





Transforming the skill landscape



# Winding Tenter

Electives: Autoconer/ Manual cone winding/ Doubler winding

QP Code: TSC/Q0305

Version: 2.0

NSQF Level: 3

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



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# Contents

TSC/Q0305: Winding Tenter	3
TSC/Q0305: Winding Tenter Brief Job Description	3
Applicable National Occupational Standards (NOS)	
Compulsory NOS	. 3
Elective 1: Autoconer	3
Elective 2: Manual cone winding	
Elective 3: Doubler winding	
Qualification Pack (QP) Parameters	. 4
TSC/N0316: Carryout shift change activities in winding department	6
TSC/N9015: Follow machine, safety, and organizational guidelines in textile sector	11
TSC/N9016: Follow teamwork, adaptability, and communication guidelines in textile sector	18
DGT/VSQ/N0101: Employability Skills (30 Hours)	23
TSC/N0317: Carryout cop creeling, doffing and tenting responsibilities in auto coner department	29
TSC/N0318: Carryout cop change, knotting, doffing and tenting responsibilities in manual cone	
winding department	35
TSC/N0319: Carryout cone change, knotting, doffing and tenting responsibilities in doubler winding	
department	41
Assessment Guidelines and Weightage	46
Assessment Guidelines	
Assessment Weightage	47
Acronyms	49
Glossary	







# TSC/Q0305: Winding Tenter

### **Brief Job Description**

A Winding Tenter is responsible for carryout tenting activities in winding machine. A Winding Tenter should be able to replenish the feed material, attend the malfunctions, perform doffing and carry out routine cleaning activities and ensure defect free cone/ cheese packages are produced in winding machine.

### **Personal Attributes**

A Winding Tenter should have physicals attributes like dexterity, coordination, motor skills, strength, stamina and handle heavy equipment. A Winding Tenter should also have sensory attributes like hearing ability and vision (normal distance vision, color vision, night vision, peripheral vision, depth perception and ability to change focus).

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

### **Compulsory NOS:**

- 1. TSC/N0316: Carryout shift change activities in winding department
- 2. TSC/N9015: Follow machine, safety, and organizational guidelines in textile sector
- 3. TSC/N9016: Follow teamwork, adaptability, and communication guidelines in textile sector
- 4. DGT/VSQ/N0101: Employability Skills (30 Hours)

### **Electives**(mandatory to select at least one):

### Elective 1: Autoconer

A Winding Tenter - Autoconer is responsible for carryout tenting activities in auto coner machine. The Tenter - Autoconer should be able to creel the ring cops, attend the malfunctions, perform doffing, segregate rejected cops and carry out routine cleaning activities and ensure defect free cone packages are produced in auto coner machine.

1. TSC/N0317: Carryout cop creeling, doffing and tenting responsibilities in auto coner department

### Elective 2: Manual cone winding

A Winding Tenter - Manual cone winding is responsible for carryout tenting activities in cone winding machine. The Tenter - Manual cone winding should be able to replenish the cops, knotting the broken yarn, doffing the cones and carry out routine cleaning activities and ensure defect free cone packages are produced in manual cone winding machine.







1. <u>TSC/N0318</u>: <u>Carryout cop change, knotting, doffing and tenting responsibilities in manual cone</u> <u>winding department</u>

### Elective 3: Doubler winding

A Winding Tenter - Doubler Winding is responsible for carryout tenting activities in Doubler winding machine. The Tenter – Doubler winding should be able to replenish the cones, knotting the broken yarn, doffing the cheeses and carry out routine cleaning activities and ensure defect free cheese packages are produced in Doubler winding machine.

1. <u>TSC/N0319</u>: <u>Carryout cone change, knotting, doffing and tenting responsibilities in doubler winding department</u>

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

Sector	Textile
Sub-Sector	Spinning – Textiles
Occupation	Post Spinning Operations
Country	India
NSQF Level	3
Credits	23.5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8151.1800
Minimum Educational Qualification & Experience	9th Class (with No Experience (OR) Grade 8 pass and pursuing continuous schooling in regular school with vocational subject with no experience (OR) 8th grade pass with 1 year of relevant experience (OR) 5th grade pass with 4 years of relevant experience (OR) Ability to read and write with 5 years of experience)
Minimum Level of Education for Training in School	9th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	30/09/2024







NSQC Approval Date	17/11/2022
Version	2.0
Reference code on NQR	2022/TEXT/TSC/07054
NQR Version	1.0







# TSC/N0316: Carryout shift change activities in winding department

# Description

This unit is about performance criteria, knowledge and understanding and generic skills and abilities required to carry out shift change activities in winding department.

