





Transforming the skill landscape



Autoconer Tenter

QP Code: TSC/Q0301

Version: 3.0

NSQF Level: 3

Textile Sector Skill Council || 14-H, 14th Floor, Hansalaya Building, 15, Barakhamba Road New Delhi – 110001



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TSC/Q0301: Autoconer Tenter

Brief Job Description

An autoconer tenter is responsible to carry out tenting activities in an autoconer machine. An autoconer tenter should be able to segregate quality cops, creel the cops, ensure proper splicing carry out routine cleaning and maintenance activities, thus producing defect free cone package and ensure proper functioning of autoconer machine. This job requires the individual to have thorough knowledge of process flow and material flow in a spinning mill for yarn production and should know about the important functions and operations of autoconer machine.

Personal Attributes

An autoconer 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/N0301: Taking charge of shift and handing over shift to Autoconer Tenter
- 2. TSC/N0302: Operating the autoconer and carrying out general tenting activities at Autoconer
- 3. TSC/N0303: Filling the ring cops and doffing the cone package at Autoconer
- 4. TSC/N0304: Carryout cleaning and maintenance activities at autoconer
- 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







Occupation	Post Spinning Operations
Country	India
NSQF Level	3
Credits	13
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8151.18
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	25/11/2024
NSQC Approval Date	17/11/2022
Version	3.0
Reference code on NQR	2022/TEXT/TSC/07043
NQR Version	1.0







TSC/N0301: Taking charge of shift and handing over shift to Autoconer Tenter

Description

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

Scope

The scope covers the following :

• Taking charge of shift from Autoconer tenter, Handing over shift to Autoconer tenter

Elements and Performance Criteria

Taking charge of shift from Autoconer tenter

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

- PC1. come at least 10 15 minutes earlier to the work spot
- PC2. tie the waist bag/overcoat/apron/cap as specified
- **PC3.** get instructions from supervisors and clarify doubts regarding repairs attended/changes made in previous shift
- PC4. bring the necessary operational tools to the department
- **PC5.** meet the previous shift operator and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.
- **PC6.** understand the count produced, colour coding, followed in the autoconer for his allocated number of drums or machines
- **PC7.** ensure the technical details are mentioned in the display board in the autoconer
- PC8. Check and make sure that the machines, equipments, etc.are in clean and good condition
- PC9. check for the availability of the ring cops
- **PC10.** ensure all the winding units are running properly, winding units which are not running and problems if any should be clarified with the supervisor and operator
- **PC11.** ensure all the cone drums are running properly, if not the reason should be enquired for the idle cone drums and should be reported to the superiors
- PC12. ensure proper functioning of autoconer machine parts
- PC13. check the cleanliness of the machines & other work areas
- **PC14.** check whether any spare/raw material/ tool / yarn / any other material are thrown under the machines or in the other work areas.
- **PC15.** question the previous shift operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift.
- PC16. ensure the wastes collection boxes are empty while taking charge of shift
- PC17. ensure the Over Head Travelling Cleaner (OHTC) is working properly
- PC18. take over the shift from the outgoing shift operator in a proper manner



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Handing over shift to Autoconer tenter

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

- **PC19.** ensure in providing the details regarding count produced, colour coding followed in the autoconer for his allocated number of cone drums or machines
- **PC20.** provide all relevant information regarding the count produced, idle cone drums, damaged machine parts if any
- **PC21.** get clearance from the incoming counterpart before leaving the work spot
- **PC22.** report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift
- PC23. ensure the shift has to be properly handed over to the incoming shift operator
- **PC24.** report to his/ her shift superior about the quality / production / safety issues/any other issue faced in his/her shift and should leave the department only after getting concurrence for the same from his/ her superiors
- **PC25.** weigh the hard waste generated and collected from the machine separately for each shift and deposit at the specified places
- PC26. collect the wastes from waste collection bags, weigh them and transport to storage area
- PC27. ensure 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 mill
- KU2. safe working practices to be adopted in spinning mill
- KU3. quality systems and other processes practiced in the spinning mill
- **KU4.** reporting to the supervisor or higher authority in case of emergency
- KU5. color coding adopted for different counts in the spinning mill
- **KU6.** understanding the importance of: types of fibres, types of yarn, yarn count, types of yarn defects
- KU7. process flow in a spinning mill
- KU8. material flow in a spinning mill
- KU9. importance of autoconer and cone package formation
- KU10. functions of different parts of autoconer
- KU11. importance of colour coding followed for different counts
- KU12. guidelines for operating the autoconer machine
- KU13. understanding the functions of different signal lamps
- KU14. guidelines for taking charge of shift from previous shift Autoconer tenter
- KU15. guidelines for handing over the shift to the next shift Autoconer tenter
- **KU16.** importance of material handling and types of material handling equipments used equipments
- KU17. functions and methodology for operating different material handling tools
- KU18. knowledge of waste collection system & equipments used







