







# **Carding Operator**

QP Code: TSC/Q0102

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/Q0102: Carding Operator

# **Brief Job Description**

A carding operator should be able to operate the carding machine, ensure proper feeding of material in chute/lap feed system, piece the sliver on breakage, doff the cans and transport to the storage area.

#### **Personal Attributes**

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 all the machines in the carding department.

# **Applicable National Occupational Standards (NOS)**

# **Compulsory NOS:**

- 1. TSC/N0104: Taking charge of shift and handing over shift to Carding Operator
- 2. TSC/N0105: Operating a carding machine
- 3. TSC/N0106: Piecing the sliver and doffing the sliver can in card
- 4. TSC/N9001: Maintain work area, tools, and machines
- 5. TSC/N9002: Working in a team
- 6. TSC/N9003: Maintain health, safety and security at workplace
- 7. TSC/N9004: Comply with industry and organizational requirement
- 8. DGT/VSQ/N0101: Employability Skills (30 Hours)

# **Qualification Pack (QP) Parameters**

| Sector     | Textile                 |
|------------|-------------------------|
| Sub-Sector | Spinning - Textiles     |
| Occupation | Pre Spinning Operations |
| Country    | India                   |
| NSQF Level | 3                       |







| Credits  | 13   |
|--|--|
| Aligned to NCO/ISCO/ISIC Code                        | NCO-2015/7318.27   |
| 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<br>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/07037  |
| NQR Version  | 1.0  |







# TSC/N0104: Taking charge of shift and handing over shift to Carding Operator

# **Description**

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

# Scope

The scope covers the following:

• Taking charge of shift from carding operator, Handing over shift to carding operator

# **Elements and Performance Criteria**

# Taking charge of shift from carding operator

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

- 1. come at least 10 15 minutes earlier to the work spot
- 2. bring the necessary operational tools to the department
- **3.** 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.
- **4.** understand the count produced, colour coding, followed in the carding for his allocated number of machines
- 5. ensure the technical details are mentioned on the display board in the card
- **6.** check for the availability of the empty sliver cans
- **7.** ensure all the cards are running properly and problems if any should be clarified with the supervisor and operator, idle machines should be enquired for the reason for stoppage and report to the superiors regarding the same
- 8. ensure proper functioning of card machine parts
- check the cleanliness of the machines & other work areas
- **10.** check whether any spare/raw material/ tool / yarn / any other materials are thrown under the machines or in the other work areas.
- 11. question the previous shift operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift
- 12. ensure the wastes collection boxes are empty while taking charge of shift
- **13.** ensure the work spot is clean
- **14.** take over the shift from the outgoing shift operator in a proper manner

# Handing over shift to carding operator

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

- **15.** ensure in providing the details regarding count produced, colour coding followed in the carding for his allocated number of machines
- **16.** provide all relevant information regarding the count produced, idle machines, damaged machine parts if any







- 17. get clearance from the incoming counterpart before leaving the work spot
- 18. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift
- 19. ensure the shift has to be properly handed over to the incoming shift operator
- **20.** report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/her shift and should leave the department only after getting concurrence for the same from his/ her superiors
- 21. collect the wastes from waste collection bags, weigh them and transport to storage area
- 22. ensure the 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.** understanding the importance of types of fibres, types of yarn, sliver hank, types of defects in sliver
- **KU7.** process flow in a spinning / textile mill
- **KU8.** material flow in a textile spinning / textile mill
- **KU9.** importance of carding and sliver formation
- **KU10.** functions of different parts of carding machine
- **KU11.** importance of colour coding followed for different sliver hanks
- **KU12.** guidelines for operating the carding machine
- **KU13.** understanding the functions of different signal lamps
- **KU14.** guidelines for taking charge of shift from previous shift carding operator
- **KU15.** guidelines for handing over the shift to the next shift carding operator
- KU16. importance of material handling and types of material handling equipment used equipment
- **KU17.** functions and methodology for operating different material handling tools
- KU18. knowledge of waste collection system & equipment used
- **KU19.** importance of cleanliness at workplace
- **KU20.** safety procedures to be followed in carding 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 carding department
- **GS11.** procedure to operate the carding machine
- **GS12.** procedure for patrolling around the carding department and identifying worn out or damaged machine parts
- **GS13.** procedure to check the quality of sliver and ensuring proper functioning of machine parts in card
- **GS14.** procedure for operating different material handling tools and equipment
- **GS15.** maintain neatness at work







