

## Qualification Pack



# Knitting Machine Operator Flat Bed Knitting

QP Code: TSC/Q4102

Version: 2.0

NSQF Level: 3

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## Qualification Pack

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### TSC/Q4102: Knitting Machine Operator Flat Bed Knitting

#### Brief Job Description

A Flat Knitting operator is responsible to operate industrial knitting machines; repair yarn-related faults at the knitting head and fabric press-offs; operate process machines ancillary to the knitting production; identify and sort wastes; and demonstrate knowledge of yarn-related faults in knitted fabrics. This job requires the individual to have thorough knowledge in process flow and material flow in a knitting machine for fabric production and should know the important functions and operations of knitting machines.

#### Personal Attributes

A knitting operator 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/N4105: Taking charge of shift and handing over shift to Knitting Machine Operator Flat Bed Knitting](#)
2. [TSC/N4106: Operate the flat bed knitting machine](#)
3. [TSC/N4107: Piecing the yarn and doffing the fabric roll in the knitting machine](#)
4. [TSC/N4108: Repair yarn related faults in Flat Bed Knitting](#)
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](#)

#### Qualification Pack (QP) Parameters

|            |                     |
|------------|---------------------|
| Sector     | Textile             |
| Sub-Sector | Knitting - Textiles |
| Occupation | Knitting            |

## Qualification Pack

|                                                   |                                                                                                                                                |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Country                                           | India                                                                                                                                          |
| NSQF Level                                        | 3                                                                                                                                              |
| Aligned to NCO/ISCO/ISIC Code                     | NCO-2015/8152.06                                                                                                                               |
| Minimum Educational Qualification & Experience    | <ul style="list-style-type: none"> <li>Class 5th (OR)</li> <li>Helper - Knitting (NSQF Level 2) with 3 years of relevant experience</li> </ul> |
| Minimum Level of Education for Training in School |                                                                                                                                                |
| Pre-Requisite License or Training                 | NA                                                                                                                                             |
| Minimum Job Entry Age                             | 18 Years                                                                                                                                       |
| Last Reviewed On                                  | 21/01/2015                                                                                                                                     |
| Next Review Date                                  | 30/09/2026                                                                                                                                     |
| Deactivation Date                                 | 30/09/2026                                                                                                                                     |
| NSQC Approval Date                                | 05/08/2015                                                                                                                                     |
| Version                                           | 2.0                                                                                                                                            |
| Reference code on NQR                             | 2015/TEXT/TSC/01299                                                                                                                            |
| NQR Version                                       | 1.0                                                                                                                                            |

## Qualification Pack

# TSC/N4105: Taking charge of shift and handing over shift to Knitting Machine Operator Flat Bed Knitting

## Description

This unit is about taking charge of shift from previous shift Knitting machine operator Flat bed knitting and relieving the responsibilities to the next shift Knitting machine operator-Flat bed knitting

## Scope

This unit/task covers the following:

- Taking charge of shift from Knitting machine operator-Flat bed knitting
- Handing over shift to Knitting machine operator-Flat bed knitting

## Elements and Performance Criteria

### *Taking charge of shift from Knitting machine operator Flat bed knitting*

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

1. • reach atleast 10  
• 15 minutes early to the work place
2. bring the necessary operational tools to the department
3. meet the previous shift operator and collect the information regarding the count, process, issues faced in quality & current fabric production followed in the knitting department.
4. be updated on information regarding the current order such as it is, for which company and other details.
5. ensure proper functioning of machine and problems if any should be reported to the supervisor and maintenance incharge.
6. understand and be informed about the current order quantity and balance quantity.
7. be updated on the new order fabric details and quantity.

### *Handing Over Shift to Knitting machine operator-Flat bed knitting*

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

8. clean the machine and department before handing over the shift.
9. hand over the necessary operational tools if any.
10. meet the next shift operator and give the information regarding the count, GSM, loop length, process, issues faced in quality, and current fabric production followed in the knitting department.
11. note the production details for the current shift
12. ensure proper functioning of the machine and problems if any, should be reported to the supervisor and maintenance incharge.
13. give details to the next shift operator about the current order quality, quantity and balance quantity.
14. convey information regarding new order fabric details and quantity.