- KU19. importance of cleanliness at workplace
- KU20. safety procedures to be followed in an autoconer machine

Generic Skills (GS)

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

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









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Taking charge of shift from Autoconer tenter	23	27	-	20
PC1. come at least 10 - 15 minutes earlier to the work spot	-	-	-	-
PC2. tie the waist bag/overcoat/apron/cap as specified	-	-	-	-
PC3. get instructions from supervisors and clarify doubts regarding repairs attended/changes made in previous shift	-	-	-	_
PC4. bring the necessary operational tools to the department	-	-	-	-
PC5. meet the previous shift operator and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.	-	-	-	_
PC6. understand the count produced, colour coding, followed in the autoconer for his allocated number of drums or machines	-	-	-	-
PC7. ensure the technical details are mentioned in the display board in the autoconer	-	-	-	-
PC8. Check and make sure that the machines, equipments, etc.are in clean and good condition	-	-	-	-
PC9. check for the availability of the ring cops	-	-	-	-
PC10. ensure all the winding units are running properly, winding units which are not running and problems if any should be clarified with the supervisor and operator	-	-	-	_
PC11. ensure all the cone drums are running properly, if not the reason should be enquired for the idle cone drums and should be reported to the superiors	-	-	-	_
PC12. ensure proper functioning of autoconer machine parts	-	-	-	_







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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
$\ensuremath{\text{PC13.}}$ check the cleanliness of the machines & other work areas	-	-	-	-
PC14. check whether any spare/raw material/ tool / yarn / any other material are thrown under the machines or in the other work areas.	_	-	-	-
PC15. question the previous shift operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift.	-	-	-	-
PC16. ensure the wastes collection boxes are empty while taking charge of shift	_	-	-	-
PC17. ensure the Over Head Travelling Cleaner (OHTC) is working properly	-	-	-	-
PC18. take over the shift from the outgoing shift operator in a proper manner	-	-	-	-
Handing over shift to Autoconer tenter	8	9	-	13
PC19. ensure in providing the details regarding count produced, colour coding followed in the autoconer for his allocated number of cone drums or machines	_	_	_	-
PC20. provide all relevant information regarding the count produced, idle cone drums, damaged machine parts if any	-	-	-	-
PC21. get clearance from the incoming counterpart before leaving the work spot	-	-	-	-
PC22. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift	_	-	-	-
PC23. ensure the shift has to be properly handed over to the incoming shift operator	-	-	-	-
PC24. report to his/ her shift superior about the quality / production / safety issues/any other issue faced in his/her shift and should leave the department only after getting concurrence for the same from his/ her superiors	_	_	_	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC25. weigh the hard waste generated and collected from the machine separately for each shift and deposit at the specified places	-	-	-	-
PC26. collect the wastes from waste collection bags, weigh them and transport to storage area	-	-	-	-
PC27. ensure the work spot is clean	-	-	-	-
NOS Total	31	36	-	33







National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0301
NOS Name	Taking charge of shift and handing over shift to Autoconer Tenter
Sector	Textile
Sub-Sector	Spinning – Textiles
Occupation	Spinning
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	17/11/2022







TSC/N0302: Operating the autoconer and carrying out general tenting activities at Autoconer

Description

This unit is about carrying out procedure for operating the autoconer machine and carryout general tenting responsibilities

Scope

The scope covers the following :

• Operating the machine, Carry out general tenting activities, Material handling and safety at workplace

Elements and Performance Criteria

Operating the machine

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

- PC1. identify the cop by looking at the count board affixed on the machine
- **PC2.** make sure that necessary changes and tests are carried out and follow the instructions of the superiors before running the machine
- **PC3.** operate the control switches for starting and stopping the machine
- PC4. ensure correct procedure is followed for operating the different control switches and machine
- PC5. following the different signal lamps used in machines
- **PC6.** ensure the display panel board is working properly and relevant details are displayed on the screen
- **PC7.** ensure proper functioning of autoconer by verifying the details in the display panel
- **PC8.** ensure the ring cops are properly filled in the magazine
- PC9. properly doff the full cone package in case of manual doffing
- PC10. ensure the full cone are properly doffed in auto doffer
- PC11. ensure the machine is running in the set speed by viewing the display panel

Carry out general tenting activities

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

- PC12. bring the cops in the cop trolley from storage area
- PC13. fill the ring cops in magazine
- **PC14.** Sort the empties collected in the bin then and, take the rejected cops, rectify the defect (by unwinding without wastage) and creel in the nearest magazines
- PC15. ensure proper passage of material of yarn in the winding units
- PC16. ensure the splicing unit is working properly
- **PC17.** restart the winding unit if the winding unit stops on specified number of successive failures of splicing
- PC18. ensure the waxing roll is available if the yarn is to be waxed