# Assessment Criteria

| Assessment Criteria for Outcomes   | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|--|-----------------|--------------------|------------------|---------------|
| Taking charge of shift from carding operator   | 22              | 23                 | -                | 16            |
| 1. come at least 10 - 15 minutes earlier to the work spot  | 1               | 1                  | -                | 1             |
| 2. bring the necessary operational tools to the department   | 1               | 2                  | -                | 1             |
| 3. meet the previous shift operator and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.                                     | 3               | 2                  | -                | 2             |
| <b>4.</b> understand the count produced, colour coding, followed in the carding for his allocated number of machines   | 3               | 2                  | -                | 2             |
| 5. ensure the technical details are mentioned on the display board in the card   | 2               | 1                  | -                | 1             |
| <b>6.</b> check for the availability of the empty sliver cans  | 1               | 2                  | -                | 1             |
| 7. ensure all the cards are running properly and problems if any should be clarified with the supervisor and operator, idle machines should be enquired for the reason for stoppage and report to the superiors regarding the same | 1               | 1                  | -                | 1             |
| 8. ensure proper functioning of card machine parts   | 2               | 2                  | -                | 1             |
| 9. check the cleanliness of the machines & other work areas  | 1               | 2                  | -                | 1             |
| 10. 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             |
| 11. question the previous shift operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift  | 2               | 1                  | -                | 1             |







| Assessment Criteria for Outcomes   | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|--|-----------------|--------------------|------------------|---------------|
| 12. ensure the wastes collection boxes are empty while taking charge of shift  | 1               | 2                  | -                | 1             |
| 13. ensure the work spot is clean  | 1               | 1                  | -                | 1             |
| <b>14.</b> take over the shift from the outgoing shift operator in a proper manner   | 2               | 2                  | -                | 1             |
| Handing over shift to carding operator   | 15              | 12                 | -                | 12            |
| <b>15.</b> ensure in providing the details regarding count produced, colour coding followed in the carding for his allocated number of machines  | 3               | 2                  | -                | 2             |
| <b>16.</b> provide all relevant information regarding the count produced, idle machines, damaged machine parts if any  | 3               | 2                  | -                | 2             |
| 17. get clearance from the incoming counterpart before leaving the work spot   | 2               | 1                  | -                | 2             |
| 18. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift   | 2               | 1                  | -                | 2             |
| <b>19.</b> ensure the shift has to be properly handed over to the incoming shift operator  | 1               | 2                  | -                | 1             |
| 20. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/her shift and should leave the department only after getting concurrence for the same from his/ her superiors | 1               | 1                  | -                | 2             |
| <b>21.</b> collect the wastes from waste collection bags, weigh them and transport to storage area   | 2               | 2                  | -                | -             |
| 22. ensure the work spot is clean  | 1               | 1                  | -                | 1             |
| NOS Total  | 37              | 35                 | -                | 28            |







# **National Occupational Standards (NOS) Parameters**

| NOS Code            | TSC/N0104   |
|---------------------|---|
| NOS Name            | Taking charge of shift and handing over shift to Carding Operator |
| Sector              | Textile   |
| Sub-Sector          | Spinning - Textiles   |
| Occupation          | Pre 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/N0105: Operating a carding machine

# **Description**

This unit is about carrying out procedure for operating the sequence of machines in carding

