

Qualification Pack



TFO Tenter

QP Code: TSC/Q0303

Version: 3.0

NSQF Level: 3

Textile Sector Skill Council || 14-H, 14th Floor, Hansalaya Building, 15, Barakhamba Road
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TSC/Q0303: TFO Tenter

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.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [TSC/N0309: Taking charge of shift and handing over shift to TFO Tenter](#)
2. [TSC/N0310: Creeling and knotting/splicing the yarn at TFO](#)
3. [TSC/N0311: Carry out doffing activities at TFO](#)
4. [TSC/N0312: Carryout cleaning and maintenance activities at TFO](#)
5. [TSC/N9001: Maintain work area, tools, and machines](#)
6. [TSC/N9002: Working in a team](#)
7. [TSC/N9003: Maintain health, safety and security at workplace](#)
8. [TSC/N9004: Comply with industry and organizational requirement](#)
9. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Textile
Sub-Sector	Spinning – Textiles

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Occupation	Post Spinning Operations
Country	India
NSQF Level	3
Credits	13
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8151.04
Minimum Educational Qualification & Experience	9th Class (with No Experience (OR) Grade 8 pass and pursuing continuous schooling in regular school with vocational subject with no experience (OR) 8th grade pass with 1 year of relevant experience (OR) 5th grade pass with 4 years of relevant experience (OR) Ability to read and write with 5 years of experience)
Minimum Level of Education for Training in School	9th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	27/01/2025
NSQC Approval Date	17/11/2022
Version	3.0
Reference code on NQR	2022/TEXT/TSC/07045
NQR Version	1.0

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TSC/N0309: 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

The scope covers the following :

- Taking charge of shift
- Handing over shift

Elements and Performance Criteria

Taking charge of shift

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

1. reach the work place at least 10 - 15 minutes early
2. bring the necessary operational tools to the department
3. 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. understand the count produced, colour coding followed in the TFO for his allocated number of spindles or machines
5. ensure the technical details are mentioned on the display board of the TFO machine
6. check for the availability of the paralleled cheese package
7. check the availability of cheese package trolley with technical details mentioned regarding the count being produced
8. check that the yarn passage and doubled yarn formation is proper
9. check for the run outs and availability of the cheese package in the pot
10. ensure all the spindles are running properly, if not enquire the reason for idle spindle and report to the superiors regarding the same
11. check the condition of different running spindles
12. ensure proper functioning of TFO machine parts and machine
13. 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
14. check the condition of running spindles and report damages, if any
15. check the cleanliness of the machines and other work areas
16. check whether any spare/raw material/ tool / yarn / any other materials are thrown under the machines or in the other work areas
17. 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
18. ensure proper passage of yarn through pig tail guide to avoid twist variations and defective package

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19. ensure the waste collection boxes are empty while taking charge of shift
20. ensure the work spot is clean
21. ensure the OHTC is working properly
22. take over the shift from the outgoing TFO tenter in a proper manner

Handing over shift

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

23. provide the details regarding count produced, colour coding followed in the TFO for his allocated number of spindles or machines
24. provide all relevant information regarding the count produced, idle spindles, damaged machine parts if any
25. get clearance from the incoming counterpart before leaving the work place
26. report to his/ her shift superior and the incoming shift supervisor in case his/ her counterpart does not report for the incoming shift
27. ensure the shift is properly handed over to the incoming shift operator
28. 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
29. collect the waste from waste collection bags, weigh them and transport to storage area
30. ensure that the work spot is clean

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedures (SOP) and regulations in a spinning / textile mill
- KU2.** safe working practices to be adopted in spinning / textile mill
- KU3.** quality systems and other processes practiced in the spinning / textile mill
- KU4.** reporting to the supervisor or higher authority in case of emergency
- KU5.** color coding adopted for different counts in the spinning / textile mill
- KU6.** the importance of: types of fibres, types of yarn, yarn count, importance of doubled yarn, types of yarn defect
- KU7.** process flow in a spinning / textile mill
- KU8.** material flow in a spinning / textile mill
- KU9.** importance of mixing & count change
- KU10.** functions of different parts of TFO machine
- KU11.** importance of colour coding followed for different counts in spinning / textile mill
- KU12.** guidelines for operating the TFO machine
- KU13.** the functions of different signal lamps
- KU14.** guidelines for taking charge of shift from previous shift operator
- KU15.** guidelines for handing over the shift to the next shift operator
- KU16.** knowledge of waste collection system & equipments used
- KU17.** importance of cleanliness at workplace

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- KU18.** importance of material handling and types of material handling equipments used
- KU19.** functions and methodology for operating different material handling equipment. Safety procedures to be followed in a TFO machine

Generic Skills (GS)

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

- GS1.** write clear and short sentences
- GS2.** read and comprehend written instructions
- GS3.** communicate with supervisor appropriately
- GS4.** talk to others to convey information effectively
- GS5.** apply problem-solving approaches in different situations
- GS6.** refer anomalies to the supervisor
- GS7.** seek clarification on problems from others
- GS8.** apply good attention to detail
- GS9.** check that your work is complete and free of errors
- GS10.** procedure to patrol around the TFO machine
- GS11.** procedure to identify yarn breakage or cheese exhaust
- GS12.** procedure for operating different material handling tools and equipments
- GS13.** procedure for patrolling around the TFO department and identifying worn out or damaged machine parts
- GS14.** procedure to check the quality of paralleled cheese package, doubled yarn, proper functioning of machine parts in a TFO machine
- GS15.** maintain neatness at work place