## Qualification Pack

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. standard operating procedures (SOP) and regulations in a knitting mill
- KU2. safe working practices to be adopted in knitting mill
- KU3. quality systems and other processes practiced in the knitting mill
- KU4. reporting to the supervisor or higher authority in case of emergency
- KU5. color coding adopted for different counts/products in the knitting mill
- KU6. Process flow and material flow in knitting industry
- KU7. Functions of a knitting machine
- KU8. Functions of control switches and signal lamps in knitting machine
- KU9. Importance of fabric quality
- KU10. Importance of yarn quality
- KU11. Functions of different control switches in knitting machine
- KU12. Knowledge of different functions in display panel and procedure to operate the knitting machine.
- KU13. Importance of fabric technical details (GSM, loop length) etc.
- KU14. Knowledge about type of the fabric, machine settings
- KU15. Importance of cleanliness and safety at the work place

### Generic Skills (GS)

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

- GS1. write clear and short sentences
- GS2. read and comprehend written instructions
- GS3. communicate with supervisor appropriately
- GS4. talk to others to convey information effectively
- GS5. apply problem-solving approaches in different situations
- GS6. refer anomalies to the supervisor
- GS7. seek clarification on problems from others
- GS8. apply good attention to detail
- GS9. check your work is complete and free from errors
- GS10. Procedure to collect the yarn from creel zone and condense through the guides, feeders for fabric formation.
- GS11. Procedure for segregating the different types of fabric and yarn
- GS12. Procedure for storing the fabric roll.
- GS13. Procedure for checking the fabric roll.
- GS14. Procedure for segregating the different types of wastes
- GS15. Procedure for storing reusable wastes and weighing them
- GS16. Procedure for material handling of cone, fabric roll
- GS17. Maintain cleanliness at work

## Qualification Pack

### Assessment Criteria

| Assessment Criteria for Outcomes                                                                                                                                                                      | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| <i>Taking charge of shift from Knitting machine operator Flat bed knitting</i>                                                                                                                        | 7            | 9               | -             | 7          |
| 1.<br>• reach atleast 10<br>• 15 minutes early to the work place                                                                                                                                      | 1            | 1               | -             | 1          |
| 2. bring the necessary operational tools to the department                                                                                                                                            | 1            | 1               | -             | 1          |
| 3. meet the previous shift operator and collect the information regarding the count, process, issues faced in quality & current fabric production followed in the knitting department.                | 1            | 2               | -             | 1          |
| 4. be updated on information regarding the current order such as it is, for which company and other details.                                                                                          | 1            | 1               | -             | 1          |
| 5. ensure proper functioning of machine and problems if any should be reported to the supervisor and maintenance incharge.                                                                            | 1            | 2               | -             | 1          |
| 6. understand and be informed about the current order quantity and balance quantity.                                                                                                                  | 1            | 1               | -             | 1          |
| 7. be updated on the new order fabric details and quantity.                                                                                                                                           | 1            | 1               | -             | 1          |
| <i>Handing Over Shift to Knitting machine operator- Flat bed knitting</i>                                                                                                                             | 7            | 13              | -             | 7          |
| 8. clean the machine and department before handing over the shift.                                                                                                                                    | 1            | 2               | -             | 1          |
| 9. hand over the necessary operational tools if any.                                                                                                                                                  | 1            | 2               | -             | 1          |
| 10. meet the next shift operator and give the information regarding the count, GSM, loop length, process, issues faced in quality, and current fabric production followed in the knitting department. | 1            | 2               | -             | 1          |
| 11. note the production details for the current shift                                                                                                                                                 | 1            | 2               | -             | 1          |

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| Assessment Criteria for Outcomes                                                                                                 | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|----------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| 12. ensure proper functioning of the machine and problems if any, should be reported to the supervisor and maintenance incharge. | 1            | 2               | -             | 1          |
| 13. give details to the next shift operator about the current order quality, quantity and balance quantity.                      | 1            | 2               | -             | 1          |
| 14. convey information regarding new order fabric details and quantity.                                                          | 1            | 1               | -             | 1          |
| <b>NOS Total</b>                                                                                                                 | <b>14</b>    | <b>22</b>       | <b>-</b>      | <b>14</b>  |

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### National Occupational Standards (NOS) Parameters

|                     |                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------|
| NOS Code            | TSC/N4105                                                                                    |
| NOS Name            | Taking charge of shift and handing over shift to Knitting Machine Operator Flat Bed Knitting |
| Sector              | Textile                                                                                      |
| Sub-Sector          | Knitting - Textiles                                                                          |
| Occupation          | Knitting                                                                                     |
| NSQF Level          | 3                                                                                            |
| Credits             | TBD                                                                                          |
| Version             | 2.0                                                                                          |
| Last Reviewed Date  | 21/01/2015                                                                                   |
| Next Review Date    | 30/09/2026                                                                                   |
| Deactivation Date   | 30/09/2026                                                                                   |
| NSQC Clearance Date | 05/08/2015                                                                                   |

## Qualification Pack

# TSC/N4106: Operate the flat bed knitting machine

## Description

This unit is about carrying out procedure for operating the sequence of flat knitting machine

## Scope

This unit/task covers the following:

- operate the knitting machine
- repair yarn related faults at the knitting head and fabric press-offs
- carry out maintenance activities
- material handling and safety at workplace
- other tenting responsibilities