- **PC19.** put the wax in the wax axle according to the material being processed as per the instruction of superiors
- PC20. check the waxing unit and fix new waxing rolls if the old one exhausts
- **PC21.** ensure running wax rolls are clean and are freely rotating.
- PC22. ensure the wax index is switched off, while processing un waxed counts
- PC23. restart the winding unit on need basis
- PC24. ensure the eye unit is working properly
- **PC25.** remove the drum lapping manually with appropriate tool like knife, scissors, without damaging the drum
- PC26. switch on air valve while restating the machine after every stoppage
- PC27. see that the tension is as per requirement in drums
- PC28. Follow instructions/direction of supervisors, during count changes,
- **PC29.** switch on the spindle only after rectifying the problem.
- **PC30.** ensure all the winding unit are in running condition
- PC31. see the signal lamps in every winding unit and identify the reason for stoppage and restart
- **PC32.** give priority to drums where the signal is glowing, attend the drums immediately and start the drums without any delay
- PC33. carryout doffing activity if auto doffing unit is not available in the autoconer
- **PC34.** attend DHT conveyor belt jam immediately to avoid parallel yarn winding.
- **PC35.** report to the supervisor and maintenance incharge about the yarn alarm and quality alarms rings
- **PC36.** identify and report the different package defects to the superiors transport empty cops to ring frame department
- **PC37.** report to superiors immediately for any defects such as yarn shade variation, strength variation, twist variation, stains etc. are found
- PC38. change as per the instructions direction of supervisors during count changes

Material handling and safety at workplace

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

- **PC39.** ensure proper material handling of full cops, empty cops, cop trolleys and full cones
- **PC40.** Use appropriate tool for cleaning choked dust at yarn clearer unit
- **PC41.** remove the drum lapping manually with appropriate tool, without damaging the drum
- PC42. ensure using proper material handling of tools and equipments
- PC43. ensure proper material handling of waste
- **PC44.** use of safety gadgets like caps, masks and shoes and verifying the safety stop motions

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. standard operating procedures (SOP)and regulations in a spinning mill
- KU2. safe working practices to be adopted in spinning mill
- KU3. quality systems and other processes practiced in the spinning mill







- KU4. reporting to the supervisor or higher authority in case of emergency
- **KU5.** color coding adopted for different counts in the spinning mill
- KU6. process and material flow in a spinning mill
- **KU7.** understanding the importance of fibres, types of yarn, yarn count, types of sliver, sliver hank,
- **KU8.** knowledge of different functions in display panel and procedure to operate in autoconer
- KU9. importance of mixing, count change, yarn defects
- KU10. functions of different keys in display panel
- KU11. functions and purpose of different signal lamps
- KU12. functions of different mechanisms in autoconer
- KU13. importance of splicing, waxing, and electronic yarn clearing system (eyc)
- KU14. types of yarn defects
- KU15. guidelines for removing defects in cop and cone package
- KU16. guidelines for operating the winding unit in autoconer
- KU17. guidelines for filling the cops in magazine
- **KU18.** guidelines for carrying out doffing activity
- KU19. importance of material handling
- **KU20.** types of material handling equipments used
- **KU21.** functions and methodology for operating different material handling equipments
- **KU22.** importance of cleanliness at work place
- KU23. importance of safety at workplace
- KU24. safety gadgets used in a spinning mill

Generic Skills (GS)

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

- **GS1.** write clear and short sentences
- GS2. comprehend written instructions
- GS3. communicate with supervisor appropriately
- GS4. talk to others to convey information effectively
- GS5. apply problem-solving approaches in different situations
- **GS6.** refer anomalies to the supervisor
- GS7. seek clarification on problems from others
- GS8. apply good attention to detail
- GS9. check your work is complete and free from errors
- GS10. procedure to identify and remove the defects in cops and cone
- GS11. procedure to operate different keys in display panel
- **GS12.** procedure to operate the autoconer machine
- GS13. procedure to operate the winding unit in autoconer
- GS14. procedure to transport full cops in cop trolley







- GS15. procedure to remove and replace wax rolls in waxing unit
- **GS16.** maintain cleanliness at work place