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Taking charge of shift</i>	22	30	-	20
1. reach the work place at least 10 - 15 minutes early	1	1	-	-
2. bring the necessary operational tools to the department	1	1	-	1
3. 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	1	1	-	2
4. understand the count produced, colour coding followed in the TFO for his allocated number of spindles or machines	1	1	-	2
5. ensure the technical details are mentioned on the display board of the TFO machine	1	1	-	1
6. check for the availability of the paralleled cheese package	1	1	-	1
7. check the availability of cheese package trolley with technical details mentioned regarding the count being produced	1	2	-	1
8. check that the yarn passage and doubled yarn formation is proper	1	1	-	1
9. check for the run outs and availability of the cheese package in the pot	1	2	-	1
10. ensure all the spindles are running properly, if not enquire the reason for idle spindle and report to the superiors regarding the same	1	2	-	1
11. check the condition of different running spindles	1	3	-	-
12. ensure proper functioning of TFO machine parts and machine	1	1	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
13. 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	1	2	-	1
14. check the condition of running spindles and report damages, if any	1	1	-	1
15. check the cleanliness of the machines and other work areas	1	1	-	1
16. check whether any spare/raw material/ tool / yarn / any other materials are thrown under the machines or in the other work areas	1	2	-	1
17. 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	1	1	-	1
18. ensure proper passage of yarn through pig tail guide to avoid twist variations and defective package	1	2	-	1
19. ensure the waste collection boxes are empty while taking charge of shift	1	1	-	1
20. ensure the work spot is clean	1	1	-	-
21. ensure the OHTC is working properly	1	1	-	-
22. take over the shift from the outgoing TFO tenter in a proper manner	1	1	-	1
<i>Handing over shift</i>	10	5	-	13
23. provide the details regarding count produced, colour coding followed in the TFO for his allocated number of spindles or machines	1	1	-	1
24. provide all relevant information regarding the count produced, idle spindles, damaged machine parts if any	2	-	-	2
25. get clearance from the incoming counterpart before leaving the work place	2	-	-	2

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
26. report to his/ her shift superior and the incoming shift supervisor in case his/ her counterpart does not report for the incoming shift	1	-	-	3
27. ensure the shift is properly handed over to the incoming shift operator	1	1	-	1
28. 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	1	1	-	2
29. collect the waste from waste collection bags, weigh them and transport to storage area	1	1	-	1
30. ensure that the work spot is clean	1	1	-	1
NOS Total	32	35	-	33

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National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0309
NOS Name	Taking charge of shift and handing over shift to TFO Tenter
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Post Spinning Operations
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	27/01/2025
NSQC Clearance Date	17/11/2022

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TSC/N0310: Creeling and knotting/splicing the yarn at TFO

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

The scope covers the following :

- Attending the machine for creeling,
- Creeling the cheese package,
- Attending the breaks and knotting/splicing the yarn

Elements and Performance Criteria

Attending the machine for creeling

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

- PC1.** bring the paralleled cheese package in the cheese trolley from storage area
- PC2.** ensure correct colour coded cheese is taken to TFO section for creeling
- PC3.** identify cheese exhausts and remove the empty cheese
- PC4.** ensure proper material handling of cheese and cheese trolley
- PC5.** ensure colour coding of feed in the creel is correct
- PC6.** ensure that minimum time is taken for attending the cheese exhaust or cheese change

Creeling the cheese package

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

- PC7.** ensure colour coding of feed in the creel is correct
- PC8.** Lift the drop wire before taking empty cheese from inner pot
- PC9.** lift the cheese spindle and properly mount the full cheese
- PC10.** creel the cheese in the creel stand and ensure the cheese is properly fixed in the cheese pot
- PC11.** take the flyer out and put it on pigtail guide rod
- PC12.** turn the pigtail, else cut end cheese may be formed
- PC13.** clean the inner pot using cloth
- PC14.** after cleaning, take the tension variator out and replace it with full cheese
- PC15.** re-fix the tension variator and flyer
- PC16.** take the yarn from cheese and pass through the flyer through wire
- PC17.** ensure minimum time is taken for creeling the cheese package during exhaust or cheese change

Attending the breaks and knotting/splicing the yarn

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

- PC18.** patrol around the machine to ensure proper production of ply yarn
- PC19.** ensure minimum time is taken for attending the breaks

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- PC20.** when there is any break, clean the cone (as specified length), ensure proper twist
- PC21.** lift the drop wire
- PC22.** take the flyer and tension variator out and store in a suitable place.
- PC23.** take the cheese package and identify defects, if any
- PC24.** remove defects in the cheese package, if any
- PC25.** feed the cleaned cheese into the inner pot
- PC26.** ensure defect free cheese is fed in the pot
- PC27.** fix the flyer and tension variator in the correct position
- PC28.** take the yarn from cheese and pass through the flyer through proper material handling tools
- PC29.** stop the spindle by applying brake
- PC30.** insert the nylon wire/ or appropriate tool through the tension variator
- PC31.** tie the yarn at the piecing wire properly
- PC32.** Pull out the wire by holding the front end through the reserve disc
- PC33.** take the yarn through pig tail guide
- PC34.** release the brake
- PC35.** ensure proper time is taken for tying / knotting/splicing the yarns, for inserting required amount of twist to the untwisted portion of yarn
- PC36.** cut the yarn passing through pre-take up roller in the cone
- PC37.** engage the cradle
- PC38.** engage the drop wire
- PC39.** mark the brakes
- PC40.** ensure releasing the brakes
- PC41.** Knot/Splice the ends using knotter/splicer
- PC42.** ensure the size of knot / splices minimal
- PC43.** follow proper procedure for knotting/splicing the yarn
- PC44.** while processing knotless yarn broken ends to be overlapped on the cone as instructed
- PC45.** ensure proper material handling of cheese and cone package
- PC46.** ensure proper yarn passage & tension variator position post knotting/splicing
- PC47.** ensure proper procedure for operating material handling tools and knotting/splicing equipments
- PC48.** ensure safety while carrying out creeling and knotting/splicing activities
- PC49.** ensure cleanliness at work place

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedures (SOP) and regulations in a spinning / textile mill
- KU2.** safe working practices to be adopted in spinning / textile mill
- KU3.** quality systems and other processes practiced in the spinning / textile mill
- KU4.** reporting to the supervisor or higher authority in case of emergency