# Scope

The scope covers the following:

- · Operating the card
- Carryout cleaning activities
- Carryout maintenance activities
- Material handling and safety at workplace
- Other related responsibilities

# **Elements and Performance Criteria**

# Operating the card

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

- **PC1.** start the machine
- **PC2.** operate the control switches for starting and stopping the card
- **PC3.** follow the different signal lamps used in machines
- **PC4.** ensure proper functioning of card by verifying in the display panel
- **PC5.** check whether the material is properly fed in the carding machine via chute/lap feed system
- **PC6.** piece the sliver during breakage
- **PC7.** place empty can as per the machine number in the magazine
- **PC8.** view the display panel and identify the reasons for machine stoppages if any
- **PC9.** ensure the card is running in the set speed by viewing the display panel
- PC10. ensure the working area is clean
- PC11. ensure proper functioning of machine
- PC12. store defective material in non conformity area

# Carryout cleaning activities

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

- **PC13.** ensure the sliver produced is free from surface damages
- **PC14.** clean the wastes in the carding department as per schedule
- **PC15.** segregate the wastes collected and deposit at the waste bins
- PC16. remove the defect in slivers
- PC17. support the mechanic while carryout cleaning maintenance activities
- PC18. use proper tools for cleaning
- PC19. ensure safety while carrying out cleaning
- **PC20.** ensure the wastes collected are deposited in the respective waste box
- **PC21.** ensure carding area is clean







# Carryout maintenance activities

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

- PC22. ensure the chute/ lap feed is working properly and material is uniformly fed into card
- **PC23.** support the fitter for carrying out maintenance activities
- **PC24.** ensure the draft variation on CV% is within the limits and if its abnormal report it to superiors
- **PC25.** inform the supervisor and maintenance in charge in case of a jam
- **PC26.** support the fitter during minor breakdown

# Material handling and safety at workplace

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

- PC27. ensure proper material handling of sliver, sliver can and empty can
- **PC28.** ensure using proper material handling of tools and equipment
- PC29. ensure safety while operating the card
- PC30. use safety gadgets like caps, masks, shoes, also verify the safety stop motions

# Other related responsibilities

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

- **PC31.** ensure the sliver produced is free from outside damages
- PC32. inform superiors immediately, if any break down or fault in the machine is noticed
- **PC33.** ensure the proper functioning of signal lamps
- **PC34.** ensure that machine is always working properly, if any deviations inform superiors immediately
- **PC35.** collect the reusable wastes in card and weigh them at shift end and place them in specified area
- **PC36.** provide all relevant informations 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 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 and material flow in a spinning / textile mill
- **KU7.** understanding the importance of fibers, types of yarn, yarn count, types of sliver, sliver hank, importance of sliver and roving quality
- **KU8.** importance of carding, various parts in a card and their functions
- **KU9.** function of chute/lap feed system
- **KU10.** importance & functions of different signal lamps
- KU11. different control buttons in card
- **KU12.** knowledge of different functions in display panel and procedure to operate the card







- **KU13.** types of wastes
- **KU14.** procedure for collecting wastes
- **KU15.** guidelines for operating the material handling tools and equipment
- **KU16.** importance of cleanliness at work place
- KU17. procedure to identify the normal defects in card web and actions needed to correct them
- KU18. guidelines for carrying out cleaning activities
- **KU19.** guidelines for carrying out maintenance activities
- KU20. importance of material handling
- KU21. types of material handling equipment used
- KU22. functions and methodology for operating different material handling equipment
- KU23. importance of safety at card
- **KU24.** safety gadgets used in a textile 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 sliver
- **GS11.** procedure for cleaning the wastes and waste segregation
- GS12. procedure to carryout cleaning activities in card
- **GS13.** procedure for cleaning the carding area
- **GS14.** procedure to carryout basic maintenance activities in card
- **GS15.** maintain cleanliness at work place







