in the correct way	4	1	2	1	
	PC2. use correct lifting and handling procedures	4	1	2	1	
	PC3. use materials to minimize waste	3	1	1	1	
	PC4. maintain a clean and hazard free working area	3	1	1	1	
	PC5. maintain tools and equipment	4	2	1	1	
	PC6. carry out running maintenance within agreed schedules	4	1	2	1	

Assessment criteria

	PC7. carry out maintenance and/or cleaning within one's responsibility	50	4	1	2	1
	PC8. report unsafe equipment and other dangerous occurrences		4	1	2	1
	PC9. ensure that the correct machine guards are in place		3	1	1	1
	PC10. work in a comfortable position with the correct posture		3	1	1	1
	PC11. use cleaning equipment and methods appropriate for the work to be carried out		3	1	1	1
	PC12. dispose of waste safely in the designated location		4	1	2	1
	PC13. store cleaning equipment safely after use		3	1	1	1
	PC14. carry out cleaning according to schedules and limits of responsibility		4	1	2	1
	Total		50	15	21	14
	Weightage %			30%	42%	28%
6.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	1	1
	PC3. be effective and efficient at workplace		5	2	2	1
	PC4. properly communicate about company policies		4	1	1	2
	PC5. report all problems faced during the process		4	1	1	2
	PC6. talk politely with other team members and colleagues		4	1	1	2
	PC7. submit daily report of own performance		5	2	2	1
	PC8. adjust in different work situations		4	2	1	1
	PC9. give due importance to others' point of view		4	1	2	1
	PC10. avoid conflicting situations		4	1	1	2
	PC11. develop new ideas for work procedures		4	1	2	1
	PC12. improve upon the existing techniques to increase process efficiency		4	1	2	1

Assessment criteria

		Total	50	17	17	16
		Weightage %		34%	34%	32%
7.TSC/N9003 (Maintain health, safety and security required at work place)	PC1. comply with health and safety related instructions applicable to the workplace	100	5	2	2	1
	PC2. use and maintain personal protective equipment such as “ ear plug” “ nose mask “ “ head cap” etc., as per protocol		5	2	2	1
	PC3. carry out own activities in line with approved guidelines and procedures		4	2	1	1
	PC4. maintain a healthy lifestyle and guard against dependency on intoxicants		4	2	1	1
	PC5. follow environment management system related procedures		4	2	1	1
	PC6. identify and correct (if possible) malfunctions in machinery and equipment		5	2	2	1
	PC7. report any service malfunctions that cannot be rectified		4	2	1	1
	PC8. store materials and equipment in line with organisational requirements		4	1	2	1
	PC9. safely handle and remove waste		4	1	2	1
	PC10. minimize health and safety risks to self and others due to own actions		5	2	2	1
	PC11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks		4	2	0	2
	PC12. monitor the workplace and work processes for potential risks and threat		5	2	2	1
	PC13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned		5	2	2	1
	PC14. report hazards and potential risks/ threats to supervisors or other authorized personnel		4	1	2	1
	PC15. participate in mock drills/ evacuation procedures organized at the workplace		4	2	2	0

Assessment criteria

	PC16. undertake first aid, fire-fighting and emergency response training, if asked to do so		5	2	2	1
	PC17. take action based on instructions in the event of fire, emergencies or accidents		5	2	2	1
	PC18. follow organisation procedures for shutdown and evacuation when required		4	2	1	1
	PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry		4	2	1	1
	PC20. recognise other possible security issues existing in the workplace		4	2	1	1
	PC21. recognise different measures to curb the hazards		4	2	1	1
	PC22. communicate the safety plan to everyone		4	2	1	1
	PC23. attach disciplinary rules with the implementation		4	2	1	1
	Total		100	43	34	23
	Weightage %			43%	34%	23%
8.TSC/N9004 (Comply with industry and organizational requirements)	PC1. perform own duties effectively	50	4	1	2	1
	PC2. take responsibility for own actions		4	1	2	1
	PC3. be accountable towards the job role and assigned duties		4	2	1	1
	PC4. take initiative and innovate the existing methods		3	1	1	1
	PC5. focus on self-learning and improvement		4	1	2	1
	PC6. co-ordinate with all the team members and colleagues		4	1	2	1
	PC7. communicate politely		4	1	1	2
	PC8. avoid conflicts and miscommunication		4	1	2	1
	PC9. know the organisational standards		4	2	1	1
	PC10. implement them in your performance		4	1	2	1
	PC11. motivate others to follow them		3	1	1	1
	PC12. know the industry standards		4	3	1	0
	PC13. align them with organisation standards		4	2	1	1
	Total		50	18	19	13

Assessment criteria

	Weightage %			36%	38%	26%
	Grand Total	800				