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- KU5.** color coding adopted for different counts in the spinning / textile mill
- KU6.** the importance of: types of fibres, types of yarn, yarn count, importance of yarn quality, types of yarn defects.
- KU7.** process flow in a spinning / textile mill
- KU8.** material flow in a spinning / textile mill
- KU9.** functions of different parts of TFO machine
- KU10.** importance of colour coding followed for different counts in spinning / textile mill
- KU11.** importance of creeling
- KU12.** importance of knotting/splicing
- KU13.** importance of attending breakages and knotting/splicing the yarn
- KU14.** guidelines for creeling the cheese package in TFO
- KU15.** guidelines for knotting/splicing the yarn
- KU16.** knowledge of waste collection system & equipments used
- KU17.** importance of material handling
- KU18.** types of material handling equipments used
- KU19.** functions and methodology for operating different material handling equipments
- KU20.** understanding the functions of different signal lamps
- KU21.** safety procedures to be followed in a TFO machine
- KU22.** importance of cleanliness at workplace

Generic Skills (GS)

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

- GS1.** write clear and short sentences
- GS2.** read and comprehend written instructions
- GS3.** communicate with supervisor appropriately
- GS4.** talk to others to convey information effectively
- GS5.** apply problem-solving approaches in different situations
- GS6.** refer anomalies to the supervisor
- GS7.** seek clarification on problems from others
- GS8.** apply good attention to detail
- GS9.** check that your work is complete and free of errors
- GS10.** procedure for patrolling around the TFO machine
- GS11.** patrol around the TFO machine and identify yarn breakage or cheese exhaust
- GS12.** procedure for material handling of cheese package and cheese trolley
- GS13.** standard operating procedure for creeling the cheese package
- GS14.** standard operating procedure for knotting/splicing the paralleled yarn
- GS15.** procedure for removing the damages in cheese package surface
- GS16.** procedure for operating different material handling tools and equipments
- GS17.** maintain neatness at work place

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Attending the machine for creeling</i>	6	11	-	5
PC1. bring the paralleled cheese package in the cheese trolley from storage area	-	-	-	-
PC2. ensure correct colour coded cheese is taken to TFO section for creeling	-	-	-	-
PC3. identify cheese exhausts and remove the empty cheese	-	-	-	-
PC4. ensure proper material handling of cheese and cheese trolley	-	-	-	-
PC5. ensure colour coding of feed in the creel is correct	-	-	-	-
PC6. ensure that minimum time is taken for attending the cheese exhaust or cheese change	-	-	-	-
<i>Creeling the cheese package</i>	17	24	-	6
PC7. ensure colour coding of feed in the creel is correct	-	-	-	-
PC8. Lift the drop wire before taking empty cheese from inner pot	-	-	-	-
PC9. lift the cheese spindle and properly mount the full cheese	-	-	-	-
PC10. creel the cheese in the creel stand and ensure the cheese is properly fixed in the cheese pot	-	-	-	-
PC11. take the flyer out and put it on pigtail guide rod	-	-	-	-
PC12. turn the pigtail, else cut end cheese may be formed	-	-	-	-
PC13. clean the inner pot using cloth	-	-	-	-
PC14. after cleaning, take the tension variator out and replace it with full cheese	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC15. re-fix the tension variator and flyer	-	-	-	-
PC16. take the yarn from cheese and pass through the flyer through wire	-	-	-	-
PC17. ensure minimum time is taken for creeling the cheese package during exhaust or cheese change	-	-	-	-
<i>Attending the breaks and knotting/splicing the yarn</i>	39	66	-	26
PC18. patrol around the machine to ensure proper production of ply yarn	-	-	-	-
PC19. ensure minimum time is taken for attending the breaks	-	-	-	-
PC20. when there is any break, clean the cone (as specified length), ensure proper twist	-	-	-	-
PC21. lift the drop wire	-	-	-	-
PC22. take the flyer and tension variator out and store in a suitable place.	-	-	-	-
PC23. take the cheese package and identify defects, if any	-	-	-	-
PC24. remove defects in the cheese package, if any	-	-	-	-
PC25. feed the cleaned cheese into the inner pot	-	-	-	-
PC26. ensure defect free cheese is fed in the pot	-	-	-	-
PC27. fix the flyer and tension variator in the correct position	-	-	-	-
PC28. take the yarn from cheese and pass through the flyer through proper material handling tools	-	-	-	-
PC29. stop the spindle by applying brake	-	-	-	-
PC30. insert the nylon wire/ or appropriate tool through the tension variator	-	-	-	-
PC31. tie the yarn at the piecing wire properly	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC32. Pull out the wire by holding the front end through the reserve disc	-	-	-	-
PC33. take the yarn through pig tail guide	-	-	-	-
PC34. release the brake	-	-	-	-
PC35. ensure proper time is taken for tying / knotting/splicing the yarns, for inserting required amount of twist to the untwisted portion of yarn	-	-	-	-
PC36. cut the yarn passing through pre-take up roller in the cone	-	-	-	-
PC37. engage the cradle	-	-	-	-
PC38. engage the drop wire	-	-	-	-
PC39. mark the brakes	-	-	-	-
PC40. ensure releasing the brakes	-	-	-	-
PC41. Knot/Splice the ends using knotter/splicer	-	-	-	-
PC42. ensure the size of knot / splices minimal	-	-	-	-
PC43. follow proper procedure for knotting/splicing the yarn	-	-	-	-
PC44. while processing knotless yarn broken ends to be overlapped on the cone as instructed	-	-	-	-
PC45. ensure proper material handling of cheese and cone package	-	-	-	-
PC46. ensure proper yarn passage & tension variator position post knotting/splicing	-	-	-	-
PC47. ensure proper procedure for operating material handing tools and knotting/splicing equipments	-	-	-	-
PC48. ensure safety while carrying out creeling and knotting/splicing activities	-	-	-	-
PC49. ensure cleanliness at work place	-	-	-	-
NOS Total	62	101	-	37