## Elements and Performance Criteria

### *Operate the knitting machine*

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

1. start the machine
2. operate the control switches for starting and stopping the knitting machine
3. follow the signal lamps used in machines
4. ensure proper functioning of the knitting machine by verifying the display panel
5. ensure the machines are operated in accordance with workplace procedures.
6. ensure the yarns are run through correct yarn-paths at operating tensions according to machine-builder's instructions
7. ensure the production is monitored for faults, and variations notified, in accordance with workplace procedures.
8. ensure the machines are monitored for continuous functioning of all systems, and variations notified, in accordance with workplace procedures.
9. ensure the production is removed from machines in accordance with workplace procedures.
10. ensure the documentation of production is completed in accordance with workplace procedures.
11. ensure the machines are lubricated as directed in the machine manual
12. ensure the yarn paths, eyelets, knitting heads, machines, and working environment are clean and free of contamination.
13. check whether the yarns are properly fed in the knitting machine
14. knot the yarn in case of breakage
15. doff the full fabric roll
16. view the display panel or signal and identify the reasons for machine stoppages if any
17. ensure the knitting machine is running in the set speed by viewing the display panel
18. ensure the working area is clean
19. ensure proper functioning of machine

### *Repair yarn related faults at the knitting head and fabric press-offs*

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

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20. rethread incorrectly-positioned yarns in accordance with workplace procedures.
21. join broken yarns or new ends
22. fix fabric press-offs
23. reset machines for restart
24. Arrange after fault correction, style changes, and pattern changes
25. ensure the feeder is working properly and yarn is uniformly fed into the feeder.

#### *Carry out maintenance activities*

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

26. support the fitter for carrying out maintenance activities
27. ensure the gsm, loop length variation is within the limits and if it's abnormal report it to superiors.
28. inform the supervisor and maintenance incharge in case of a jam
29. support the fitter during minor breakdown
30. ancillary process machines are operated in accordance with machine-builder's instructions
31. safety precautions that comply with workplace procedures are observed.
32. the working environment is kept clean and free of contamination

#### *Material handling and safety at workplace*

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

33. ensure proper material handling of yarn, cone and empty cone
34. ensure using proper material handling of tools and equipments
35. ensure safety while operating the machine.
36. using of safety gadgets like caps, masks, ear plugs and shoes and verifying the safety stop motions

#### *Other tenting responsibilities*

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

37. ensure the fabric produced is free from outside damages
38. collect usable waste to be weighed at shift end and to be placed in the specified area
39. inform superiors immediately, if any break down or fault in the machine is noticed
40. ensure the proper functioning of signal lamps
41. ensure that machine is always working properly, if any deviations inform superiors immediately
42. identify yarn wastes by fibre content and sorted according to workplace procedures
43. identify fabric wastes are identified and sorted according to workplace procedures.
44. 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 knitting mill
- KU2. safe working practices to be adopted in knitting mill
- KU3. quality systems and other processes practiced in the knitting unit of the mill

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- KU4. reporting to the supervisor or higher authority in case of emergency
- KU5. color coding adopted for different counts/products in the knitting mill
- U6. process and material flow in a knitting unit of the mill
- KU7. understanding the importance of yarn, types of yarn, yarn count, types of fabric, loop length, gsm, importance of yarn and fabric quality
- KU8. importance of flat knitting machine, various parts in a knitting machine and their functions
- KU9. function of a feeder
- KU10. importance & functions of signal lamps
- KU11. different control buttons in knitting machine
- KU12. knowledge of different functions in display panel and procedure to operate the knitting machine
- KU13. types of waste
- KU14. procedure for collecting waste
- KU15. guidelines for operating the material handling tools and equipments
- KU16. importance of cleanliness at work place
- KU17. procedure to identify the normal defects in fabric 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 equipments used
- KU22. functions and methodology for operating different material handling equipments
- KU23. safety gadgets used in a knitting department

## Generic Skills (GS)

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

- GS1. write clear and short sentences
- GS2. read and comprehend written instructions
- GS3. communicate with supervisor appropriately
- GS4. talk to others to convey information effectively
- GS5. apply problem-solving approaches in different situations
- GS6. refer anomalies to the supervisor
- GS7. seek clarification on problems from others
- GS8. apply good attention to detail
- GS9. check your work is complete and free from errors
- GS10. Procedure to identify and remove the defects in fabric
- GS11. Procedure for cleaning the wastes and waste segregation
- GS12. Procedure to carryout cleaning activities in knitting machine
- GS13. Procedure for cleaning the knitting machine area.
- GS14. Procedure to carryout basic maintenance activities in knitting machine
- GS15. Maintain cleanliness at work place