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Operating the machine	19	23	-	8
PC1. identify the cop by looking at the count board affixed on the machine	-	-	-	-
PC2. make sure that necessary changes and tests are carried out and follow the instructions of the superiors before running the machine	-	-	-	-
PC3. operate the control switches for starting and stopping the machine	-	-	-	-
PC4. ensure correct procedure is followed for operating the different control switches and machine	-	-	_	-
PC5. following the different signal lamps used in machines	-	-	-	-
PC6. ensure the display panel board is working properly and relevant details are displayed on the screen	-	-	-	-
PC7. ensure proper functioning of autoconer by verifying the details in the display panel	-	-	-	-
PC8. ensure the ring cops are properly filled in the magazine	-	-	-	-
PC9. properly doff the full cone package in case of manual doffing	_	-	-	-
PC10. ensure the full cone are properly doffed in auto doffer	-	-	-	-
PC11. ensure the machine is running in the set speed by viewing the display panel	-	-	-	-
Carry out general tenting activities	47	55	-	26
PC12. bring the cops in the cop trolley from storage area	_	-	_	-
PC13. fill the ring cops in magazine	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. Sort the empties collected in the bin then and, take the rejected cops, rectify the defect (by unwinding without wastage) and creel in the nearest magazines	-	-	-	-
PC15. ensure proper passage of material of yarn in the winding units	-	-	-	-
PC16. ensure the splicing unit is working properly	-	-	-	-
PC17. restart the winding unit if the winding unit stops on specified number of successive failures of splicing	_	-	-	-
PC18. ensure the waxing roll is available if the yarn is to be waxed	-	-	-	-
PC19. put the wax in the wax axle according to the material being processed as per the instruction of superiors	_	-	_	-
PC20. check the waxing unit and fix new waxing rolls if the old one exhausts	-	-	-	-
PC21. ensure running wax rolls are clean and are freely rotating.	-	-	-	-
PC22. ensure the wax index is switched off, while processing un - waxed counts	-	-	-	_
PC23. restart the winding unit on need basis	-	-	-	-
PC24. ensure the eye unit is working properly	-	-	-	-
PC25. remove the drum lapping manually with appropriate tool like knife, scissors, without damaging the drum	-	-	_	_
PC26. switch on air valve while restating the machine after every stoppage	-	-	-	-
PC27. see that the tension is as per requirement in drums	-	-	-	-
PC28. Follow instructions/direction of supervisors, during count changes,	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC29. switch on the spindle only after rectifying the problem.	-	-	-	-
PC30. ensure all the winding unit are in running condition	-	-	-	-
PC31. see the signal lamps in every winding unit and identify the reason for stoppage and restart	-	-	-	-
PC32. give priority to drums where the signal is glowing, attend the drums immediately and start the drums without any delay	-	-	-	-
PC33. carryout doffing activity if auto doffing unit is not available in the autoconer	-	-	-	-
PC34. attend DHT conveyor belt jam immediately to avoid parallel yarn winding.	-	-	-	-
PC35. report to the supervisor and maintenance incharge about the yarn alarm and quality alarms rings	-	-	-	-
PC36. identify and report the different package defects to the superiors transport empty cops to ring frame department	-	-	-	-
PC37. report to superiors immediately for any defects such as yarn shade variation, strength variation, twist variation, stains etc. are found	-	-	-	-
PC38. change as per the instructions direction of supervisors during count changes	-	-	-	-
Material handling and safety at workplace	7	11	-	4
PC39. ensure proper material handling of full cops, empty cops, cop trolleys and full cones	-	-	-	-
PC40. Use appropriate tool for cleaning choked dust at yarn clearer unit	-	-	_	-
PC41. remove the drum lapping manually with appropriate tool, without damaging the drum	-	-	-	-
PC42. ensure using proper material handling of tools and equipments	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC43. ensure proper material handling of waste	-	-	-	-
PC44. use of safety gadgets like caps, masks and shoes and verifying the safety stop motions	-	-	-	-
NOS Total	73	89	-	38







National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0302
NOS Name	Operating the autoconer and carrying out general tenting activities at Autoconer
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	25/11/2024
NSQC Clearance Date	17/11/2022







TSC/N0303: Filling the ring cops and doffing the cone package at Autoconer

Description

This unit is about carrying out procedure for filling the ring cops and doffing the cone package in auto coner machine

Scope

The scope covers the following :

• Filling the cops, Doffing the cone package if no auto doffing unit is available, Restarting the winding unit after doffing, Weighing and store the cone package, Responsibilities in autoconer with link coner attachment

Elements and Performance Criteria

Filling the cops

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

- **PC1.** bring the cops in the cop trolley from storage area
- PC2. ensure correct count cop trolley is taken to winding unit for filling
- PC3. patrol around the winding machine successively and identify the cop exhaust in magazine
- PC4. creel the cops in the magazine
- PC5. Check frequently for any signal stops during cops filling
- **PC6.** ensure the cop is properly placed in the magazine
- **PC7.** ensure the yarn end of the cop is fed in the suction pipe at the centre of magazine
- PC8. ensure the winding unit does not stop due to cops exhausting
- PC9. Deposit hard waste in their coat pocket/waist bag after filling
- PC10. ensure minimum time is taken for filling the ring cops
- PC11. ensure proper functioning of machine
- PC12. ensure safety while filling cops