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National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0310
NOS Name	Creeling and knotting/splicing the yarn at TFO
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Post Spinning Operations
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	27/01/2025
NSQC Clearance Date	17/11/2022

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TSC/N0311: Carry out doffing activities at TFO

Description

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

Scope

The scope covers the following :

- 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

Elements and Performance Criteria

Identify the machine for carrying out doffing

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

1. follow the plan as instructed by superiors for performing doffing activities at various machines in TFO department
2. identify the machine in the TFO department which is ready for doffing
3. ensure minimum time is taken for identifying the machine to carryout doffing activity
4. ensure in confirming the machine with the superiors for carrying out doffing activity

Doffing the cone package

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

5. ensure the cone is wound up to the required length or weight of yarn on cone package
6. check that the cone package is fully wound to the predetermined length or weight and start doffing
7. before taking doffs take empty cone from empty cone peg stand and ensure count identification
8. remove full cone from cone holder
9. keep doffed cone in the peg trolley
10. either stop the machine for doffing or doff the cone package while the machine is running as per the instructions of the supervisor
11. ensure proper procedure is adopted for doffing the cone package
12. ensure proper material handling of cone package
13. ensure safety while carrying out doffing activity

Weighing and storing the full cone package in storage area

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

14. weigh the cone package and ensure the required weight has been achieved
15. fix the cone in the cone spindle and run it again till the cone reaches the predetermined weight as instructed by superiors
16. place the cones in the cone trolley and store in the storage area as instructed

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17. reserve the empty paper cones in the reserve area for doffing
18. 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

Restarting the machine after doffing

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

19. after doffing insert the empty cone
20. ensure proper colour coded empty paper cone is mounted in the spindle
21. put tail end of minimum (as prescribed length) on the base of the empty cone before starting
22. do the necessary changes and follow the instructions of the superiors
23. ensure the proper passage of yarn in the TFO machine
24. 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
25. fix the cone tightly on centering disc nose and base side
26. release the brake
27. 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
28. engage the drop wire
29. ensure releasing of brake, proper yarn passage & tension variator

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedures (SOP) and regulations in a spinning / textile mill
- KU2.** safe working practices to be adopted in spinning / textile mill
- KU3.** quality systems and other processes practiced in the spinning / textile mill
- KU4.** reporting to the supervisor or higher authority in case of emergency
- KU5.** color coding adopted for different counts in the spinning / textile mill
- KU6.** process flow and material flow in a spinning / textile mill
- KU7.** understand the types of yarn defects and reason for yarn breakage
- KU8.** functions of different parts of a TFO machine
- KU9.** functions of different signal lamps and control buttons
- KU10.** knowledge about the schedule for carrying out doffing activity
- KU11.** type of yarn defects
- KU12.** importance of doffing
- KU13.** importance of material handling
- KU14.** functions of various tools and equipments used for doffing
- KU15.** guidelines for carrying out doffing activity
- KU16.** knowledge of waste collection system & material handling equipments used
- KU17.** safety procedures to be followed in a TFO machine

Generic Skills (GS)

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

- GS1.** write clear and short sentences
- GS2.** read and comprehend written instructions
- GS3.** communicate with supervisor appropriately
- GS4.** talk to others to convey information effectively
- GS5.** standard operating procedure for carrying out doffing activity
- GS6.** procedure to inspect the cone package and identify defects in cone
- GS7.** procedure to identify the cone defects
- GS8.** procedure to material handling cone and cone trolley
- GS9.** procedure for deposit the waste
- GS10.** maintain neatness at work place

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identify the machine for carrying out doffing</i>	4	7	-	6
1. follow the plan as instructed by superiors for performing doffing activities at various machines in TFO department	1	1	-	2
2. identify the machine in the TFO department which is ready for doffing	1	2	-	2
3. ensure minimum time is taken for identifying the machine to carryout doffing activity	1	2	-	1
4. ensure in confirming the machine with the superiors for carrying out doffing activity	1	2	-	1
<i>Doffing the cone package</i>	11	18	-	9
5. ensure the cone is wound up to the required length or weight of yarn on cone package	1	2	-	1
6. check that the cone package is fully wound to the predetermined length or weight and start doffing	2	2	-	1
7. before taking doffs take empty cone from empty cone peg stand and ensure count identification	1	2	-	1
8. remove full cone from cone holder	1	2	-	1
9. keep doffed cone in the peg trolley	1	2	-	1
10. either stop the machine for doffing or doff the cone package while the machine is running as per the instructions of the supervisor	1	2	-	1
11. ensure proper procedure is adopted for doffing the cone package	1	2	-	1
12. ensure proper material handling of cone package	1	2	-	1
13. ensure safety while carrying out doffing activity	2	2	-	1

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Weighing and storing the full cone package in storage area</i>	5	10	-	5
14. weigh the cone package and ensure the required weight has been achieved	1	3	-	1
15. fix the cone in the cone spindle and run it again till the cone reaches the predetermined weight as instructed by superiors	1	2	-	1
16. place the cones in the cone trolley and store in the storage area as instructed	1	2	-	1
17. reserve the empty paper cones in the reserve area for doffing	1	1	-	1
18. 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	1	2	-	1
<i>Restarting the machine after doffing</i>	13	21	-	11
19. after doffing insert the empty cone	1	2	-	1
20. ensure proper colour coded empty paper cone is mounted in the spindle	1	1	-	1
21. put tail end of minimum (as prescribed length) on the base of the empty cone before starting	1	2	-	1
22. do the necessary changes and follow the instructions of the superiors	2	2	-	1
23. ensure the proper passage of yarn in the TFO machine	1	2	-	1
24. 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	1	2	-	1
25. fix the cone tightly on centering disc nose and base side	1	2	-	1
26. release the brake	1	2	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
27. 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	2	2	-	1
28. engage the drop wire	1	2	-	1
29. ensure releasing of brake, proper yarn passage & tension variator	1	2	-	1
NOS Total	33	56	-	31