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### Assessment Criteria

| Assessment Criteria for Outcomes                                                                                                                  | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| <i>Operate the knitting machine</i>                                                                                                               | 26           | 43              | -             | 32         |
| 1. start the machine                                                                                                                              | 1            | 2               | -             | 1          |
| 2. operate the control switches for starting and stopping the knitting machine                                                                    | 1            | 2               | -             | 1          |
| 3. follow the signal lamps used in machines                                                                                                       | 1            | 2               | -             | 2          |
| 4. ensure proper functioning of the knitting machine by verifying the display panel                                                               | 1            | 2               | -             | 1          |
| 5. ensure the machines are operated in accordance with workplace procedures.                                                                      | 1            | 2               | -             | 1          |
| 6. ensure the yarns are run through correct yarn-paths at operating tensions according to machine-builder's instructions                          | 2            | 2               | -             | 2          |
| 7. ensure the production is monitored for faults, and variations notified, in accordance with workplace procedures.                               | 1            | 3               | -             | 2          |
| 8. ensure the machines are monitored for continuous functioning of all systems, and variations notified, in accordance with workplace procedures. | 1            | 2               | -             | 2          |
| 9. ensure the production is removed from machines in accordance with workplace procedures.                                                        | 1            | 2               | -             | 2          |
| 10. ensure the documentation of production is completed in accordance with workplace procedures.                                                  | 2            | 2               | -             | 2          |
| 11. ensure the machines are lubricated as directed in the machine manual                                                                          | 1            | 2               | -             | 2          |
| 12. ensure the yarn paths, eyelets, knitting heads, machines, and working environment are clean and free of contamination.                        | 2            | 2               | -             | 2          |
| 13. check whether the yarns are properly fed in the knitting machine                                                                              | 2            | 4               | -             | 2          |

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| Assessment Criteria for Outcomes                                                                            | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|-------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| 14. knot the yarn in case of breakage                                                                       | 1            | 2               | -             | 1          |
| 15. doff the full fabric roll                                                                               | 1            | 2               | -             | 2          |
| 16. view the display panel or signal and identify the reasons for machine stoppages if any                  | 2            | 4               | -             | 2          |
| 17. ensure the knitting machine is running in the set speed by viewing the display panel                    | 2            | 2               | -             | 2          |
| 18. ensure the working area is clean                                                                        | 2            | 3               | -             | 2          |
| 19. ensure proper functioning of machine                                                                    | 1            | 1               | -             | 1          |
| <i>Repair yarn related faults at the knitting head and fabric press-offs</i>                                | <b>6</b>     | <b>11</b>       | -             | <b>9</b>   |
| 20. rethread incorrectly-positioned yarns in accordance with workplace procedures.                          | 1            | 2               | -             | 2          |
| 21. join broken yarns or new ends                                                                           | 1            | 2               | -             | 2          |
| 22. fix fabric press-offs                                                                                   | 1            | 1               | -             | 1          |
| 23. reset machines for restart                                                                              | 1            | 2               | -             | 1          |
| 24. Arrange after fault correction, style changes, and pattern changes                                      | 1            | 2               | -             | 2          |
| 25. ensure the feeder is working properly and yarn is uniformly fed into the feeder.                        | 1            | 2               | -             | 1          |
| <i>Carry out maintenance activities</i>                                                                     | <b>7</b>     | <b>14</b>       | -             | <b>8</b>   |
| 26. support the fitter for carrying out maintenance activities                                              | 1            | 2               | -             | 1          |
| 27. ensure the gsm, loop length variation is within the limits and if it's abnormal report it to superiors. | 1            | 2               | -             | 1          |
| 28. inform the supervisor and maintenance incharge in case of a jam                                         | 1            | 2               | -             | 1          |
| 29. support the fitter during minor breakdown                                                               | 1            | 2               | -             | 1          |
| 30. ancillary process machines are operated in accordance with machine-builder's instructions               | 1            | 2               | -             | 1          |

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| Assessment Criteria for Outcomes                                                                                | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|-----------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| 31. safety precautions that comply with workplace procedures are observed.                                      | 1            | 2               | -             | 2          |
| 32. the working environment is kept clean and free of contamination                                             | 1            | 2               | -             | 1          |
| <i>Material handling and safety at workplace</i>                                                                | 4            | 7               | -             | 4          |
| 33. ensure proper material handling of yarn, cone and empty cone                                                | 1            | 2               | -             | 1          |
| 34. ensure using proper material handling of tools and equipments                                               | 1            | 2               | -             | 1          |
| 35. ensure safety while operating the machine.                                                                  | 1            | 2               | -             | 1          |
| 36. using of safety gadgets like caps, masks, ear plugs and shoes and verifying the safety stop motions         | 1            | 1               | -             | 1          |
| <i>Other tenting responsibilities</i>                                                                           | 9            | 11              | -             | 9          |
| 37. ensure the fabric produced is free from outside damages                                                     | 1            | 1               | -             | 1          |
| 38. collect usable waste to be weighed at shift end and to be placed in the specified area                      | 1            | 1               | -             | 1          |
| 39. inform superiors immediately, if any break down or fault in the machine is noticed                          | 1            | 1               | -             | 1          |
| 40. ensure the proper functioning of signal lamps                                                               | 1            | 1               | -             | 1          |
| 41. ensure that machine is always working properly, if any deviations inform superiors immediately              | 2            | 3               | -             | 2          |
| 42. identify yarn wastes by fibre content and sorted according to workplace procedures                          | 1            | 1               | -             | 1          |
| 43. identify fabric wastes are identified and sorted according to workplace procedures.                         | 1            | 1               | -             | 1          |
| 44. provide all relevant information of the current working process to the next shift operator before relieving | 1            | 2               | -             | 1          |
| <b>NOS Total</b>                                                                                                | <b>52</b>    | <b>86</b>       | <b>-</b>      | <b>62</b>  |