# Scope

The scope covers the following :

- take charge of shift in winding department
- hand over shift in winding department

### **Elements and Performance Criteria**

### Taking charge of shift in winding department

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

- **PC1.** report for the shift at scheduled time as per the duty chart with necessary operational tools and take stock of supply packages, running count production, count change and lot change (reach 10-15 minutes earlier to take stock)
- **PC2.** discuss with previous shift Winding Tenter and gather shift details (i.e., production, maintenance, raw material, count change, colour coding, etc.) and match them with shift supervisor
- **PC3.** check for quality and the availability of spares/ production materials (i.e., supply packages, empty cones/cheeses, cone/cheese trolley, etc.)
- **PC4.** monitor condition of machine, spares and processing materials (i.e., idle drums, run outs, drum lapping, rejected/half cops, OHTC, waste collection box, etc.) and report deviations
- **PC5.** report idle drums, condition of machine, stock, etc and other deviations to the incoming shift supervisor
- PC6. check work spot and machine for cleanliness as per specifications

### Handing over shift in Winding department

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

- **PC7.** provide shift details to incoming Winding Tenter (i.e., production, maintenance, spare parts, counts running, count changes, maintenance schedule, ring cops availability, etc.)
- **PC8.** complete the shift end jobs like production log report writing, waste collection box disposal, cleaning as per standard protocol
- PC9. report deviation (in production, maintenance, absenteeism, etc.) to incoming shift Supervisor
- PC10. get clearance from incoming Winding Tenter and shift Supervisor before leaving the shift

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:







- **KU1.** basics of staple yarn spinning i.e. types of fibre, types of yarn, count, process flow, material flow, sectors of fibre to apparel, etc.
- **KU2.** organizational chart & name of department HODs, locations of various departments, offices and toilet and its importance
- KU3. roles and responsibilities of Winding Tenter
- **KU4.** rules and regulations followed in a spinning mill like shift timing and duration, limits of leave and holidays, etc.
- KU5. standard operating procedures (SOP) of shift hand over and take over in winding department
- KU6. safe working practices adopted during taking care of shift and handing over shift
- **KU7.** importance of operational tools such as cleaning brush, hip bag, drum lapping cleaning tool, etc
- KU8. check list of shift change activities and its importance
- **KU9.** types of changing parameters during count or process change in winding machines
- **KU10.** methods of identifying the idle drums, faults at Winding machine, their causes and procedures to correct them
- KU11. knowledge of waste collection system & equipment used
- **KU12.** function of OHTC and its importance in winding department
- KU13. functions of different signal lamps in winding department
- **KU14.** importance of humidification in winding department
- KU15. housekeeping system (5S) and its importance in cleanliness at workplace
- KU16. production calculation and type of records maintained in winding department

# **Generic Skills (GS)**

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

- **GS1.** write clear and short sentences in the log book (i.e., production, maintenance, count change, idle drums, etc.)
- **GS2.** write clear and short sentences in the log book (i.e., production, maintenance, count change, idle drums, etc.)
- GS3. communicate with the supervisor and colleagues as per the standard protocol