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0311
NOS Name	Carry out doffing activities at TFO
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Post Spinning Operations
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	27/01/2025
NSQF Clearance Date	17/11/2022

Qualification Pack

TSC/N0312: Carryout cleaning and maintenance activities at TFO

Description

This unit is about carrying out the tenting responsibilities in a Ring frame machine with auto doffer

Scope

The scope covers the following :

- Carryout cleaning activities,
- Carryout maintenance activities,
- Other tenting responsibilities

Elements and Performance Criteria

Carryout cleaning activities

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

1. schedule the cleaning activities
2. carry out cleaning activities
3. clean the creeling area
4. ensure cleanliness in the yarn passage
5. clean the inner pot using cloth
6. ensure proper cleaning of different mechanisms in TFO machine
7. deposit the yarn waste in the waste collection pocket provided to each tenter and finally deposit in the waste collection box
8. remove the cleaned waste and store in a separate area
9. clean the alley around the TFO machine using proper cleaning equipments
10. ensure the waste collected from different parts of machine are deposited in the respective dustbins
11. ensure the TFO department is neat and clean

Carry out maintenance activities

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

12. ensure proper functioning of machine
13. check and verify the quality of different machine parts
14. ensure taking care of yarn passage & tension variator position
15. support fitter in removing the worn-out parts and replace with new parts in TFO machine
16. 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
17. check TPI from relevant department (qad/SQC/R&D) to ensure proper twist and run
18. remove and replace worn-out parts
19. oil various parts of TFO machine on need basis

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20. check top arm lifting
21. check OHTC air blowing
22. report to the supervisor and maintenance fitter if any problems are observed in the smooth functioning of the machine
23. ensure the OHTC is working
24. carry out preventive maintenance activities at specified intervals

Other tenting responsibilities

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

25. check the count board, cheese colour, cone tip colour and other given instructions
26. record the production details in the production report
27. report to the supervisor in case of emergency stoppage of machine
28. report to the supervisor and maintenance in charge if the operator had replaced the worn-out machine part with a new one
29. support the maintenance team while machine is under maintenance
30. ensure all details related to production are provided to the next shift operator while relieving
31. ensure count wise storage of damaged cones in a separate area

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedures (SOP) and regulations in a spinning / textile mill
- KU2.** safe working practices to be adopted in spinning / textile mill
- KU3.** quality systems and other processes practiced in the spinning / textile mill
- KU4.** reporting to the supervisor or higher authority in case of emergency
- KU5.** process flow and material flow in a spinning / textile mill
- KU6.** functions of different parts of a TFO machine
- KU7.** importance of yarn quality
- KU8.** importance of cleaning
- KU9.** schedule for cleaning
- KU10.** types and functions of various cleaning tools and equipments
- KU11.** guidelines for cleaning the various parts in TFO machine
- KU12.** operational schedule for cleaning different parts of TFO machine
- KU13.** guidelines for carrying out routine preventive maintenance activities
- KU14.** types of end breaks and reason for end breaks
- KU15.** knowledge of various types of oil used for preventive maintenance
- KU16.** understanding the safety precautions to be followed in a TFO department

Generic Skills (GS)

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

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- GS1.** write clear and short sentences
- GS2.** comprehend written instructions
- GS3.** communicate with supervisor appropriately
- GS4.** talk to others to convey information effectively
- GS5.** procedure for operating the various cleaning tools and equipments
- GS6.** procedure for cleaning the creeling area
- GS7.** procedure for cleaning the different mechanisms in TFO machine
- GS8.** procedure for proper material handling of cleaning equipments and maintenance tools
- GS9.** procedure to identify and remove worn-out parts in TFO
- GS10.** procedure to replace the worn-out parts with a new machine part
- GS11.** procedure for carrying out preventive maintenance activities
- GS12.** procedure for oiling different parts of TFO machine
- GS13.** maintain neatness at work place

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carryout cleaning activities</i>	13	21	-	11
1. schedule the cleaning activities	2	1	-	2
2. carry out cleaning activities	1	3	-	1
3. clean the creeling area	1	2	-	1
4. ensure cleanliness in the yarn passage	1	2	-	1
5. clean the inner pot using cloth	1	1	-	1
6. ensure proper cleaning of different mechanisms in TFO machine	1	2	-	1
7. deposit the yarn waste in the waste collection pocket provided to each tenter and finally deposit in the waste collection box	2	3	-	-
8. remove the cleaned waste and store in a separate area	1	2	-	1
9. clean the alley around the TFO machine using proper cleaning equipments	1	2	-	1
10. ensure the waste collected from different parts of machine are deposited in the respective dustbins	1	2	-	1
11. ensure the TFO department is neat and clean	1	1	-	1
<i>Carry out maintenance activities</i>	15	24	-	15
12. ensure proper functioning of machine	1	1	-	1
13. check and verify the quality of different machine parts	1	2	-	1
14. ensure taking care of yarn passage & tension variator position	1	2	-	1
15. support fitter in removing the worn-out parts and replace with new parts in TFO machine	1	2	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
16. 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	1	3	-	1
17. check TPI from relevant department (qad/SQC/R&D) to ensure proper twist and run	2	2	-	1
18. remove and replace worn-out parts	1	2	-	1
19. oil various parts of TFO machine on need basis	1	2	-	1
20. check top arm lifting	1	2	-	1
21. check OHTC air blowing	1	2	-	1
22. report to the supervisor and maintenance fitter if any problems are observed in the smooth functioning of the machine	2	1	-	3
23. ensure the OHTC is working	1	1	-	1
24. carry out preventive maintenance activities at specified intervals	1	2	-	1
<i>Other tenting responsibilities</i>	10	11	-	10
25. check the count board, cheese colour, cone tip colour and other given instructions	1	2	-	1
26. record the production details in the production report	1	2	-	1
27. report to the supervisor in case of emergency stoppage of machine	2	1	-	2
28. report to the supervisor and maintenance in charge if the operator had replaced the worn-out machine part with a new one	2	1	-	2
29. support the maintenance team while machine is under maintenance	1	2	-	1
30. ensure all details related to production are provided to the next shift operator while relieving	2	1	-	2