# **Assessment Criteria**

| Assessment Criteria for Outcomes  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|---|-----------------|--------------------|------------------|---------------|
| Operating the card  | 18              | 22                 | -                | 15            |
| PC1. start the machine  | 1               | 1                  | -                | 1             |
| <b>PC2.</b> operate the control switches for starting and stopping the card                             | 1               | 2                  | -                | 1             |
| <b>PC3.</b> follow the different signal lamps used in machines  | 1               | 1                  | -                | 1             |
| <b>PC4.</b> ensure proper functioning of card by verifying in the display panel                         | 2               | 2                  | -                | 2             |
| <b>PC5.</b> check whether the material is properly fed in the carding machine via chute/lap feed system | 1               | 2                  | -                | 1             |
| PC6. piece the sliver during breakage   | 2               | 2                  | -                | 2             |
| <b>PC7.</b> place empty can as per the machine number in the magazine                                   | 2               | 2                  | -                | 2             |
| <b>PC8.</b> view the display panel and identify the reasons for machine stoppages if any                | 2               | 2                  | -                | 1             |
| <b>PC9.</b> ensure the card is running in the set speed by viewing the display panel                    | 1               | 2                  | -                | 1             |
| PC10. ensure the working area is clean  | 1               | 2                  | -                | 1             |
| PC11. ensure proper functioning of machine  | 2               | 2                  | -                | 1             |
| PC12. store defective material in non conformity area   | 2               | 2                  | -                | 1             |
| Carryout cleaning activities  | 10              | 18                 | -                | 9             |
| <b>PC13.</b> ensure the sliver produced is free from surface damages                                    | 1               | 2                  | -                | 1             |
| PC14. clean the wastes in the carding department as per schedule  | 1               | 2                  | -                | 1             |
| <b>PC15.</b> segregate the wastes collected and deposit at the waste bins                               | 2               | 2                  | -                | 1             |







| Assessment Criteria for Outcomes   | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|--|-----------------|--------------------|------------------|---------------|
| PC16. remove the defect in slivers   | 1               | 2                  | -                | 1             |
| <b>PC17.</b> support the mechanic while carryout cleaning maintenance activities                               | 1               | 2                  | -                | 1             |
| PC18. use proper tools for cleaning  | 1               | 2                  | -                | 1             |
| PC19. ensure safety while carrying out cleaning  | 1               | 2                  | -                | 1             |
| <b>PC20.</b> ensure the wastes collected are deposited in the respective waste box                             | 1               | 2                  | -                | 1             |
| PC21. ensure carding area is clean   | 1               | 2                  | -                | 1             |
| Carryout maintenance activities  | 6               | 8                  | -                | 5             |
| <b>PC22.</b> ensure the chute/ lap feed is working properly and material is uniformly fed into card            | 1               | 1                  | -                | 1             |
| <b>PC23.</b> support the fitter for carrying out maintenance activities  | 2               | 1                  | -                | 1             |
| <b>PC24.</b> ensure the draft variation on CV% is within the limits and if its abnormal report it to superiors | 1               | 2                  | -                | 1             |
| <b>PC25.</b> inform the supervisor and maintenance in charge in case of a jam                                  | 1               | 2                  | -                | 1             |
| PC26. support the fitter during minor breakdown  | 1               | 2                  | -                | 1             |
| Material handling and safety at workplace  | 5               | 7                  | -                | 4             |
| <b>PC27.</b> ensure proper material handling of sliver, sliver can and empty can                               | 1               | 1                  | -                | 1             |
| PC28. ensure using proper material handling of tools and equipment   | 2               | 2                  | -                | 1             |
| PC29. ensure safety while operating the card   | 1               | 2                  | -                | 1             |
| <b>PC30.</b> use safety gadgets like caps, masks, shoes, also verify the safety stop motions                   | 1               | 2                  | -                | 1             |
| Other related responsibilities   | 6               | 11                 | -                | 6             |







