







# Fitter - Ring Spinning

QP Code: TSC/Q0402

Version: 3.0

NSQF Level: 4

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# TSC/Q0402: Fitter - Ring Spinning

# **Brief Job Description**

The ring spinning fitter is responsible for carrying out all the maintenance activities in a ring spinning machine. He/she should be able to carry out all the maintenance activities such as erecting, dismantling, assembling, leveling, attending & resolving repairs and breakdowns in a ring spinning machine. The fitter should also carry out regular maintenance activities thus ensuring proper functioning of the machines.

#### **Personal Attributes**

This job requires the individual to have thorough knowledge of process flow and material flow in a spinning mill for yarn production and should have sound technical knowledge on erecting the different sequence of machines in ring spinning machine.

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

### **Compulsory NOS:**

- 1. TSC/N0406: Taking charge of shift and handing over shift to Fitter Ring Spinning
- 2. TSC/N0407: General Maintenance Responsibilities- Ring Spinning
- 3. TSC/N0408: Preventive maintenance responsibilities Ring Spinning
- 4. TSC/N0409: Break Down Maintenance- Ring Spinning
- 5. TSC/N0410: Maintaining records and ensuring availability of spares in ring spinning
- 6. TSC/N9001: Maintain work area, tools, and machines
- 7. TSC/N9002: Working in a team
- 8. TSC/N9003: Maintain health, safety and security at workplace
- 9. TSC/N9004: Comply with industry and organizational requirement
- 10. DGT/VSQ/N0101: Employability Skills (30 Hours)

#### **Qualification Pack (QP) Parameters**

Sector	Textile
Sub-Sector	Spinning - Textiles







Occupation	Maintenance-Weaving Machines
Country	India
NSQF Level	4
Credits	16
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8151.99
Minimum Educational Qualification & Experience	11th Class (with no experience (OR) Completed 1st year of 3-year diploma (after 10th) and pursuing regular diploma with no experience (OR) 10th grade pass plus 1-year NTC/NAC with no experience (OR) 8th grade pass plus 2-year NTC plus 1 Year NAC with no experience (OR) 8th pass plus 1-year NTC plus 1-Year NAC plus CITS with no experience (OR) 10th grade pass and pursuing continuous schooling (OR) 10th Grade Pass with 2 year relevant experience (OR) Previous relevant Qualification of NSQF Level 3.0 with minimum education as 5th Grade pass (OR) Previous relevant Qualification of NSQF Level 3.5 with 1 year relevant experience)
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	25/11/2024
NSQC Approval Date	17/11/2022
Version	3.0
Reference code on NQR	2022/TEXT/TSC/07086
NQR Version	1.0







# TSC/N0406: Taking charge of shift and handing over shift to Fitter - Ring Spinning

# **Description**

This unit is about taking charge of shift from previous shift fitter-Ring Spinning and relieving the responsibilities to the next shift fitter-Ring Spinning

# Scope

The scope covers the following:

- Taking charge of shift from fitter-Ring Spinning
- Handing over shift to fitter-Ring Spinning

## **Elements and Performance Criteria**

#### Taking charge of shift from fitter-Ring Spinning

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

- **PC1.** come at least 10 15 minutes earlier to the work spot
- PC2. bring the necessary operational tools to the department
- **PC3.** meet the previous shift fitter and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc
- **PC4.** understand the count produced, colour coding, followed in the ring spinning machines
- **PC5.** patrol around the machines in spinning department and ensure the smooth functioning of all the machines in the department
- **PC6.** discuss with previous shift fitter regarding the issues faced in the machines if any
- **PC7.** ensure all the machines are running properly, for machines which are not running and problems if any should be clarified with the fitter, supervisor and operator
- **PC8.** check the cleanliness of work areas
- **PC9.** check whether any spare/raw material/ tool / yarn / any other material are thrown under the machines or in the other work areas
- **PC10.** should question the previous shift maintenance people for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift
- **PC11.** ensure the work spot is clean
- **PC12.** take over the shift from the outgoing shift's fitter in a proper manner

#### Handing over shift to fitter-Ring Spinning

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

- **PC13.** ensure in providing the details regarding count produced, colour coding followed for his allocated number of machines in ring spinning department
- **PC14.** provide all relevant information regarding the count produced, idle machines, damaged machine parts if any
- PC15. get clearance from the incoming counterpart before leaving the work spot