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
31. ensure count wise storage of damaged cones in a separate area	1	2	-	1
NOS Total	38	56	-	36

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0312
NOS Name	Carryout cleaning and maintenance activities at TFO
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Post Spinning Operations
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	27/01/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

TSC/N9001: Maintain 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

The scope covers the following :

- Maintaining the work area, tools and machines

Elements and Performance Criteria

Maintaining the work area, tools and machines

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

1. handle materials, machinery, equipment and tools with care and use them in the correct way
2. use correct lifting and handling procedures
3. use materials to minimize waste
4. maintain a clean and hazard free working area
5. maintain tools and equipment
6. carry out running maintenance within agreed schedules
7. carry out maintenance and/or cleaning within ones responsibility
8. report unsafe equipment and other dangerous occurrences
9. ensure that the correct machine guards are in place
10. work in a comfortable position with the correct posture
11. use cleaning equipment and methods appropriate for the work to be carried out
12. dispose of waste safely in the designated location
13. store cleaning equipment safely after use
14. carry out cleaning according to schedules and limits of responsibility

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** personal hygiene and duty of care
- KU2.** safe working practices and organisational standard operating procedures
- KU3.** limits of your own responsibility
- KU4.** ways of resolving problems within the work area
- KU5.** the production process and the specific work activities that relate to the whole process
- KU6.** the importance of effective communication with supervisors
- KU7.** the lines of communication, authority and reporting procedures

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- KU8.** the organisation's rules, codes and guidelines (including timekeeping)
- KU9.** the company's quality standards
- KU10.** the importance of complying with written instructions
- KU11.** equipment operating procedures / supervisor's instructions
- KU12.** work instructions and specifications and interpret them accurately
- KU13.** relation between work role and the overall manufacturing process
- KU14.** hazards likely to be encountered when conducting routine maintenance
- KU15.** the importance of taking action when problems are identified
- KU16.** different ways of minimising waste
- KU17.** the importance of running maintenance and regular cleaning
- KU18.** effects of contamination on products i.e. machine oil, dirt, foreign materials
- KU19.** common faults with equipment and the method to rectify
- KU20.** maintenance procedures
- KU21.** different types of cleaning equipment and substances and their use
- KU22.** safe working practices for cleaning and the method of carrying them out

Generic Skills (GS)

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

- GS1.** comprehend written instructions
- GS2.** read any application sent by other colleagues
- GS3.** Communicate effectively in local language
- GS4.** communicate with supervisor appropriately
- GS5.** talk to others to convey information effectively
- GS6.** identify the real reason of problem faced
- GS7.** apply problem-solving approaches in different situations
- GS8.** refer anomalies to the supervisor
- GS9.** seek clarification on problems from others
- GS10.** apply good attention to detail
- GS11.** check your work is complete and free from errors
- GS12.** make sure every kind of communication is error free
- GS13.** communicate effectively
- GS14.** apply leadership skills wherever required
- GS15.** take initiative at the right place
- GS16.** understand the requirement to be creative

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintaining the work area, tools and machines</i>	17	20	-	13
1. handle materials, machinery, equipment and tools with care and use them in the correct way	2	2	-	1
2. use correct lifting and handling procedures	1	2	-	1
3. use materials to minimize waste	2	1	-	1
4. maintain a clean and hazard free working area	1	1	-	1
5. maintain tools and equipment	2	1	-	1
6. carry out running maintenance within agreed schedules	1	2	-	1
7. carry out maintenance and/or cleaning within ones responsibility	1	2	-	1
8. report unsafe equipment and other dangerous occurrences	1	2	-	-
9. ensure that the correct machine guards are in place	1	1	-	1
10. work in a comfortable position with the correct posture	1	1	-	1
11. use cleaning equipment and methods appropriate for the work to be carried out	1	1	-	1
12. dispose of waste safely in the designated location	1	2	-	1
13. store cleaning equipment safely after use	1	1	-	1
14. carry out cleaning according to schedules and limits of responsibility	1	1	-	1
NOS Total	17	20	-	13

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	TSC/N9001
NOS Name	Maintain work area, tools, and machines
Sector	Textile
Sub-Sector	Spinning, Weaving, Processing, Knitting
Occupation	Textile Mill sector - Cotton
NSQF Level	3
Credits	TBD
Version	3.0
Last Reviewed Date	27/01/2022
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

TSC/N9002: Working in a team

Description

This unit is about working as a team member in the textile industry

Scope

The scope covers the following :

- commitment and trust
- communication
- adaptability
- creative freedom

Elements and Performance Criteria

Commitment and trust

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

1. be accountable to the own role in whole process
2. perform all roles with full responsibility
3. be effective and efficient at workplace

Communication

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

4. properly communicate about company policies
5. report all problems faced during the process
6. talk politely with other team members and colleagues
7. submit daily report of own performance

Adaptability

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

8. adjust in different work situations
9. give due importance to other's point of view
10. avoid conflicting situations

Creative freedom

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

11. develop new ideas for work procedures
12. improve upon the existing techniques to increase process efficiency

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedures (SOP) and regulations in a textile mill
KU2. procedure followed to get the final output in the mill

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- KU3.** safe working practices to be adopted in textile mill
- KU4.** reporting to the supervisor or higher authority about any grievances faced
- KU5.** the importance of the previous and next step of the process
- KU6.** process flow in a textile mill and the concerned workers
- KU7.** material flow in a textile mill and the required person
- KU8.** functions of different parts of the machine
- KU9.** tools and equipments used
- KU10.** guidelines for operating the machine
- KU11.** safety procedures to be followed in the machine