| Assessment Criteria for Outcomes  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|---|-----------------|--------------------|------------------|---------------|
| <b>PC31.</b> ensure the sliver produced is free from outside damages  | 1               | 2                  | -                | 1             |
| <b>PC32.</b> inform superiors immediately, if any break down or fault in the machine is noticed                           | 1               | 2                  | -                | 1             |
| <b>PC33.</b> ensure the proper functioning of signal lamps  | 1               | 1                  | -                | 1             |
| <b>PC34.</b> ensure that machine is always working properly, if any deviations inform superiors immediately               | 1               | 2                  | -                | 1             |
| <b>PC35.</b> collect the reusable wastes in card and weigh them at shift end and place them in specified area             | 1               | 2                  | -                | 1             |
| <b>PC36.</b> provide all relevant informations of the current working process to the next shift operator before relieving | 1               | 2                  | -                | 1             |
| NOS Total   | 45              | 66                 | -                | 39            |







# **National Occupational Standards (NOS) Parameters**

| NOS Code            | TSC/N0105                   |
|---------------------|-----------------------------|
| NOS Name            | Operating a carding machine |
| Sector              | Textile                     |
| Sub-Sector          | Spinning - Textiles         |
| Occupation          | Pre 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/N0106: Piecing the sliver and doffing the sliver can in card

# **Description**

This unit is about carrying out tenting, cleaning and maintenance activities in carding

# Scope

The scope covers the following:

- Attending the machine on sliver breakage
- · Piecing the sliver
- Checking the quality of piecing
- Carryout doffing
- Post doffing responsibilities

# **Elements and Performance Criteria**

# Attending the machine on sliver breakage

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

- 1. identify the machine stoppage by viewing the signal lamps and display panel
- 2. identify the reasons for sliver breakage
- **3.** ensure minimum time is taken for attending the sliver breakage in carding department *Piecing the sliver*

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

- **4.** open the calendaring zone of card using control switches
- **5.** collect the web from calendaring zone and condense through the calendaring rollers and trumpet for sliver formation
- **6.** ensure proper piecing of sliver
- 7. draw the sliver through the conveyor rollers and pass it through the coiler rollers in delivery zone into the sliver can
- 8. ensure proper functioning of card post piecing
- 9. collect the wastes collected during piecing and store the waste at respective waste box
- 10. segregate the reusable wastes and weigh and record them in a register
- 11. transfer the reusable wastes to carding
- **12.** ensure standard piecing procedure is adopted and quality of piecing is as per standards
- **13.** ensure that minimum time is taken for piecing the sliver
- **14.** ensure safety while carrying out piecing activity

#### Checking the quality of piecing

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

- **15.** verify the quality of piecing done in the sliver
- **16.** ensure that sliver tension in the creeling section is appropriate
- **17.** ensure proper functioning of the machine







# Carrying out doffing

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

- **18.** collect the empty cans from combing preparatory or drawing department for feeding the empty cans in card
- 19. keep the can castors clean before putting to the card
- 20. ensure whether the sliver can is ready for doffing by viewing the details in the display panel
- **21.** keep the empty cans at coiler for automatic can change
- 22. keep the empty sliver can near the doffing machine in manual doffing
- 23. doff the full sliver can in case of manual doffing
- **24.** ensure proper doffing procedure is followed
- 25. ensure doffing is carried out properly in auto doffing
- **26.** move the sliver can to storage area
- 27. ensure the card is properly restarted after doffing

# Post doffing responsibilities

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

- 28. ensure proper functioning of card post doffing
- 29. ensure proper material handling of sliver, sliver can and empty can
- 30. ensure proper material handling of tools and equipment