Doffing the cone package if no auto doffing unit is available

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

- PC13. fetch and reserve empty cones in autoconer machine
- **PC14.** write down drum no., machine no. and winder number in empty cone if necessary
- PC15. ensure that the required length or weight of yarn is wound on cone package
- **PC16.** check the cone package is fully wound to the predetermined length or weight and start doffing
- PC17. either stop the drum for doffing or doff the cone package while the drum is running as per the• instructions of the supervisor
- PC18. ensure proper procedure is adopted for doffing the cone package
- PC19. ensure proper material handling of cone package



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Restarting the winding unit after doffing

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

- **PC20.** ensure the cones are as per specifications
- **PC21.** insert the empty cone after doffing
- PC22. ensure strictly proper colour coded empty paper cone is mounted in the holder.
- PC23. Put the tail end as specified on the base of the empty cone before starting.
- PC24. follow the instructions of the superiors & do necessary changes during count change
- PC25. release the cone holder and ensure the paper cone is in surface contact with the winding drum&ensure proper traverse of yarn on winding drum
- PC26. ensure the proper passage of yarn in autoconer

Weighing and store the cone package

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

PC27. weigh the cone package as specified and ensure the required weight have been achieved

PC28. place the cones in the cone trolley and store in the storage area as instructed

Responsibilities in autoconer with link coner attachment

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

- PC29. Patrol around the machine and check for signal stops
- PC30. ensure the link coner mechanism is properly working
- PC31. ensure there is no jam in the link coner transport passage
- PC32. ensure the cops are properly mounted in the cop holder
- PC33. ensure the cops are properly fed to winding unit
- **PC34.** Clear traffic congestion at the full cop feeding path and rejected cops carrying path

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. standard operating procedures (SOP)and regulations in a spinning mill
- KU2. safe working practices to be adopted in spinning mill
- KU3. quality systems and other processes practiced in the spinning mill
- KU4. reporting to the supervisor or higher authority in case of emergency
- KU5. color coding adopted for different counts in the spinning mill
- KU6. process flow and material flow in spinning mill
- KU7. the importance of the types of yarn, yarn count, types of yarn defects
- KU8. function of different parts in winding machine
- KU9. importance of yarn quality
- KU10. importance of material handling
- KU11. procedure for material handling of cops, cop trolley, and cone packages
- KU12. importance of time management
- **KU13.** procedure for filling the empty cops
- KU14. importance of splicing



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- KU15. types of splicing
- KU16. procedure for splicing
- KU17. splicing defects
- KU18. importance of yarn quality
- **KU19.** importance of doffing
- **KU20.** importance of weighing the cone package
- **KU21.** importance of safety at work place
- KU22. importance of cleanliness at work place

Generic Skills (GS)

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

- **GS1.** write clear and short sentences
- GS2. comprehend written instructions
- GS3. communicate with supervisor appropriately
- GS4. talk to others to convey information effectively
- GS5. procedure for patrolling around the winding machine
- **GS6.** procedure for filling the cops
- **GS7.** standard operating procedure for filling the cops
- GS8. standard operating procedure for restarting the winding unit post doffing
- GS9. standard doffing procedure
- **GS10.** procedure for weighing the cone package
- **GS11.** procedure for material handling of cone package