Generic Skills (GS)

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

- GS1.** write clear and short sentences
- GS2.** write daily work report
- GS3.** write grievance complaint application
- GS4.** comprehend written instructions
- GS5.** read any application sent by other colleagues
- GS6.** communicate with supervisor appropriately
- GS7.** talk to co-workers to convey information effectively
- GS8.** identify the real reason of problem faced
- GS9.** be able to find the most effective solution to the problems faced
- GS10.** apply good attention to detail
- GS11.** ensure every kind of communication is error free
- GS12.** communicate effectively
- GS13.** apply leadership skills wherever required
- GS14.** take initiative at the right place
- GS15.** understand the requirement to be creative

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Commitment and trust</i>	5	4	-	2
1. be accountable to the own role in whole process	2	1	-	1
2. perform all roles with full responsibility	2	1	-	1
3. be effective and efficient at workplace	1	2	-	-
<i>Communication</i>	6	7	-	4
4. properly communicate about company policies	1	2	-	1
5. report all problems faced during the process	1	2	-	1
6. talk politely with other team members and colleagues	2	1	-	1
7. submit daily report of own performance	2	2	-	1
<i>Adaptability</i>	5	4	-	3
8. adjust in different work situations	1	1	-	1
9. give due importance to other's point of view	2	1	-	1
10. avoid conflicting situations	2	2	-	1
<i>Creative freedom</i>	3	5	-	2
11. develop new ideas for work procedures	1	3	-	1
12. improve upon the existing techniques to increase process efficiency	2	2	-	1
NOS Total	19	20	-	11

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National Occupational Standards (NOS) Parameters

NOS Code	TSC/N9002
NOS Name	Working in a team
Sector	Textile
Sub-Sector	Spinning, Weaving, Processing, Knitting
Occupation	Textile Mill sector - Cotton
NSQF Level	3
Credits	TBD
Version	6.0
Last Reviewed Date	27/01/2022
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

TSC/N9003: Maintain health, safety and security at workplace

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

The scope covers the following :

- comply with health, safety and security requirements at work
- Recognizing the hazards
- Planning the safety techniques
- Implementing the programs

Elements and Performance Criteria

Comply with health, Safety and security requirements at work

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

1. comply with health and safety related instructions applicable to the workplace
2. use and maintain personal protective equipment such as ear plug, nose mask , head cap etc., as per protocol
3. carry out own activities in line with approved guidelines and procedures
4. maintain a healthy lifestyle and guard against dependency on intoxicants
5. follow environment management system related procedures
6. identify and correct (if possible) malfunctions in machinery and equipment
7. report any service malfunctions that cannot be rectified
8. store materials and equipment in line with organisational requirements
9. safely handle and remove waste
10. minimize health and safety risks to self and others due to own actions
11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks
12. monitor the workplace and work processes for potential risks and threat
13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned
14. report hazards and potential risks/ threats to supervisors or other authorized personnel
15. participate in mock drills/ evacuation procedures organized at the workplace
16. undertake first aid, fire-fighting and emergency response training, if asked to do so
17. take action based on instructions in the event of fire, emergencies or accidents
18. follow organisation procedures for shutdown and evacuation when required

Recognizing the hazards

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

Qualification Pack

19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry
20. recognise other possible security issues existing in the workplace

Planning the safety techniques Implementing the programs

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

21. recognise different measures to curb the hazards
22. communicate the safety plan to everyone
23. attach disciplinary rules with the implementation

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedures (SOP) and regulations in a textile mill
- KU2.** safe working practices to be adopted in textile mill
- KU3.** quality systems and other processes practiced in the textile mill
- KU4.** health and safety related practices applicable at the workplace
- KU5.** potential hazards, risks and threats based on nature of operations
- KU6.** organizational procedures for safe handling of equipment and machine operations
- KU7.** potential risks due to own actions and methods to minimize these
- KU8.** environmental management system related procedures at the workplace
- KU9.** layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points
- KU10.** potential accidents and emergencies and response to these scenarios
- KU11.** reporting protocol and documentation required
- KU12.** details of personnel trained in first aid, fire-fighting and emergency response
- KU13.** actions to take in the event of a mock drills/ evacuation procedures or actual accident, emergency or fire
- KU14.** occupational health and safety risks and methods
- KU15.** personal protective equipment and method of use
- KU16.** identification, handling and storage of hazardous substances
- KU17.** proper disposal system for waste and by-products
- KU18.** signage related to health and safety and their meaning
- KU19.** importance of sound health, hygiene and good habits
- KU20.** ill-effects of alcohol, tobacco and drugs

Generic Skills (GS)

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

- GS1.** write clear and short sentences
- GS2.** read and understand the company instructions

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- GS3.** read and understand work instructions
- GS4.** read and understand the safety guidelines
- GS5.** listen to others attentively
- GS6.** respond to emergencies, accidents or fire at the workplace
- GS7.** evacuate the premises and help others in need while doing so
- GS8.** the value of physical fitness, personal hygiene and good habits
- GS9.** talk with others politely
- GS10.** identify correct safety measure for particular hazard
- GS11.** make required safety plans as and when required
- GS12.** raise alarm in case of emergency
- GS13.** know the use of correct safety measure whenever required
- GS14.** be attentive to details
- GS15.** be careful to avoid occurrence of hazards
- GS16.** maintenance of neatness at work
- GS17.** procedure for reporting unwanted behavior