# **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 textile spinning / textile mill
- **KU6.** process flow and material flow in textile spinning / textile mill
- **KU7.** functions of carding machine
- **KU8.** functions of control switches and signal lamps in carding
- **KU9.** importance of piecing
- **KU10.** importance of doffing
- **KU11.** importance of sliver quality
- KU12. guidelines for piecing the sliver
- KU13. guidelines for carrying out doffing activity
- KU14. functions of different control switches in card
- **KU15.** knowledge of different functions in display panel and procedure to operate the card
- **KU16.** functions of different signal lamps in card
- **KU17.** importance of cleanliness and 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.** convey the instruction to coworker 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 collect the web from calendaring zone and condense through the calendaring rollers for sliver formation
- **GS11.** standard operating procedure for carrying out piecing activity
- **GS12.** standard operating procedure for carrying out doffing activity
- **GS13.** procedure for segregating the different types of fiber wastes
- **GS14.** procedure for storing reusable wastes and weighing them
- **GS15.** procedure for material handling of sliver, sliver cans
- **GS16.** maintain cleanliness at work







# **Assessment Criteria**

| Assessment Criteria for Outcomes  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|---|-----------------|--------------------|------------------|---------------|
| Attending the machine on sliver breakage  | 5               | 6                  | -                | 4             |
| 1. identify the machine stoppage by viewing the signal lamps and display panel  | 2               | 2                  | -                | 1             |
| 2. identify the reasons for sliver breakage   | 2               | 2                  | -                | 2             |
| 3. ensure minimum time is taken for attending the sliver breakage in carding department                                     | 1               | 2                  | -                | 1             |
| Piecing the sliver  | 19              | 26                 | -                | 15            |
| <b>4.</b> open the calendaring zone of card using control switches  | 1               | 2                  | -                | 1             |
| 5. collect the web from calendaring zone and condense through the calendaring rollers and trumpet for sliver formation      | 2               | 3                  | -                | 1             |
| 6. ensure proper piecing of sliver  | 2               | 3                  | -                | 2             |
| 7. draw the sliver through the conveyor rollers and pass it through the coiler rollers in delivery zone into the sliver can | 2               | 3                  | -                | 2             |
| 8. ensure proper functioning of card post piecing   | 2               | 2                  | -                | 2             |
| 9. collect the wastes collected during piecing and store the waste at respective waste box                                  | 2               | 2                  | -                | 2             |
| 10. segregate the reusable wastes and weigh and record them in a register   | 2               | 2                  | -                | 1             |
| 11. transfer the reusable wastes to carding   | 1               | 2                  | -                | 1             |
| <b>12.</b> ensure standard piecing procedure is adopted and quality of piecing is as per standards                          | 2               | 3                  | -                | 1             |
| <b>13.</b> ensure that minimum time is taken for piecing the sliver   | 2               | 2                  | -                | 1             |
| 14. ensure safety while carrying out piecing activity   | 1               | 2                  | -                | 1             |







| Assessment Criteria for Outcomes  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|---|-----------------|--------------------|------------------|---------------|
| Checking the quality of piecing   | 5               | 6                  | -                | 3             |
| <b>15.</b> verify the quality of piecing done in the sliver   | 2               | 2                  | -                | 1             |
| <b>16.</b> ensure that sliver tension in the creeling section is appropriate  | 2               | 2                  | -                | 1             |
| 17. ensure proper functioning of the machine  | 1               | 2                  | -                | 1             |
| Carrying out doffing  | 13              | 24                 | -                | 10            |
| <b>18.</b> collect the empty cans from combing preparatory or drawing department for feeding the empty cans in card | 1               | 2                  | -                | 1             |
| 19. keep the can castors clean before putting to the card   | 1               | 2                  | -                | 1             |
| <b>20.</b> ensure whether the sliver can is ready for doffing by viewing the details in the display panel           | 1               | 2                  | -                | 1             |
| <b>21.</b> keep the empty cans at coiler for automatic can change   | 1               | 2                  | -                | 1             |
| <b>22.</b> keep the empty sliver can near the doffing machine in manual doffing                                     | 1               | 2                  | -                | 1             |
| 23. doff the full sliver can in case of manual doffing  | 1               | 3                  | -                | 1             |
| 24. ensure proper doffing procedure is followed   | 2               | 4                  | -                | 1             |
| <b>25.</b> ensure doffing is carried out properly in auto doffing   | 2               | 3                  | -                | 1             |
| 26. move the sliver can to storage area   | 1               | 2                  | -                | 1             |
| <b>27.</b> ensure the card is properly restarted after doffing  | 2               | 2                  | -                | 1             |
| Post doffing responsibilities   | 5               | 6                  | -                | 3             |
| 28. ensure proper functioning of card post doffing  | 2               | 2                  | -                | 1             |