- **PC16.** report to his shift's superiors as well as the incoming shift's superiors in case his/ her counterpart doesn't report for the incoming shift
- **PC17.** report to his shift superior about the quality / production / maintenance issues / safety issues/ any other issue faced in his/her shift and should leave the department only after getting concurrence for the same from his/ her superiors
- **PC18.** ensure the shift has to be properly handed over to the incoming shift fitter
- **PC19.** report to his shift superior about the quality / production / maintenance issues / safety issues/ any other issue faced in his shift and should leave the department only after getting concurrence for the same from his/ her superiors
- PC20. ensure the work spot is clean

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** standard operating procedures (SOP) and regulations in a spinning/ textile mill
- KU2. safe working practices to be adopted in spinning / textile mill
- **KU3.** quality systems and other processes practiced in the spinning / textile mill
- **KU4.** reporting to the supervisor or higher authority in case of emergency
- **KU5.** color coding adopted for different counts in the spinning / textile mill
- **KU6.** understanding the importance of: types of fibres, types of yarn, yarn count, sliver hank
- **KU7.** process flow in a spinning / textile mill
- **KU8.** material flow in a spinning / textile mill
- **KU9.** functions of different machines in ring spinning department
- **KU10.** importance of colour coding followed for different counts
- **KU11.** guidelines for operating the ring spinning machines
- KU12. guidelines for taking charge of shift from previous shift fitter
- **KU13.** guidelines for handing over the shift to the next shift fitter
- **KU14.** functions and methodology for operating different material handling tools
- **KU15.** knowledge of waste collection system & equipment used
- **KU16.** importance of cleanliness at workplace
- **KU17.** safety procedures to be followed

### **Generic Skills (GS)**

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

- **GS1.** write clear and short sentences
- **GS2.** comprehend written instructions
- **GS3.** communicate with supervisor appropriately
- **GS4.** talk to others to convey information effectively
- **GS5.** apply problem-solving approaches in different situations
- **GS6.** refer anomalies to the supervisor







- **GS7.** seek clarification on problems from others
- **GS8.** apply good attention to detail
- **GS9.** check your work is complete and free from errors
- **GS10.** patrol around different machines in spinning department
- **GS11.** operate the different mechanisms of the ring spinning machine
- **GS12.** procedure for patrolling around the spinning machinery and identifying worn out or damaged machine parts
- **GS13.** maintain neatness at work







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Taking charge of shift from fitter-Ring Spinning	18	27	-	18
<b>PC1.</b> come at least 10 - 15 minutes earlier to the work spot	-	-	-	-
<b>PC2.</b> bring the necessary operational tools to the department	-	-	-	-
<b>PC3.</b> meet the previous shift fitter and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc	-	-	-	-
<b>PC4.</b> understand the count produced, colour coding, followed in the ring spinning machines	-	-	-	-
<b>PC5.</b> patrol around the machines in spinning department and ensure the smooth functioning of all the machines in the department	-	-	-	-
<b>PC6.</b> discuss with previous shift fitter regarding the issues faced in the machines if any	-	-	-	-
<b>PC7.</b> ensure all the machines are running properly, for machines which are not running and problems if any should be clarified with the fitter, supervisor and operator	-	-	-	-
PC8. check the cleanliness of work areas	-	-	-	-
<b>PC9.</b> check whether any spare/raw material/ tool / yarn / any other material are thrown under the machines or in the other work areas	-	-	-	-
<b>PC10.</b> should question the previous shift maintenance people for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift	-	-	-	-
PC11. ensure the work spot is clean	-	-	-	-
<b>PC12.</b> take over the shift from the outgoing shift's fitter in a proper manner	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Handing over shift to fitter-Ring Spinning	8	13	-	16
<b>PC13.</b> ensure in providing the details regarding count produced, colour coding followed for his allocated number of machines in ring spinning department	-	-	-	-
<b>PC14.</b> provide all relevant information regarding the count produced, idle machines, damaged machine parts if any	-	-	-	-
<b>PC15.</b> get clearance from the incoming counterpart before leaving the work spot	-	-	-	-
<b>PC16.</b> report to his shift's superiors as well as the incoming shift's superiors in case his/ her counterpart doesn't report for the incoming shift	-	-	-	-
<b>PC17.</b> report to his shift superior about the quality / production / maintenance issues / safety issues/ any other issue faced in his/her shift and should leave the department only after getting concurrence for the same from his/ her superiors	-	-	-	-
<b>PC18.</b> ensure the shift has to be properly handed over to the incoming shift fitter	-	-	-	-
<b>PC19.</b> report to his shift superior about the quality / production / maintenance issues / safety issues/ any other issue faced in his shift and should leave the department only after getting concurrence for the same from his/ her superiors	-	-	-	-
PC20. ensure the work spot is clean	-	-	-	-
NOS Total	26	40	-	34