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Filling the cops	17	26	-	12
PC1. bring the cops in the cop trolley from storage area	-	-	_	-
PC2. ensure correct count cop trolley is taken to winding unit for filling	_	-	-	-
PC3. patrol around the winding machine successively and identify the cop exhaust in magazine	-	-	-	_
PC4. creel the cops in the magazine	-	-	_	-
PC5. Check frequently for any signal stops during cops filling	-	-	-	-
PC6. ensure the cop is properly placed in the magazine	-	-	-	-
PC7. ensure the yarn end of the cop is fed in the suction pipe at the centre of magazine	-	-	-	-
PC8. ensure the winding unit does not stop due to cops exhausting	-	-	-	-
PC9. Deposit hard waste in their coat pocket/waist bag after filling	-	-	-	-
PC10. ensure minimum time is taken for filling the ring cops	-	-	_	-
PC11. ensure proper functioning of machine	-	-	-	-
PC12. ensure safety while filling cops	-	-	-	-
Doffing the cone package if no auto doffing unit is available	11	15	-	8
PC13. fetch and reserve empty cones in autoconer machine	-	-	_	-
PC14. write down drum no., machine no. and winder number in empty cone if necessary	-	-	_	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC15. ensure that the required length or weight of yarn is wound on cone package	-	-	-	-
PC16. check the cone package is fully wound to the predetermined length or weight and start doffing	-	-	-	-
 PC17. either stop the drum for doffing or doff the cone package while the drum is running as per the instructions of the supervisor 	-	-	-	-
PC18. ensure proper procedure is adopted for doffing the cone package	-	-	-	-
PC19. ensure proper material handling of cone package	-	-	-	-
Restarting the winding unit after doffing	11	15	-	6
PC20. ensure the cones are as per specifications	-	-	-	-
PC21. insert the empty cone after doffing	-	-	-	-
PC22. ensure strictly proper colour coded empty paper cone is mounted in the holder.	-	-	-	-
PC23. Put the tail end as specified on the base of the empty cone before starting.	-	-	-	-
PC24. follow the instructions of the superiors & do necessary changes during count change	-	-	-	-
 PC25. release the cone holder and ensure the paper cone is in surface contact with the winding drum &ensure proper traverse of yarn on winding drum 	-	-	-	-
PC26. ensure the proper passage of yarn in autoconer	-	-	-	-
Weighing and store the cone package	3	5	-	3
PC27. weigh the cone package as specified and ensure the required weight have been achieved	-	-	-	-
PC28. place the cones in the cone trolley and store in the storage area as instructed	_	-	-	_







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Responsibilities in autoconer with link coner attachment	7	8	-	3
PC29. Patrol around the machine and check for signal stops	-	-	-	-
PC30. ensure the link coner mechanism is properly working	-	-	-	-
PC31. ensure there is no jam in the link coner transport passage	-	-	-	-
PC32. ensure the cops are properly mounted in the cop holder	-	-	-	-
PC33. ensure the cops are properly fed to winding unit	-	-	_	-
PC34. Clear traffic congestion at the full cop feeding path and rejected cops carrying path	-	-	-	-
NOS Total	49	69	-	32







National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0303
NOS Name	Filling the ring cops and doffing the cone package at Autoconer
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	25/11/2024
NSQC Clearance Date	17/11/2022







TSC/N0304: Carryout cleaning and maintenance activities at autoconer

Description

This unit is about carrying the tenting, cleaning and maintenance activities in cone winding machine

Scope

The scope covers the following :

- Carry out cleaning activities
- Carry out autonomous activities
- Carryout regular maintenance activities
- Other tenting responsibilities

Elements and Performance Criteria

Carry out cleaning activities

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

- **PC1.** ensure the different mechanisms in autoconer is clean
- **PC2.** clean the different mechanisms in autoconer at the scheduled interval as instructed by superiors
- PC3. remove faults from ring cops
- PC4. ensure the waxing rolls are clean
- PC5. ensure the EYC area is clean
- **PC6.** remove the waste from the measuring head of EYC if any
- **PC7.** to keep the wastes in waste bags, piecer bags, or in aprons.
- PC8. proper material handling of full cops, empty cops and full cones
- PC9. proper material handling of waste
- PC10. transporting empty cops to ring frame department
- PC11. ensure in keeping the wax washers clean
- PC12. clean the waste accumulation from different parts of the machine from time to time
- PC13. to use proper tools for cleaning
- **PC14.** defective package produced in the autoconer to be identified and should be reported to superiors
- PC15. ensure the yarn produced is free from defects and damages
- **PC16.** collect the hard wastes from waste collection box in autoconer machine at regular intervals as instructed by superiors
- PC17. ensure the wastes collected is deposited in the respective waste box
- **PC18.** ensure that the rejected cops in the empties trolley should be segregated, cleaned and returned
- PC19. all half cops and damaged cops should be cleaned in the particular shift itself
- PC20. to ensure safety while carrying out cleaning activities



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Qualification Pack

- **PC21.** ensure cleanliness at work place
- PC22. support the mechanic while carryout cleaning maintenance activities if necessary
- PC23. clean the wastes in the alley around the autoconer area
- PC24. ensure the full cone transportation belt and empty tubes conveyor belt area is clean
- **PC25.** ensure OHTC is running continuously without stopping whenever machine stopped for any maintenance / cleaning work

Carry out autonomous activities

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

- PC26. ensure proper functioning of machine
- PC27. check and verify the quality of different machine parts
- **PC28.** able to remove the worn-out parts and replace with new parts in Autoconer machine with the knowledge of fitter/shift incharge