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### National Occupational Standards (NOS) Parameters

|                     |                                       |
|---------------------|---------------------------------------|
| NOS Code            | TSC/N4106                             |
| NOS Name            | Operate the flat bed knitting machine |
| Sector              | Textile                               |
| Sub-Sector          | Knitting - Textiles                   |
| Occupation          | Knitting                              |
| NSQF Level          | 3                                     |
| Credits             | TBD                                   |
| Version             | 2.0                                   |
| Last Reviewed Date  | 21/01/2015                            |
| Next Review Date    | 30/09/2026                            |
| Deactivation Date   | 30/09/2026                            |
| NSQC Clearance Date | 05/08/2015                            |

## Qualification Pack

# TSC/N4107: Piecing the yarn and doffing the fabric roll in the knitting machine

## Description

This unit is about carrying out piecing, cleaning and maintenance activities in the knitting department

## Scope

This unit/task covers the following:

- Attending the machine on yarn breakage
- Piecing the yarn
- Checking the quality of piecing
- Carryout doffing

## Elements and Performance Criteria

### *Attending the machine on yarn 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 in display panel
2. identify the reasons for yarn breakage
3. ensure minimum time is taken for attending the yarn breakage in carding department

### *Piecing the yarn*

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

4. unwind the yarn from the cone
5. ensure proper piecing
6. draw the yarn through the guide, guide rollers and pass it through the stop motion into the feeder in the delivery zone
7. ensure proper functioning of knitting machine post piecing
8. collect the waste collected during piecing and store the waste at respective waste box
9. segregate the reusable wastes and weigh and record them in a register
10. ensure standard piecing procedure is adopted and quality of piecing is as per standards
11. ensure minimum time is taken for piecing the yarn.
12. ensure safety while carrying out piecing activity

### *Check the quality of piecing*

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

13. verify the quality of piecing done in the yarn
14. ensure yarn tension in the creeling section is appropriate
15. ensure proper functioning of the machine

### *Carry out doffing*

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

16. collect the empty cones from creel and replace with a full cone

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17. ensure whether the fabric roll is ready for doffing by viewing the details in display panel or by manual
18. keep the empty fabric roller ready for replacement
19. to keep the empty fabric roll near the knitting machine in manual doffing
20. to doff the full fabric roll in case of manual doffing
21. ensure proper doffing procedure is followed
22. ensure doffing is carried out properly
23. move the fabric roll to the storage area
24. ensure the knitting machine is properly restarted after doffing

### *Post doffing responsibilities*

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

25. ensure proper functioning of knitting machine post doffing
26. ensure proper material handling of yarn, cone and empty cone
27. ensure proper material handling of tools and equipments

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. standard operating procedures (SOP) and regulations in a knitting unit of the mill
- KU2. safe working practices to be adopted in knitting unit of the mill
- KU3. quality systems and other processes practiced in the knitting unit of the mill
- KU4. reporting to the supervisor or higher authority in case of emergency
- KU5. color coding adopted for different counts/ products in the knitting mill
- KU6. process flow and material flow in knitting industry
- KU7. functions of knitting machine
- KU8. functions of control switches and signal lamps in knitting machine
- KU9. importance of piecing
- KU10. importance of doffing
- KU11. importance of fabric quality
- KU12. guidelines for piecing the yarn
- KU13. guidelines for carrying out doffing activity knowledge of different functions in display panel and procedure to operate the knitting machine
- KU14. 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

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- 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 collect the yarn from creel zone and condense through the guides, feeders for fabric 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 wastes
- GS14. Procedure for storing reusable waste and weighing them
- GS15. Procedure for material handling of cone, fabric roll
- GS16. Maintain cleanliness at work