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Comply with health, Safety and security requirements at work</i>	27	35	-	23
1. comply with health and safety related instructions applicable to the workplace	2	2	-	2
2. use and maintain personal protective equipment such as ear plug, nose mask , head cap etc., as per protocol	2	2	-	2
3. carry out own activities in line with approved guidelines and procedures	2	2	-	2
4. maintain a healthy lifestyle and guard against dependency on intoxicants	2	2	-	2
5. follow environment management system related procedures	2	2	-	2
6. identify and correct (if possible) malfunctions in machinery and equipment	2	2	-	1
7. report any service malfunctions that cannot be rectified	2	2	-	1
8. store materials and equipment in line with organisational requirements	2	2	-	1
9. safely handle and remove waste	2	2	-	1
10. minimize health and safety risks to self and others due to own actions	1	2	-	1
11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks	1	2	-	2
12. monitor the workplace and work processes for potential risks and threat	1	2	-	1
13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned	1	2	-	1
14. report hazards and potential risks/ threats to supervisors or other authorized personnel	1	2	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
15. participate in mock drills/ evacuation procedures organized at the workplace	1	2	-	-
16. undertake first aid, fire-fighting and emergency response training, if asked to do so	1	2	-	1
17. take action based on instructions in the event of fire, emergencies or accidents	1	2	-	1
18. follow organisation procedures for shutdown and evacuation when required	1	1	-	1
<i>Recognizing the hazards</i>	2	2	-	2
19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry	1	1	-	1
20. recognise other possible security issues existing in the workplace	1	1	-	1
<i>Planning the safety techniques Implementing the programs</i>	3	3	-	3
21. recognise different measures to curb the hazards	1	1	-	1
22. communicate the safety plan to everyone	1	1	-	1
23. attach disciplinary rules with the implementation	1	1	-	1
NOS Total	32	40	-	28

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	TSC/N9003
NOS Name	Maintain health, safety and security at workplace
Sector	Textile
Sub-Sector	Spinning, Weaving, Processing, Knitting
Occupation	Textile Mill sector - Cotton
NSQF Level	3
Credits	TBD
Version	5.0
Last Reviewed Date	27/01/2022
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

TSC/N9004: Comply with industry and organizational requirement

Description

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

Scope

The scope covers the following :

- self development
- team work
- organizational standards
- industry standards

Elements and Performance Criteria

Self development

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

1. perform own duties effectively
2. take responsibility for own actions
3. be accountable towards the job role and assigned duties
4. take initiative and innovate the existing methods
5. focus on self-learning and improvement

Team work

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

6. co-ordinate with all the team members and colleagues
7. communicate politely
8. avoid conflicts and miscommunication

Organisational standards

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

9. know the organisational standards
10. implement them in your performance
11. motivate others to follow them

Industry standards

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

12. monitor the workplace and work processes for potential risks and threat
13. align them with organisation standards

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

Qualification Pack

- KU1.** standard operating procedures (SOP) and regulations in a textile mill
- KU2.** reporting to the supervisor or higher authority
- KU3.** knowledge of organisational standards
- KU4.** knowledge of industry standards
- KU5.** process and material flow in a textile mill
- KU6.** importance of complying with the standards
- KU7.** guidelines for cleaning the various parts of machine

Generic Skills (GS)

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

- GS1.** write clear and short sentences
- GS2.** read the given instructions
- GS3.** comprehend written instructions
- GS4.** talk effectively with others
- GS5.** put forward your point
- GS6.** listen to others
- GS7.** Organizational requirements
- GS8.** your responsibilities at the workplace
- GS9.** procedure to comply with the industry standards

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Self development</i>	5	9	-	7
1. perform own duties effectively	1	2	-	2
2. take responsibility for own actions	1	2	-	2
3. be accountable towards the job role and assigned duties	1	2	-	1
4. take initiative and innovate the existing methods	1	1	-	1
5. focus on self-learning and improvement	1	2	-	1
<i>Team work</i>	3	5	-	4
6. co-ordinate with all the team members and colleagues	1	2	-	1
7. communicate politely	1	1	-	2
8. avoid conflicts and miscommunication	1	2	-	1
<i>Organisational standards</i>	3	4	-	3
9. know the organisational standards	1	1	-	1
10. implement them in your performance	1	2	-	1
11. motivate others to follow them	1	1	-	1
<i>Industry standards</i>	4	2	-	1
12. monitor the workplace and work processes for potential risks and threat	2	1	-	-
13. align them with organisation standards	2	1	-	1
NOS Total	15	20	-	15

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	TSC/N9004
NOS Name	Comply with industry and organizational requirement
Sector	Textile
Sub-Sector	Spinning, Weaving, Processing, Knitting
Occupation	Textile Mill sector - Cotton
NSQF Level	3
Credits	TBD
Version	3.0
Last Reviewed Date	27/01/2022
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

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

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Introduction to Employability Skills

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

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

Constitutional values - Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team

Qualification Pack

Diversity & Inclusion

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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

PC11. approach the concerned authorities for any exploitation as per legal rights and laws

Essential Digital Skills

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

PC12. operate digital devices and use its features and applications securely and safely

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

KU4. Twenty first (21st) century skills and their importance

KU5. how to use basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

KU8. different types of disabilities and appropriate communication and behaviour towards PwD

KU9. different types of financial products and services

Qualification Pack

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

Generic Skills (GS)

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

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

Assessment Criteria

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

Qualification Pack

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

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/10/2024
NSQC Clearance Date	25/06/2020

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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

Minimum Aggregate Passing % at QP Level : 50

Qualification Pack

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

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N0309.Taking charge of shift and handing over shift to TFO Tenter	32	35	-	33	100	12
TSC/N0310.Creeling and knotting/splicing the yarn at TFO	62	101	-	37	200	25
TSC/N0311.Carry out doffing activities at TFO	33	56	-	31	120	15
TSC/N0312.Carryout cleaning and maintenance activities at TFO	38	56	-	36	130	16
TSC/N9001.Maintain work area, tools, and machines	17	20	-	13	50	5
TSC/N9002.Working in a team	19	20	-	11	50	5
TSC/N9003.Maintain health, safety and security at workplace	32	40	-	28	100	12
TSC/N9004.Comply with industry and organizational requirement	15	20	-	15	50	5
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	0	0	50	5
Total	268	378	0	204	850	100

Acronyms

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

Qualification Pack

Glossary

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

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Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.