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Taking charge of shift in winding department	11	10	-	13
<b>PC1.</b> report for the shift at scheduled time as per the duty chart with necessary operational tools and take stock of supply packages, running count production, count change and lot change (reach 10-15 minutes earlier to take stock)	-	-	-	-
<b>PC2.</b> discuss with previous shift Winding Tenter and gather shift details (i.e., production, maintenance, raw material, count change, colour coding, etc.) and match them with shift supervisor	-	-	-	-
<b>PC3.</b> check for quality and the availability of spares/ production materials (i.e., supply packages, empty cones/cheeses, cone/cheese trolley, etc.)	-	-	-	-
<b>PC4.</b> monitor condition of machine, spares and processing materials (i.e., idle drums, run outs, drum lapping, rejected/half cops, OHTC, waste collection box, etc.) and report deviations	-	-	-	_
<b>PC5.</b> report idle drums, condition of machine, stock, etc and other deviations to the incoming shift supervisor	-	-	-	-
<b>PC6.</b> check work spot and machine for cleanliness as per specifications	-	-	-	-
Handing over shift in Winding department	7	10	-	9
<b>PC7.</b> provide shift details to incoming Winding Tenter (i.e., production, maintenance, spare parts, counts running, count changes, maintenance schedule, ring cops availability, etc.)	-	-	-	-
<b>PC8.</b> complete the shift end jobs like production log report writing, waste collection box disposal, cleaning as per standard protocol	-	-	-	-
<b>PC9.</b> report deviation (in production, maintenance, absenteeism, etc.) to incoming shift Supervisor	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> get clearance from incoming Winding Tenter and shift Supervisor before leaving the shift	-	-	-	-
NOS Total	18	20	-	22







# National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0316
NOS Name	Carryout shift change activities in winding department
Sector	Textile
Sub-Sector	Spinning – Textiles
Occupation	Post Spinning Operations
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	19/02/2021
Next Review Date	30/09/2024
NSQC Clearance Date	17/11/2022







# TSC/N9015: Follow machine, safety, and organizational guidelines in textile sector

# Description

This unit provides performance criteria, knowledge and skills required to follow machine, safety and organizational guidelines in textile sector.

## Scope

The scope covers the following :

- Maintaining the work area, tools and machines
- Greening and energy conservation in textile sector
- Health, safety and response to emergencies at textile sector
- Organizational standards and policies

## **Elements and Performance Criteria**

### Maintaining the work area, tools and machines

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

- **PC1.** handle materials, machinery, equipment and tools as per standard procedure
- PC2. use appropriate material handling equipment and tools as per standard procedure
- **PC3.** keep the equipment, machine and work area clean using appropriate cleaning tools as per standard procedure
- **PC4.** undertake minor routine maintenance of equipment and tools as per standard maintenance procedure
- PC5. maintain record for defective and unsafe equipment and tools
- PC6. verify that machine guards are in place as per standard specifications
- PC7. follow specified ergonomics for the assigned job role in textile sector
- PC8. collect and store worn-out spare parts at specified location
- **PC9.** report the condition of worn out parts as per standard procedure

### Greening and energy conservation in textile sector

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

- PC10. segregate wastes such as recyclable, non-recyclable, hazardous as per standard protocol
- PC11. optimize usage of material and resources including water, electricity in various tasks
- PC12. switch off the machines and lights when not in use

Health, safety and response to emergencies at textile sector

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

- **PC13.** use Personal Protective Equipment (PPEs) like body protector, ear plugs, nose mask, head cap, etc. as per guidelines
- **PC14.** identify abnormal sounds emanating from faulty or worn out machine parts and take appropriate action
- PC15. avoid dependency on any type of intoxicants







- PC16. maintain social distance as per the instruction at workplace
- **PC17.** report hazardous material to superiors at workplace
- PC18. use the various appropriate fire extinguishers on different types of fires correctly
- **PC19.** follow the specified steps in case of electricity failure
- **PC20.** lift heavy objects using correct lifting procedures
- PC21. recall emergency exits, safe spots, etc. of workplace
- PC22. practice mock drills and evacuation procedures organized by industry
- PC23. assist others to reach to safe spots in emergency situations
- PC24. provide basic first aid for injury to peers and report to superiors
- PC25. interpret different signs, alarms and take action appropriately
- PC26. follow the guidelines while working in hazards atmosphere
- PC27. assist in designing the safety plans with peers and superiors
- PC28. follow the approved safety plans at workplace

### Organizational standards and policies

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

- PC29. perform assigned duties as per organization's protocol within scheduled time period
- **PC30.** follow organization policies, quality standards, rules and regulations for working in textile sector
- PC31. motivate colleagues to follow operational guidelines of organization
- PC32. wear specified uniform and follow etiquette as per standard guidelines for the textile sector
- **PC33.** maintain hygienic working atmosphere as per protocol of the textile sector
- PC34. submit lost and found articles as per standard protocol