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

NOS Code	TSC/N0406
NOS Name	Taking charge of shift and handing over shift to Fitter - Ring Spinning
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Maintenance-Spinning Machines
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	17/11/2022







# TSC/N0407: General Maintenance Responsibilities- Ring Spinning

### **Description**

This unit is about carrying out general maintenance activities in spinning department

# Scope

The scope covers the following:

General maintenance activities

#### **Elements and Performance Criteria**

#### General Maintenance Activities

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

- **PC1.** take a round of the work area before the start of the shift for observing the working
- **PC2.** note down the machines stopped for repairs and the type of problem
- **PC3.** dismantle and assemble different mechanisms in machines on need basis
- **PC4.** understand the quality complaints in the machines
- **PC5.** understand the works done till now and the works pending in the machines stopped for repairs or for maintenance works or modifications
- **PC6.** understand the production plan and preparing maintenance plan and allocating people for different activities
- **PC7.** understand the machines allotted for various counts and mixings and decide on the parameters to be checked while doing maintenance like top arm settings, spacers, cots and aprons, spindle tapes, jockey pulley alignment, rings and travelers, traveler clearer setting, etc.
- **PC8.** allocate the workers for different tasks considering their knowledge, skills, maturity and workloads agreed
- **PC9.** identify any abnormal sound in running machine
- **PC10.** identify any damaged cops in the ring spinning department and segregate the same
- **PC11.** refer to process parameters and work out the changes to be made for change in hank or product mix and getting the changes made by the concerned maintenance workers
- **PC12.** ensure the use of safety gadgets like caps, masks, gloves and shoes by all maintenance workers
- **PC13.** counsel and influence a poor performers worker to achieve output as per norms

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** organization's standard operating procedures (SOP)
- **KU2.** knowledge of customers
- **KU3.** potential hazards associated with the machines and the safety precautions must be taken







- **KU4.** protocol to obtain more information on work related tasks
- **KU5.** contact person in case of queries on procedure or products and for revolving issues related to defective machines, tools, materials & equipments
- **KU6.** details of the various job roles & responsibilities
- **KU7.** documentation and reporting formats
- **KU8.** work targets & review machine with superiors
- **KU9.** protocol and format for reporting work related risks/ problems
- **KU10.** method of obtaining /giving feed back with respect to performance
- **KU11.** importance of team work & harmonious working relationships
- **KU12.** process for offering /obtaining work related assistance
- **KU13.** responsibilities under health, safety and environmental legislation
- KU14. guidelines for storage & disposal of waste materials
- **KU15.** process flow and material flow in spinning
- KU16. functions of ring spinning machine
- **KU17.** planning of maintenance activities and preparing date-wise plans for maintenance and replacement of parts considering their life
- **KU18.** role of humidity and temperature in maintaining quality and productivity
- KU19. basic knowledge of operating a humidification plant
- KU20. workload, work allocation and standard working conditions for maintenance operatives
- **KU21.** calculation of maintenance efficiency, time spent for maintenance, men employed, cost of maintenance, costs of spares consumption, mean time between breakdowns, and the industry norms
- KU22. factors affecting maintenance
- **KU23.** roles and responsibilities of a maintenance supervisor
- **KU24.** basic supervisory skills listening and observing, communicating, counseling, taking charge, reporting and motivating
- **KU25.** general management knowledge of managing subordinates, coordinating with workshop, electrical department, stores and production
- **KU26.** standing orders and discipline in working
- **KU27.** precautions to be taken while working
- **KU28.** importance of cleanliness and personal safety
- KU29. fire fighting and first aid
- **KU30.** safety precautions and gadgets to be used in factory

#### **Generic Skills (GS)**

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

- **GS1.** write clear and short sentences
- **GS2.** comprehend written instructions
- GS3. Read, write and communicate orally in local language
- **GS4.** Plan and manage work routine based on instructions from supervisor