Carryout regular maintenance activities

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

- PC29. report to superior of any abnormal functioning mechanisms in autoconer
- PC30. ensure all the winding drums are in good running condition
- PC31. remove the lappings if any
- PC32. ensure the working of all stop motions, tension washer and EYC .
- PC33. check whether splicing unit is working properly
- PC34. check the proper functioning of machine parts
- PC35. ensure that the conveyor belt is clean, and proper cop transport occurs
- PC36. ensure that the conveyor belt is clean and proper cone transport occurs
- PC37. attend the jams in winding sections and report to supervisor and fitters
- **PC38.** see that all the red lights are attended immediately and also feed track jamming and cops jamming should be attended properly
- **PC39.** in case yarn getting wound up on the drum, stop the machine and remove the same gently without damaging the drum
- PC40. report to the maintenance incharge and supervisor of any malfunctioning in the machine
- **PC41.** check the OHTC working condition.
- PC42. report to the superiors if any EYC is malfunctioning
- PC43. ensure safety while carrying out maintenance activities
- PC44. support the fitter for carrying out maintenance activities
- PC45. inform the supervisor and maintenance incharge in case of a jam
- **PC46.** in case of any break-downs, report to the superiors and support him for carrying out maintenance activities
- PC47. support the fitter during minor breakdown

Other tenting responsibilities

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

- PC48. ensure the cone produced is free from outside damages
- PC49. inform superiors immediately, if any breakdown or fault in the machine is noticed
- PC50. ensure the proper functioning of signal lamps







- PC51. ensure that machine is working properly, if any deviations inform superiors immediately
- **PC52.** collect the hard wastes and weigh them at shift end and place them in specified area
- **PC53.** provide all relevant information of the current working process to the next shift operator before relieving

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
- KU3. quality systems and other processes practiced in the spinning mill
- **KU4.** reporting to the supervisor or higher authority in case of emergency
- KU5. process flow and material flow in spinning mill
- KU6. function of different parts in winding machine
- KU7. importance of yarn quality
- KU8. importance of cleaning and carrying out maintenance activities
- KU9. types of waste
- KU10. knowledge on types of defects in yarn and cone package
- KU11. importance of material handling
- **KU12.** material handling of cone and cone trolley
- **KU13.** importance and procedure for weighing the cone packages
- KU14. general guidelines for carryout maintenance activities
- KU15. importance of cleanliness at work
- KU16. types of material handling tools and equipments used in winding
- KU17. types of control switches and signal lamps used in autoconer machine
- KU18. importance of safety at work place

Generic Skills (GS)

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

- **GS1.** write clear and short sentences
- GS2. comprehend written instructions
- GS3. communicate with supervisor appropriately
- **GS4.** talk to others to convey information effectively
- **GS5.** procedure for material handling of cops, cop trolley, cone packages, empty cones
- GS6. procedure for material handling of full cops, empty cops and full cones
- GS7. procedure for carrying out cleaning activities of different parts in autoconer machine
- GS8. procedure for carrying out maintenance activities in different parts of autoconer machine
- GS9. procedure for operating material handling tools and equipments
- GS10. maintain cleanliness at work place