| Assessment Criteria for Outcomes   | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|--|-----------------|--------------------|------------------|---------------|
| <b>29.</b> ensure proper material handling of sliver, sliver can and empty can | 1               | 2                  | -                | 1             |
| <b>30.</b> ensure proper material handling of tools and equipment              | 2               | 2                  | -                | 1             |
| NOS Total  | 47              | 68                 | -                | 35            |







# **National Occupational Standards (NOS) Parameters**

| NOS Code            | TSC/N0106   |
|---------------------|---|
| NOS Name            | Piecing the sliver and doffing the sliver can in card |
| Sector              | Textile   |
| Sub-Sector          | Spinning - Textiles                                   |
| Occupation          | Pre 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







# **Assessment Criteria**

| Assessment Criteria for Outcomes  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>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             |
| <b>6.</b> 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                  | -                | -             |
| <b>9.</b> ensure that the correct machine guards are in place                                 | 1               | 1                  | -                | 1             |
| <b>10.</b> 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             |
| <b>14.</b> 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<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>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             |
| 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             |
| Adaptability   | 5               | 4                  | -                | 3             |
| 8. adjust in different work situations   | 1               | 1                  | -                | 1             |
| <b>9.</b> 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             |
| <b>12.</b> 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







# **Assessment Criteria**

| Assessment Criteria for Outcomes  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|---|-----------------|--------------------|------------------|---------------|
| Comply with health, Safety and security requirements at work  | 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             |
| <b>6.</b> 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             |
| <b>13.</b> 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             |







| Assessment Criteria for Outcomes   | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|--|-----------------|--------------------|------------------|---------------|
| <b>15.</b> participate in mock drills/ evacuation procedures organized at the workplace                                | 1               | 2                  | -                | -             |
| <b>16.</b> 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             |
| <b>18.</b> follow organisation procedures for shutdown and evacuation when required                                    | 1               | 1                  | -                | 1             |
| Recognizing the hazards  | 2               | 2                  | -                | 2             |
| <b>19.</b> identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry | 1               | 1                  | -                | 1             |
| <b>20.</b> recognise other possible security issues existing in the workplace  | 1               | 1                  | -                | 1             |
| Planning the safety techniques Implementing the programs   | 3               | 3                  | -                | 3             |
| <b>21.</b> 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







## **Assessment Criteria**

| Assessment Criteria for Outcomes  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>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             |
| <b>4.</b> 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             |
| <b>6.</b> 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  |
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## **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







#### **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







## **Assessment Criteria**

| Assessment Criteria for Outcomes   | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|--|-----------------|--------------------|------------------|---------------|
| Introduction to Employability Skills   | 1               | 1                  | -                | -             |
| <b>PC1.</b> understand the significance of employability skills in meeting the job requirements  | -               | -                  | -                | -             |
| Constitutional values - Citizenship  | 1               | 1                  | -                | -             |
| <b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices   | -               | -                  | -                | -             |
| Becoming a Professional in the 21st Century  | 1               | 3                  | -                | -             |
| <b>PC3.</b> 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                  | -                | -             |
| <b>PC4.</b> speak with others using some basic English phrases or sentences  | -               | -                  | -                | -             |
| Communication Skills   | 1               | 1                  | -                | -             |
| <b>PC5.</b> follow good manners while communicating with others  | -               | -                  | -                | -             |
| PC6. work with others in a team  | -               | -                  | -                | -             |
| Diversity & Inclusion  | 1               | 1                  | -                | -             |
| <b>PC7.</b> communicate and behave appropriately with all genders and PwD  | -               | -                  | -                | -             |
| PC8. report any issues related to sexual harassment  | -               | -                  | -                | -             |
| Financial and Legal Literacy   | 3               | 4                  | -                | -             |
| <b>PC9.</b> use various financial products and services safely and securely  | -               | -                  | -                | -             |