- **GS5.** Should willingly participate in the various programs/ meetings that are conducted by the Superiors & put forth the suggestions in the interest of the Company
- GS6. Participate in the Quality Circles formed by the Superiors
- **GS7.** Should extend voluntary supports and adapt to the various procedures that are adopted by the Company with respect to compliances for the different like ISO 9001, ISO 14001, SA 8001 GOTS Certification Fair Trade etc.
- **GS8.** Procedure to alter the setting of the following: creel, condensers, drafting zone, top arm settings, spacers, cots and aprons, spindle tapes, jockey pulley alignment, rings, spindle, travelers, traveler clearer setting, pneumatic pipe fitting, changing gear wheel, variation alignment, drafting setting, ring centering, lappet & ABC setting, flutter roller eccentricity, top arm pressure checking, gear end service, piston service, timing belt checking, bobbin holder checking, spindle oil checking,
- **GS9.** skill to change the settings of different mechanisms in ring frame
- **GS10.** procedure to dismantle and assemble different mechanisms in the ring frame







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
General Maintenance Activities	26	33	-	16
<b>PC1.</b> take a round of the work area before the start of the shift for observing the working	-	-	-	-
<b>PC2.</b> note down the machines stopped for repairs and the type of problem	-	-	-	-
<b>PC3.</b> dismantle and assemble different mechanisms in machines on need basis	-	-	-	-
<b>PC4.</b> understand the quality complaints in the machines	-	-	-	-
<b>PC5.</b> understand the works done till now and the works pending in the machines stopped for repairs or for maintenance works or modifications	-	-	-	-
<b>PC6.</b> understand the production plan and preparing maintenance plan and allocating people for different activities	-	-	-	-
<b>PC7.</b> understand the machines allotted for various counts and mixings and decide on the parameters to be checked while doing maintenance like top arm settings, spacers, cots and aprons, spindle tapes, jockey pulley alignment, rings and travelers, traveler clearer setting, etc.	-	-	-	-
<b>PC8.</b> allocate the workers for different tasks considering their knowledge, skills, maturity and workloads agreed	-	-	-	-
<b>PC9.</b> identify any abnormal sound in running machine	-	-	-	-
<b>PC10.</b> identify any damaged cops in the ring spinning department and segregate the same	-	-	-	-
<b>PC11.</b> refer to process parameters and work out the changes to be made for change in hank or product mix and getting the changes made by the concerned maintenance workers	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. ensure the use of safety gadgets like caps, masks, gloves and shoes by all maintenance workers	-	-	-	-
<b>PC13.</b> counsel and influence a poor performers worker to achieve output as per norms	-	-	-	-
NOS Total	26	33	-	16







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

NOS Code	TSC/N0407
NOS Name	General Maintenance Responsibilities- Ring Spinning
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Maintenance-Spinning Machines
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	17/11/2022







# TSC/N0408: Preventive maintenance responsibilities - Ring Spinning

### **Description**

This unit is about carrying out preventive maintenance activities in ring spinning

# Scope

The scope covers the following:

- Inspecting the condition of working parts
- Carrying out maintenance
- Oiling and greasing the machine parts

#### **Elements and Performance Criteria**

#### Inspecting the working condition of machine parts

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

- **PC1.** check the proper functioning of machines like ring frame and the ancillaries like trolleys, filters, roller covering and so on
- PC2. check the conditions of machine parts while they are being cleaned/scoured or overhauled
- **PC3.** ensure the use of safety gadgets like caps, masks, gloves and shoes by all maintenance workers

#### Carrying out maintenance

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

- **PC4.** change the settings of the machines on need basis
- PC5. identify the worn-out parts and get the worn-out parts replaced
- **PC6.** verify the safety stop motions and get them attended
- **PC7.** monitor the stoppages due to breakdowns, analyze the reasons for breakdowns and take precautionary measures
- **PC8.** monitor the cot mounting and buffing activities
- **PC9.** conduct the tool audits i.e. the tools used for maintenance like spanners, top arm gauge, lubricating and flushing pumps, buffing machines, mounting machines, etc

## Oiling and greasing the machine

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

- **PC10.** oil and grease the different machine parts at scheduled interval for smooth functioning of machines
- **PC11.** schedule the oiling & greasing activities
- **PC12.** ensure correct oil and grease are taken
- **PC13.** ensure proper functioning of machines in preparatory department

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:







- **KU1.** organization's standard operating procedures (SOP)
- **KU2.** should have awareness, knowledge of customers
- **KU3.** potential hazards associated with the machines and the safety precautions must be taken
- **KU4.** protocol to obtain more information on work related tasks
- **KU5.** contact person in case of queries on procedure or products and for revolving issues related to defective machines, tools, materials & equipments
- **KU6.** details of the various job roles & responsibilities
- **KU7.** documentation and reporting formats
- **KU8.** work targets & review machine with superiors
- **KU9.** protocol and format for reporting work related risks/ problems
- **KU10.** method of obtaining /giving feed back with respect to performance
- KU11. importance of team work & harmonious working relationships
- **KU12.** process for offering /obtaining work related assistance
- **KU13.** responsibilities under health, safety and environmental legislation
- **KU14.** guidelines for storage & disposal of waste materials
- **KU15.** importance and functions of various machines and mechanisms used in ring frame machine
- **KU16.** planning maintenance activities and preparing date-wise plans for maintenance and replacement of parts considering their life
- **KU17.** role of humidity and temperature in maintaining quality and productivity. basic knowledge of operating a humidification plant
- **KU18.** workloads, work allocation and standard working conditions for maintenance operatives
- **KU19.** calculation of maintenance efficiency, time spent for maintenance, men employed, cost of maintenance, costs of spares consumption, mean time between breakdowns, and the industry norms
- **KU20.** factors affecting maintenance
- **KU21.** roles and responsibilities of a maintenance supervisor
- KU22. basic supervisory skills
- **KU23.** importance of conducting the tool audits
- **KU24.** importance of oiling and greasing
- **KU25.** types of maintenance tools used
- **KU26.** general management knowledge of managing subordinates, coordinating with workshop, electrical department, stores and production
- **KU27.** standing orders and discipline in working and precautions to be taken while working
- **KU28.** safety precautions and gadgets to be used in factory

#### **Generic Skills (GS)**

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

- **GS1.** write clear and short sentences
- **GS2.** comprehend written instructions
- **GS3.** plan and manage work routine based on instructions from supervisor







- **GS4.** should willingly participate in the various programs/ meetings that are conducted by the superiors & put forth the suggestions in the interest of the company
- **GS5.** participate in the quality circles that formed by the superiors
- **GS6.** should extend voluntary supports and adapt to the various procedures that are adopted by the company with respect to compliances for the different certifications like ISO 9001, ISO 14001, SA 8001 GOTS Certification Fair Trade etc.
- **GS7.** skill to check the condition of different machine parts
- **GS8.** procedure to replace worn-out parts
- **GS9.** procedure for cot mounting and buffing activities
- **GS10.** skill to carryout mounting activities in cards, comber half laps and various beaters
- **GS11.** procedure to oil and grease the different machine parts
- **GS12.** ensuring correct oil and grease are taken
- **GS13.** skill to change the settings of the different machine parts of the ring frame







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Inspecting the working condition of machine parts	6	7	-	3
<b>PC1.</b> check the proper functioning of machines like ring frame and the ancillaries like trolleys, filters, roller covering and so on	-	-	-	-
<b>PC2.</b> check the conditions of machine parts while they are being cleaned/scoured or overhauled	-	-	-	-
<b>PC3.</b> ensure the use of safety gadgets like caps, masks, gloves and shoes by all maintenance workers	-	-	-	-
Carrying out maintenance	12	17	-	6
<b>PC4.</b> change the settings of the machines on need basis	-	-	-	-
<b>PC5.</b> identify the worn-out parts and get the worn-out parts replaced	-	-	-	-
<b>PC6.</b> verify the safety stop motions and get them attended	-	-	-	-
<b>PC7.</b> monitor the stoppages due to breakdowns, analyze the reasons for breakdowns and take precautionary measures	-	-	-	-
<b>PC8.</b> monitor the cot mounting and buffing activities	-	-	-	-
<b>PC9.</b> conduct the tool audits i.e. the tools used for maintenance like spanners, top arm gauge, lubricating and flushing pumps, buffing machines, mounting machines, etc	-	-	-	-
Oiling and greasing the machine	8	11	-	5
<b>PC10.</b> oil and grease the different machine parts at scheduled interval for smooth functioning of machines	-	-	-	-
PC11. schedule the oiling & greasing activities	-	-	-	-
PC12. ensure correct oil and grease are taken	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> ensure proper functioning of machines in preparatory department	-	-	-	-
NOS Total	26	35	-	14







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

NOS Code	TSC/N0408
NOS Name	Preventive maintenance responsibilities - Ring Spinning
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Post Spinning Operations
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	17/11/2022







# TSC/N0409: Break Down Maintenance- Ring Spinning

# **Description**

This unit is about carrying out breakdown maintenance activities in Ring spinning department in case of emergency

# Scope

The scope covers the following:

- · Attending the machine on breakdown
- Identifying the reason for breakdown and carryout maintenance activity
- Post maintenance activities