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out cleaning activities	28	39	-	22
PC1. ensure the different mechanisms in autoconer is clean	-	-	-	-
PC2. clean the different mechanisms in autoconer at the scheduled interval as instructed by superiors	-	-	-	-
PC3. remove faults from ring cops	-	-	-	-
PC4. ensure the waxing rolls are clean	-	-	_	-
PC5. ensure the EYC area is clean	-	-	-	-
PC6. remove the waste from the measuring head of EYC if any	-	-	-	-
PC7. to keep the wastes in waste bags, piecer bags, or in aprons.	-	-	-	-
PC8. proper material handling of full cops, empty cops and full cones	-	-	-	-
PC9. proper material handling of waste	-	-	-	-
PC10. transporting empty cops to ring frame department	-	-	-	-
PC11. ensure in keeping the wax washers clean	-	-	-	-
PC12. clean the waste accumulation from different parts of the machine from time to time	-	-	-	-
PC13. to use proper tools for cleaning	-	-	-	-
PC14. defective package produced in the autoconer to be identified and should be reported to superiors	-	-	-	-
PC15. ensure the yarn produced is free from defects and damages	-	-	-	-
PC16. collect the hard wastes from waste collection box in autoconer machine at regular intervals as instructed by superiors	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC17. ensure the wastes collected is deposited in the respective waste box	-	-	-	-
PC18. ensure that the rejected cops in the empties trolley should be segregated, cleaned and returned	-	-	-	-
PC19. all half cops and damaged cops should be cleaned in the particular shift itself	-	-	-	-
PC20. to ensure safety while carrying out cleaning activities	-	-	-	-
PC21. ensure cleanliness at work place	-	-	-	-
PC22. support the mechanic while carryout cleaning maintenance activities if necessary	-	-	-	-
PC23. clean the wastes in the alley around the autoconer area	-	-	-	-
PC24. ensure the full cone transportation belt and empty tubes conveyor belt area is clean	-	-	-	-
PC25. ensure OHTC is running continuously without stopping whenever machine stopped for any maintenance / cleaning work	-	-	-	-
Carry out autonomous activities	3	5	-	3
PC26. ensure proper functioning of machine	-	-	-	-
PC27. check and verify the quality of different machine parts	-	-	-	-
PC28. able to remove the worn-out parts and replace with new parts in Autoconer machine with the knowledge of fitter/shift incharge	-	-	-	-
Carryout regular maintenance activities	21	36	-	20
PC29. report to superior of any abnormal functioning mechanisms in autoconer	-	-	-	-
PC30. ensure all the winding drums are in good running condition	-	-	-	-
PC31. remove the lappings if any	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC32. ensure the working of all stop motions, tension washer and EYC .	-	-	-	-
PC33. check whether splicing unit is working properly	-	-	-	-
PC34. check the proper functioning of machine parts	-	-	_	-
PC35. ensure that the conveyor belt is clean, and proper cop transport occurs	-	-	-	-
PC36. ensure that the conveyor belt is clean and proper cone transport occurs	-	-	-	-
PC37. attend the jams in winding sections and report to supervisor and fitters	-	-	-	-
PC38. see that all the red lights are attended immediately and also feed track jamming and cops jamming should be attended properly	_	-	-	-
PC39. in case yarn getting wound up on the drum, stop the machine and remove the same gently without damaging the drum	-	-	-	-
PC40. report to the maintenance incharge and supervisor of any malfunctioning in the machine	-	-	-	-
PC41. check the OHTC working condition.	-	-	-	-
PC42. report to the superiors if any EYC is malfunctioning	-	-	-	-
PC43. ensure safety while carrying out maintenance activities	-	-	-	-
PC44. support the fitter for carrying out maintenance activities	-	-	-	-
PC45. inform the supervisor and maintenance incharge in case of a jam	-	-	-	-
PC46. in case of any break-downs, report to the superiors and support him for carrying out maintenance activities	-	-	-	-
PC47. support the fitter during minor breakdown	-	-	-	-







Transforming the skill landscape

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Other tenting responsibilities	6	11	-	6
PC48. ensure the cone produced is free from outside damages	-	-	_	-
PC49. inform superiors immediately, if any breakdown or fault in the machine is noticed	-	-	-	-
PC50. ensure the proper functioning of signal lamps	-	-	-	-
PC51. ensure that machine is working properly, if any deviations inform superiors immediately	-	-	_	-
PC52. collect the hard wastes and weigh them at shift end and place them in specified area	-	-	-	-
PC53. provide all relevant information of the current working process to the next shift operator before relieving	-	-	-	-
NOS Total	58	91	-	51







National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0304
NOS Name	Carryout cleaning and maintenance activities at autoconer
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	25/11/2024
NSQC Clearance Date	17/11/2022







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







- 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
Maintaining the work area, tools and machines	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







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







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







- **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









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Commitment and trust	5	4	-	2
 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	-	-
Communication	6	7	-	4
 properly communicate about company policies 	1	2	-	1
 report all problems faced during the process 	1	2	-	1
 talk politely with other team members and colleagues 	2	1	-	1
7. submit daily report of own performance	2	2	-	1
Adaptability	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
Creative freedom	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







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







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:







- **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







- 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



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Qualification Pack



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Comply with health, Safety and security requirements at work	27	35	-	23
 comply with health and safety related instructions applicable to the workplace 	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
 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
 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







Transforming the skill landscape

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
Recognizing the hazards	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
Planning the safety techniques Implementing the programs	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







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







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:







- 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



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Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Self development	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
 take initiative and innovate the existing methods 	1	1	-	1
5. focus on self-learning and improvement	1	2	-	1
Team work	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
Organisational standards	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
Industry standards	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







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







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, selfmotivation, 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



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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







- **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



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Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	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.	-	-	-	-
Basic English Skills	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-







Transforming the skill landscape

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	-	-	-	-
Essential Digital Skills	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	-	-	-	-
Entrepreneurship	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
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	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	-	-







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	ΝΑ
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







(**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/N0301.Taking charge of shift and handing over shift to Autoconer Tenter	31	36	-	33	100	11
TSC/N0302.Operating the autoconer and carrying out general tenting activities at Autoconer	73	89	-	38	200	21
TSC/N0303.Filling the ring cops and doffing the cone package at Autoconer	49	69	-	32	150	16
TSC/N0304.Carryout cleaning and maintenance activities at autoconer	58	91	-	51	200	21
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	11
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	314	415	0	221	950	100







Acronyms

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







Glossary

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







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