| Assessment Criteria for Outcomes  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks |
|---|-----------------|--------------------|------------------|---------------|
| PC10. calculate income, expenses, savings etc.  | -               | -                  | -                | -             |
| <b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws | -               | -                  | -                | -             |
| Essential Digital Skills  | 4               | 6                  | -                | -             |
| <b>PC12.</b> operate digital devices and use its features and applications securely and safely    | -               | -                  | -                | -             |
| <b>PC13.</b> use internet and social media platforms securely and safely                          | -               | -                  | -                | -             |
| Entrepreneurship  | 3               | 5                  | -                | -             |
| <b>PC14.</b> identify and assess opportunities for potential business                             | -               | -                  | -                | -             |
| <b>PC15.</b> identify sources for arranging money and associated financial and legal challenges   | -               | -                  | -                | -             |
| Customer Service  | 2               | 2                  | -                | -             |
| PC16. identify different types of customers   | -               | -                  | -                | -             |
| <b>PC17.</b> identify customer needs and address them appropriately                               | -               | -                  | -                | -             |
| <b>PC18.</b> 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  | -               | -                  | -                | -             |
| <b>PC21.</b> 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  | NA                              |
| Next Review Date    | 30/12/2024                      |
| NSQC Clearance Date | 30/12/2021                      |

## 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<br>Standards  | Theory<br>Marks | Practical<br>Marks | Project<br>Marks | Viva<br>Marks | Total<br>Marks | Weightage |
|---|-----------------|--------------------|------------------|---------------|----------------|-----------|
| TSC/N0104.Taking charge of shift and handing over shift to Carding Operator | 37              | 35                 | -                | 28            | 100            | 15        |
| TSC/N0105.Operating a carding machine                                       | 45              | 66                 | -                | 39            | 150            | 21        |
| TSC/N0106.Piecing the sliver and doffing the sliver can in card             | 47              | 68                 | -                | 35            | 150            | 21        |
| TSC/N9001.Maintain work area, tools, and machines                           | 17              | 20                 | -                | 13            | 50             | 7         |
| TSC/N9002.Working in a team   | 19              | 20                 | -                | 11            | 50             | 7         |
| TSC/N9003.Maintain health, safety and security at workplace                 | 32              | 40                 | -                | 28            | 100            | 15        |
| TSC/N9004.Comply with industry and organizational requirement               | 15              | 20                 | -                | 15            | 50             | 7         |
| DGT/VSQ/N0101.Employability<br>Skills (30 Hours)                            | 20              | 30                 | 0                | 0             | 50             | 7         |
| Total   | 232             | 299                | 0                | 169           | 700            | 100       |







## **Acronyms**

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







# **Glossary**

| 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 is derived from a further breakdown based on the characteristics and interests of its components.   |
| Occupation is a set of job roles, which perform similar/ related set of functions in an industry.  |
| Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.  |
| 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) are statements that together specify the standard of performance required when carrying out a task.  |
| NOS are occupational standards which apply uniquely in the Indian context.   |
| 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 is a unique identifier for an Occupational Standard, which is denoted by an 'N'  |
| Unit title gives a clear overall statement about what the incumbent should be able to do.  |
| 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 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<br>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<br>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<br>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.  |