## Qualification Pack

### Assessment Criteria

| Assessment Criteria for Outcomes                                                                                           | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|----------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| <i>Attending the machine on yarn breakage</i>                                                                              | 3            | 5               | -             | 3          |
| 1. identity the machine stoppage by viewing the signal lamps and in display panel                                          | 1            | 1               | -             | 1          |
| 2. identify the reasons for yarn breakage                                                                                  | 1            | 2               | -             | 1          |
| 3. ensure minimum time is taken for attending the yarn breakage in carding department                                      | 1            | 2               | -             | 1          |
| <i>Piecing the yarn</i>                                                                                                    | 9            | 13              | -             | 11         |
| 4. unwind the yarn from the cone                                                                                           | 1            | 1               | -             | 1          |
| 5. ensure proper piecing                                                                                                   | 1            | 1               | -             | 1          |
| 6. draw the yarn through the guide, guide rollers and pass it through the stop motion into the feeder in the delivery zone | 1            | 2               | -             | 2          |
| 7. ensure proper functioning of knitting machine post piecing                                                              | 1            | 2               | -             | 2          |
| 8. collect the waste collected during piecing and store the waste at respective waste box                                  | 1            | 1               | -             | 1          |
| 9. segregate the reusable wastes and weigh and record them in a register                                                   | 1            | 1               | -             | 1          |
| 10. ensure standard piecing procedure is adopted and quality of piecing is as per standards                                | 1            | 2               | -             | 1          |
| 11. ensure minimum time is taken for piecing the yarn.                                                                     | 1            | 2               | -             | 1          |
| 12. ensure safety while carrying out piecing activity                                                                      | 1            | 1               | -             | 1          |
| <i>Check the quality of piecing</i>                                                                                        | 3            | 4               | -             | 3          |
| 13. verify the quality of piecing done in the yarn                                                                         | 1            | 1               | -             | 1          |
| 14. ensure yarn tension in the creeling section is appropriate                                                             | 1            | 1               | -             | 1          |

### Qualification Pack

| Assessment Criteria for Outcomes                                                                             | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|--------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| 15. ensure proper functioning of the machine                                                                 | 1            | 2               | -             | 1          |
| <i>Carry out doffing</i>                                                                                     | 9            | 16              | -             | 12         |
| 16. collect the empty cones from creel and replace with a full cone                                          | 1            | 2               | -             | 1          |
| 17. ensure whether the fabric roll is ready for doffing by viewing the details in display panel or by manual | 1            | 2               | -             | 2          |
| 18. keep the empty fabric roller ready for replacement                                                       | 1            | 2               | -             | 2          |
| 19. to keep the empty fabric roll near the knitting machine in manual doffing                                | 1            | 2               | -             | 2          |
| 20. to doff the full fabric roll in case of manual doffing                                                   | 1            | 2               | -             | 1          |
| 21. ensure proper doffing procedure is followed                                                              | 1            | 2               | -             | 1          |
| 22. ensure doffing is carried out properly                                                                   | 1            | 2               | -             | 1          |
| 23. move the fabric roll to the storage area                                                                 | 1            | 1               | -             | 1          |
| 24. ensure the knitting machine is properly restarted after doffing                                          | 1            | 1               | -             | 1          |
| <i>Post doffing responsibilities</i>                                                                         | 3            | 3               | -             | 3          |
| 25. ensure proper functioning of knitting machine post doffing                                               | 1            | 1               | -             | 1          |
| 26. ensure proper material handling of yarn, cone and empty cone                                             | 1            | 1               | -             | 1          |
| 27. ensure proper material handling of tools and equipments                                                  | 1            | 1               | -             | 1          |
| <b>NOS Total</b>                                                                                             | <b>27</b>    | <b>41</b>       | <b>-</b>      | <b>32</b>  |

## Qualification Pack

### National Occupational Standards (NOS) Parameters

|                     |                                                                      |
|---------------------|----------------------------------------------------------------------|
| NOS Code            | TSC/N4107                                                            |
| NOS Name            | Piecing the yarn and doffing the fabric roll in the knitting machine |
| Sector              | Textile                                                              |
| Sub-Sector          | Knitting - Textiles                                                  |
| Occupation          | Knitting                                                             |
| NSQF Level          | 3                                                                    |
| Credits             | TBD                                                                  |
| Version             | 2.0                                                                  |
| Last Reviewed Date  | 21/01/2015                                                           |
| Next Review Date    | 30/09/2026                                                           |
| Deactivation Date   | 30/09/2026                                                           |
| NSQC Clearance Date | 05/08/2015                                                           |

## Qualification Pack

### TSC/N4108: Repair yarn related faults in Flat Bed Knitting

#### Description

This unit is about carrying out the Repair of yarn-related faults at the knitting machine

#### Scope

This unit/task covers the following:

- Attending the yarn related faults

#### Elements and Performance Criteria

##### *Attending the yarn related faults*

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

1. rethread incorrectly-positioned yarns in accordance with workplace procedures
2. identify the reasons for yarn breakage
3. broken yarns or new ends are joined in accordance with workplace procedures.
4. machines are reset for restart in accordance with workplace procedures after fault correction, style changes, and pattern changes.