#### **Elements and Performance Criteria**

#### Attending the machine on breakdown

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

- **PC1.** attend the machine on break down
- **PC2.** report to the maintenance incharge on breakdown
- **PC3.** preparing the machine for carrying out breakdown maintenance
- **PC4.** ensure in bringing the proper tool and equipments required for carrying out maintenance

Identifying the reason for breakdown and carryout maintenance activity

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

- **PC5.** analyze the machine which is under breakdown
- **PC6.** identify the reason for breakdown
- **PC7.** carryout maintenance activities
- PC8. replace worn out parts with new parts
- **PC9.** ensure safety while carrying out maintenance activity
- PC10. ensure proper material handling of maintenance tools

#### Post maintenance activities

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

- **PC11.** check for proper functioning of machine after maintenance
- **PC12.** run the machine and check for smooth functioning of machine parts
- **PC13.** repair further if further fine tuning is needed
- **PC14.** ensure the output material quality is as per quality requirement
- **PC15.** ensuring the use of safety gadgets like caps, masks, gloves and shoes by all maintenance workers
- **PC16.** ensure minimum time is taken for attending the breakdown, identifying the reason for breakdown and carryout the breakdown maintenance activities

# **Knowledge and Understanding (KU)**







The individual on the job needs to know and understand:

- KU1. organization's standard operating procedures (SOP)
- **KU2.** knowledge of customers
- **KU3.** potential hazards associated with the machines and the safety precautions must be taken
- **KU4.** protocol to obtain more information on work related tasks
- **KU5.** contact person in case of queries on procedure or products and for revolving issues related to defective machines, tools, materials & equipments
- **KU6.** details of the various job roles & responsibilities
- **KU7.** documentation and reporting formats
- **KU8.** work targets & review machine with superiors
- **KU9.** protocol and format for reporting work related risks/ problems
- **KU10.** method of obtaining /giving feed back with respect to performance
- **KU11.** importance of team work & harmonious working relationships
- **KU12.** process for offering /obtaining work related assistance
- KU13. responsibilities under health, safety and environmental legislation
- **KU14.** guidelines for storage & disposal of waste materials
- KU15. importance and functions of various machines and mechanisms used in ring frame
- **KU16.** workloads, work allocation and standard working conditions for maintenance operatives
- **KU17.** roles and responsibilities of a maintenance supervisor
- KU18. basic supervisory skills
- KU19. general management knowledge
- **KU20.** standing orders and discipline in working and precautions to be taken while working
- **KU21.** standing orders and discipline in working and precautions to be taken while working
- **KU22.** factors affecting maintenance
- **KU23.** importance of time management
- **KU24.** safety precautions and gadgets to be used in factory

#### **Generic Skills (GS)**

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

- **GS1.** write clear and short sentences
- **GS2.** comprehend written instructions
- **GS3.** read, write and communicate orally in local language
- **GS4.** plan and manage work routine based on instructions from supervisor
- **GS5.** participate in the various programs/ meetings that are conducted by the superiors & put forth the suggestions in the interest of the company
- **GS6.** participate in the Quality Circles that formed by the superiors
- **GS7.** extend voluntary supports and adapt to the various procedures that are adopted by the company with respect to compliances for the different certifications like ISO 9001, ISO 14001. SA 8001 GOTS Certification Fair Trade etc







**GS8.** skill to identify the reason for breakdown

**GS9.** skill to carryout different maintenance activities

**GS10.** skill of handling the different maintenance tools properly

**GS11.** skill to identify that the quality of output material is as per requirement

**GS12.** maintain cleanliness at work place







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Attending the machine on breakdown	4	7	-	5
PC1. attend the machine on break down	-	-	-	-
<b>PC2.</b> report to the maintenance incharge on breakdown	-	-	-	-
<b>PC3.</b> preparing the machine for carrying out breakdown maintenance	-	-	-	-
<b>PC4.</b> ensure in bringing the proper tool and equipments required for carrying out maintenance	-	-	-	-
Identifying the reason for breakdown and carryout maintenance activity	7	16	-	5
<b>PC5.</b> analyze the machine which is under breakdown	-	-	-	-
PC6. identify the reason for breakdown	-	-	-	-
PC7. carryout maintenance activities	-	-	-	-
PC8. replace worn out parts with new parts	-	-	-	-
<b>PC9.</b> ensure safety while carrying out maintenance activity	-	-	-	-
<b>PC10.</b> ensure proper material handling of maintenance tools	-	-	-	-
Post maintenance activities	6	16	-	4
<b>PC11.</b> check for proper functioning of machine after maintenance	-	-	-	-
PC12. run the machine and check for smooth functioning of machine parts	-	<u>-</u>	-	-
PC13. repair further if further fine tuning is needed	-	<u>-</u>	-	-
<b>PC14.</b> ensure the output material quality is as per quality requirement	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> ensuring the use of safety gadgets like caps, masks, gloves and shoes by all maintenance workers	-	-	-	-
<b>PC16.</b> ensure minimum time is taken for attending the breakdown, identifying the reason for breakdown and carryout the breakdown maintenance activities	-	-	-	-
NOS Total	17	39	-	14