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. standard operating procedures (SOP) and regulations in a knitting mill
- KU2. safe working practices to be adopted in knitting mill
- KU3. quality systems and other processes practiced in the knitting mill
- KU4. reporting to the supervisor or higher authority in case of emergency
- KU5. color coding adopted for different counts/ products in the knitting mill
- KU6. process flow and material flow in knitting industry
- KU7. functions of knitting machine
- KU8. functions of control switches and signal lamps in knitting machine
- KU9. importance of piecing
- KU10. importance of doffing
- KU11. importance of fabric quality
- KU12. guidelines for piecing the yarn
- KU13. guidelines for carrying out doffing activity
- KU14. functions of different control switches in knitting machine
- KU15. knowledge of different functions in display panel and procedure to operate the knitting machine
- KU16. importance of cleanliness and safety at work place

## Qualification Pack

### Generic Skills (GS)

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

- GS1. write clear and short sentences
- GS2. Read and comprehend written instructions
- GS3. Communicate with supervisor appropriately
- GS4. talk to others to convey information effectively
- GS5. apply problem-solving approaches in different situations
- GS6. refer anomalies to the supervisor
- GS7. seek clarification on problems from others
- GS8. apply good attention to detail
- GS9. check your work is complete and free from errors
- GS10. Procedure for collect the yarn from creel zone and condense through the guides, feeders for fabric 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 wastes
- GS14. Procedure for storing reusable waste and weighing them
- GS15. Procedure for material handling of cone, fabric roll
- GS16. Maintain cleanliness at work

## Qualification Pack

### Assessment Criteria

| Assessment Criteria for Outcomes                                                                                                      | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| <i>Attending the yarn related faults</i>                                                                                              | 6            | 12              | -             | 7          |
| 1. rethread incorrectly-positioned yarns in accordance with workplace procedures                                                      | 1            | 2               | -             | 2          |
| 2. identify the reasons for yarn breakage                                                                                             | 2            | 4               | -             | 2          |
| 3. broken yarns or new ends are joined in accordance with workplace procedures.                                                       | 1            | 2               | -             | 1          |
| 4. machines are reset for restart in accordance with workplace procedures after fault correction, style changes, and pattern changes. | 2            | 4               | -             | 2          |
| <b>NOS Total</b>                                                                                                                      | <b>6</b>     | <b>12</b>       | <b>-</b>      | <b>7</b>   |

## Qualification Pack

### National Occupational Standards (NOS) Parameters

|                     |                                                 |
|---------------------|-------------------------------------------------|
| NOS Code            | TSC/N4108                                       |
| NOS Name            | Repair yarn related faults in Flat Bed Knitting |
| Sector              | Textile                                         |
| Sub-Sector          | Knitting - Textiles                             |
| Occupation          | Knitting                                        |
| NSQF Level          | 3                                               |
| Credits             | TBD                                             |
| Version             | 2.0                                             |
| Last Reviewed Date  | 21/01/2015                                      |
| Next Review Date    | 30/09/2026                                      |
| Deactivation Date   | 30/09/2026                                      |
| NSQC Clearance Date | 05/08/2015                                      |

## Qualification Pack

### TSC/N9001: Maintain work area, tools and machines

#### Description

This unit provides performance criteria, knowledge & understanding and skills & abilities required to organise/ maintain work areas and activities to ensure tools and machines are maintained as per norms

#### Scope

This unit/task 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

## Qualification Pack

- 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

## Qualification Pack

### Assessment Criteria

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

|                     |                                         |
|---------------------|-----------------------------------------|
| NOS Code            | TSC/N9001                               |
| NOS Name            | Maintain work area, tools and machines  |
| Sector              | Textile                                 |
| Sub-Sector          | Spinning, Weaving, Processing, Knitting |
| Occupation          | Textile Mill sector - Cotton            |
| NSQF Level          | 4                                       |
| Credits             | TBD                                     |
| Version             | 2.0                                     |
| Last Reviewed Date  | 25/02/2015                              |
| Next Review Date    | 30/09/2026                              |
| Deactivation Date   | 30/09/2026                              |
| NSQC Clearance Date | 05/08/2015                              |

## Qualification Pack

### TSC/N9002: Working in a team

#### Description

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

#### Scope

This unit/task covers the following:

- 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

## Qualification Pack

- 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

## Qualification Pack

### Assessment Criteria

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

## Qualification Pack

### 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          | 4                                       |
| Credits             | TBD                                     |
| Version             | 2.0                                     |
| Last Reviewed Date  | 25/02/2015                              |
| Next Review Date    | 30/09/2026                              |
| Deactivation Date   | 30/09/2026                              |
| NSQC Clearance Date | 05/08/2015                              |

## Qualification Pack

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

#### Description

This unit provides performance criteria, knowledge & understanding and skills & abilities required to comply with health, safety and security requirements at the workplace and covers procedures to prevent, control and minimize risk to self and others.

#### Scope

This unit/task covers the following:

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

#### Elements and Performance Criteria

##### *Comply with health, Safety and security requirements at work*

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

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

##### *Recognizing the hazards*

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

## Qualification Pack

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

### *Planning the safety techniques Implementing the programs*

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

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

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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

## Generic Skills (GS)

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

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

## Qualification Pack

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

## Qualification Pack

### Assessment Criteria

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

### Qualification Pack

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

|                     |                                                   |
|---------------------|---------------------------------------------------|
| NOS Code            | TSC/N9003                                         |
| NOS Name            | Maintain health, safety and security at workplace |
| Sector              | Textile                                           |
| Sub-Sector          | Spinning, Weaving, Processing, Knitting           |
| Occupation          | Textile Mill sector - Cotton                      |
| NSQF Level          | 4                                                 |
| Credits             | TBD                                               |
| Version             | 2.0                                               |
| Last Reviewed Date  | 25/02/2015                                        |
| Next Review Date    | 30/09/2026                                        |
| Deactivation Date   | 30/09/2026                                        |
| NSQC Clearance Date | 05/08/2015                                        |

## Qualification Pack

### TSC/N9004: Comply with industry and organizational requirement

#### Description

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

#### Scope

This unit/task covers the following:

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

#### Elements and Performance Criteria

##### *Self development*

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

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

##### *Team work*

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

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

##### *Organisational standards*

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

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

##### *Industry standards*

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

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

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

## Qualification Pack

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

## Generic Skills (GS)

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

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

## Qualification Pack

### Assessment Criteria

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

|                     |                                                     |
|---------------------|-----------------------------------------------------|
| NOS Code            | TSC/N9004                                           |
| NOS Name            | Comply with industry and organizational requirement |
| Sector              | Textile                                             |
| Sub-Sector          | Spinning, Weaving, Processing, Knitting             |
| Occupation          | Textile Mill sector - Cotton                        |
| NSQF Level          | 4                                                   |
| Credits             | TBD                                                 |
| Version             | 2.0                                                 |
| Last Reviewed Date  | 25/02/2015                                          |
| Next Review Date    | 30/09/2026                                          |
| Deactivation Date   | 30/09/2026                                          |
| NSQC Clearance Date | 05/08/2015                                          |

## 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

## Qualification Pack

**Minimum Aggregate Passing % at QP Level : 70**

(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/N4105.Taking charge of shift and handing over shift to Knitting Machine Operator Flat Bed Knitting | 14           | 22              | -             | 14         | 50          | 8          |
| TSC/N4106.Operate the flat bed knitting machine                                                        | 52           | 86              | -             | 62         | 200         | 32         |
| TSC/N4107.Piecing the yarn and doffing the fabric roll in the knitting machine                         | 27           | 41              | -             | 32         | 100         | 16         |
| TSC/N4108.Repair yarn related faults in Flat Bed Knitting                                              | 6            | 12              | -             | 7          | 25          | 4          |
| TSC/N9001.Maintain work area, tools and machines                                                       | 17           | 20              | -             | 13         | 50          | 8          |
| TSC/N9002.Working in a team                                                                            | 19           | 20              | -             | 11         | 50          | 8          |
| TSC/N9003.Maintain health, safety and security at workplace                                            | 32           | 40              | -             | 28         | 100         | 16         |
| TSC/N9004.Comply with industry and organizational requirement                                          | 15           | 20              | -             | 15         | 50          | 8          |
| <b>Total</b>                                                                                           | <b>182</b>   | <b>261</b>      | <b>-</b>      | <b>182</b> | <b>625</b>  | <b>100</b> |

## Qualification Pack

### Acronyms

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

## Qualification Pack

### Glossary

|                                              |                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sector</b>                                | 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.                                                                      |
| <b>Sub-sector</b>                            | Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.                                                                                                                                                                                     |
| <b>Occupation</b>                            | Occupation is a set of job roles, which perform similar/ related set of functions in an industry.                                                                                                                                                                                                |
| <b>Job role</b>                              | Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.                                                                                                                                                                                |
| <b>Occupational Standards (OS)</b>           | 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. |
| <b>Performance Criteria (PC)</b>             | Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.                                                                                                                                                                    |
| <b>National Occupational Standards (NOS)</b> | NOS are occupational standards which apply uniquely in the Indian context.                                                                                                                                                                                                                       |
| <b>Qualifications Pack (QP)</b>              | 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.                                                                                                                       |
| <b>Unit Code</b>                             | Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'                                                                                                                                                                                                        |
| <b>Unit Title</b>                            | Unit title gives a clear overall statement about what the incumbent should be able to do.                                                                                                                                                                                                        |
| <b>Description</b>                           | 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.                                                                                                                   |
| <b>Scope</b>                                 | 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.                                                                                            |

## Qualification Pack

|                                         |                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge and Understanding (KU)</b> | 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.                                                                                                                                               |
| <b>Organisational Context</b>           | 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.                                                                                                                                                                       |
| <b>Technical Knowledge</b>              | Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.                                                                                                                                                                                                                                                               |
| <b>Core Skills/ Generic Skills (GS)</b> | 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. |
| <b>Electives</b>                        | 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.                                                                            |
| <b>Options</b>                          | 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.                                                                                                                                                          |