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

NOS Code	TSC/N0409
NOS Name	Break Down Maintenance- Ring Spinning
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Maintenance-Spinning Machines
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	17/11/2022







# TSC/N0410: Maintaining records and ensuring availability of spares in ring spinning

# **Description**

This unit is about carrying out maintaining record of maintenance activities in ring spinning machine

# Scope

The scope covers the following:

• Maintaining records and ensuring availability of spares

#### **Elements and Performance Criteria**

#### Maintaining records and ensuring availability of spares

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

- **PC1.** carryout maintenance auditing
- PC2. record the activities in the log book (report book) and update the machine history book
- **PC3.** verify the stock of various spares, accessories and lubricants and work out the indenting plan and
  - placing indents
- **PC4.** refer the machinery catalogues and identify the correct spares needed
- **PC5.** check quality of materials received at stores, for e.g. bearings, wheels, arbours, machine spares, belts, brushes, spanners and other tools, etc
- **PC6.** carry out maintenance machine audit
- PC7. maintain the records of maintenance
- **PC8.** ensuring availability of spares and giving requisitions on need basis

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** organization's standard operating procedures (SOP)
- **KU2.** knowledge of customers
- **KU3.** potential hazards associated with the machines and the safety precautions must be taken
- **KU4.** protocol to obtain more information on work related tasks
- **KU5.** contact person in case of queries on procedure or products and for revolving issues related to defective machines, tools, materials & equipments
- **KU6.** details of the various job roles & responsibilities
- **KU7.** documentation and reporting formats
- **KU8.** work targets & review machine with superiors
- **KU9.** protocol and format for reporting work related risks/ problems
- **KU10.** method of obtaining /giving feed back with respect to performance







- **KU11.** importance of team work & harmonious working relationships
- **KU12.** process for offering /obtaining work related assistance
- KU13. responsibilities under health, safety and environmental legislation
- **KU14.** guidelines for storage & disposal of waste materials
- **KU15.** planning maintenance activities and preparing date-wise plans for maintenance and replacement of parts considering their life
- **KU16.** types and functions of different spares in ring frame
- **KU17.** calculation of maintenance efficiency, time spent for maintenance, men employed, cost of maintenance, costs of spares consumption, mean time between breakdowns, and the industry norms
- **KU18.** roles and responsibilities of a maintenance supervisor
- **KU19.** general management knowledge of managing subordinates, coordinating with workshop, electrical department, stores and production
- **KU20.** standing orders and maintaining discipline at work

### **Generic Skills (GS)**

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

- **GS1.** write clear and short sentences
- GS2. comprehend written instructions
- **GS3.** read, write and communicate orally in local language
- GS4. plan and manage work routine based on instructions from supervisor
- **GS5.** participate in the various programs/ meetings that are conducted by the superiors & put forth the suggestions in the interest of the company
- **GS6.** participate in the Quality Circles that formed by the superiors
- **GS7.** extend voluntary supports and adapt to the various procedures that are adopted by the company with respect to compliances for the different certifications like ISO 9001, ISO 14001, SA 8001 GOTS Certification Fair Trade etc.
- **GS8.** carryout maintenance auditing
- **GS9.** verify the quality of different spares used







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintaining records and ensuring availability of spares	11	14	-	5
PC1. carryout maintenance auditing	-	-	-	<del>-</del>
<b>PC2.</b> record the activities in the log book (report book) and update the machine history book	-	-	-	-
<ul> <li>PC3.</li> <li>verify the stock of various spares, accessories and lubricants and work out the indenting plan and</li> <li>placing indents</li> </ul>	-	-	-	-
<b>PC4.</b> refer the machinery catalogues and identify the correct spares needed	-	-	-	-
<b>PC5.</b> check quality of materials received at stores, for e.g. bearings, wheels, arbours, machine spares, belts, brushes, spanners and other tools, etc	-	-	-	-
PC6. carry out maintenance machine audit	-	-	-	-
PC7. maintain the records of maintenance	-	-	-	-
<b>PC8.</b> ensuring availability of spares and giving requisitions on need basis	-	-	-	-
NOS Total	11	14	-	5







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

NOS Code	TSC/N0410
NOS Name	Maintaining records and ensuring availability of spares in ring spinning
Sector	Textile
Sub-Sector	Spinning - Textiles
Occupation	Post Spinning Operations
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	17/11/2022







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

# **Description**

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

## Scope

The scope covers the following:

Maintaining the work area, tools and machines

#### **Elements and Performance Criteria**

### Maintaining the work area, tools and machines

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

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

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

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







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

# **Generic Skills (GS)**

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

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







## **Assessment Criteria**

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







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

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







# TSC/N9002: Working in a team

# **Description**

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

### Scope

The scope covers the following:

- · commitment and trust
- communication
- adaptability
- · creative freedom

#### **Elements and Performance Criteria**

#### Commitment and trust

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

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

#### Communication

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

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

#### Adaptability

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

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

#### Creative freedom

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

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

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

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







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

# **Generic Skills (GS)**

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

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







# **Assessment Criteria**

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







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

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







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

# **Description**

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

# Scope

The scope covers the following:

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

#### **Elements and Performance Criteria**

# Comply with health, Safety and security requirements at work

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

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

#### Recognizing the hazards

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







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

### Planning the safety techniques Implementing the programs

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

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

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

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

### **Generic Skills (GS)**

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

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







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







# **Assessment Criteria**

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







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







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

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







# TSC/N9004: Comply with industry and organizational requirement

# **Description**

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

### Scope

The scope covers the following:

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

### **Elements and Performance Criteria**

#### Self development

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

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

#### Team work

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

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

# Organisational standards

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

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

#### Industry standards

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

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

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:







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

### **Generic Skills (GS)**

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

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







# **Assessment Criteria**

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







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

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







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

# **Description**

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

### Scope

The scope covers the following:

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

### **Elements and Performance Criteria**

#### Introduction to Employability Skills

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

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

#### Constitutional values - Citizenship

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

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

### Becoming a Professional in the 21st Century

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

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

#### Basic English Skills

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

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

#### Communication Skills

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

**PC5.** follow good manners while communicating with others

**PC6.** work with others in a team







### **Diversity & Inclusion**

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

- **PC7.** communicate and behave appropriately with all genders and PwD
- **PC8.** report any issues related to sexual harassment

### Financial and Legal Literacy

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

- **PC9.** use various financial products and services safely and securely
- PC10. calculate income, expenses, savings etc.
- **PC11.** approach the concerned authorities for any exploitation as per legal rights and laws

# Essential Digital Skills

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

- PC12. operate digital devices and use its features and applications securely and safely
- **PC13.** use internet and social media platforms securely and safely

#### Entrepreneurship

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

- PC14. identify and assess opportunities for potential business
- PC15. identify sources for arranging money and associated financial and legal challenges

#### **Customer Service**

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

- **PC16.** identify different types of customers
- **PC17.** identify customer needs and address them appropriately
- **PC18.** follow appropriate hygiene and grooming standards

### Getting ready for apprenticeship & Jobs

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

- PC19. create a basic biodata
- **PC20.** search for suitable jobs and apply
- PC21. identify and register apprenticeship opportunities as per requirement

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** need for employability skills
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use basic spoken English language
- **KU6.** Do and dont of effective communication
- **KU7.** inclusivity and its importance
- KU8. different types of disabilities and appropriate communication and behaviour towards PwD
- **KU9.** different types of financial products and services







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

# **Generic Skills (GS)**

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

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







# **Assessment Criteria**

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







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







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

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

# Assessment Guidelines and Assessment Weightage

### **Assessment Guidelines**

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

### Minimum Aggregate Passing % at QP Level: 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/N0406.Taking charge of shift and handing over shift to Fitter - Ring Spinning	26	40	-	34	100	15
TSC/N0407.General Maintenance Responsibilities- Ring Spinning	26	33	-	16	75	11
TSC/N0408.Preventive maintenance responsibilities - Ring Spinning	26	35	-	14	75	11
TSC/N0409.Break Down Maintenance- Ring Spinning	17	39	-	14	70	11
TSC/N0410.Maintaining records and ensuring availability of spares in ring spinning	11	14	-	5	30	5
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	15
TSC/N9004.Comply with industry and organizational requirement	15	20	-	15	50	8
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	0	0	50	8
Total	209	291	0	150	650	100







# **Acronyms**

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







# **Glossary**

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







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