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** organizational standard procedures, quality standards, rules, codes, policies and safety standards in the textile sector
- **KU2.** different type of tools and equipment used in textile sub- sector and their specifications and operating procedures
- KU3. safe handling procedure of tools and equipment
- KU4. the importance of displays and written instructions for the allocated machines
- KU5. dos and donts specific to the assigned work responsibilities
- KU6. protocol for minimizing the wastage of material, effort and time
- **KU7.** organization's formats and procedures for reporting production, defects, faults, material/tool requisition and quality parameters and task completed for assigned job
- **KU8.** schedule for cleaning and waste collection for the assigned job role
- **KU9.** importance and standard procedure for disposal of soft, hard, non-hazardous and hazardous wastes and materials
- **KU10.** available types of material handling equipment and handling methods used in the textile sector







- **KU11.** hazards of unsafe workplace conditions and procedures in the textile industry and methods to avoid hazards
- KU12. various types of fire extinguishers
- KU13. importance of stable mental condition in case of emergency
- **KU14.** correct work posture and importance of ergonomics for the assigned job role
- **KU15.** organizational quality systems like quality circle, 5S, ISO, SA, etc. followed in the textile sector
- **KU16.** importance of following work wear standards, behavioral protocols and etiquette in the textile sector
- **KU17.** importance of energy conservation through proper maintenance schedule in the textile sector
- KU18. procedures and formats for reporting lost and found material
- KU19. different types of alarms and their significance

# **Generic Skills (GS)**

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

- GS1. read and comprehend policies in notice boards displayed in the workplace
- **GS2.** minimize the resource consumption for the assigned task
- GS3. solve basic arithmetic calculations related to assigned job role
- GS4. recognize and differentiate colors of materials used in textile sector
- GS5. lift specified materials for the allotted task using prescribed ergonomic position
- **GS6.** exhibit motor skill required for the allotted task









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintaining the work area, tools and machines	10	10	-	6
<b>PC1.</b> handle materials, machinery, equipment and tools as per standard procedure	-	-	-	-
<b>PC2.</b> use appropriate material handling equipment and tools as per standard procedure	-	-	-	-
<b>PC3.</b> keep the equipment, machine and work area clean using appropriate cleaning tools as per standard procedure	-	-	-	-
<b>PC4.</b> undertake minor routine maintenance of equipment and tools as per standard maintenance procedure	-	-	-	-
<b>PC5.</b> maintain record for defective and unsafe equipment and tools	-	-	_	_
<b>PC6.</b> verify that machine guards are in place as per standard specifications	-	-	-	_
<b>PC7.</b> follow specified ergonomics for the assigned job role in textile sector	-	-	-	-
<b>PC8.</b> collect and store worn-out spare parts at specified location	-	-	-	-
<b>PC9.</b> report the condition of worn out parts as per standard procedure	-	-	-	-
Greening and energy conservation in textile sector	7	10	-	6
<b>PC10.</b> segregate wastes such as recyclable, non-recyclable, hazardous as per standard protocol	-	-	-	-
<b>PC11.</b> optimize usage of material and resources including water, electricity in various tasks	-	-	-	-
<b>PC12.</b> switch off the machines and lights when not in use	-	-	-	-
Health, safety and response to emergencies at textile sector	32	40	-	28







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> use Personal Protective Equipment (PPEs) like body protector, ear plugs, nose mask, head cap, etc. as per guidelines	-	-	-	-
<b>PC14.</b> identify abnormal sounds emanating from faulty or worn out machine parts and take appropriate action	-	-	-	-
<b>PC15.</b> avoid dependency on any type of intoxicants	-	-	-	-
<b>PC16.</b> maintain social distance as per the instruction at workplace	-	-	-	-
<b>PC17.</b> report hazardous material to superiors at workplace	-	-	-	-
<b>PC18.</b> use the various appropriate fire extinguishers on different types of fires correctly	-	_	-	-
<b>PC19.</b> follow the specified steps in case of electricity failure	-	-	-	-
<b>PC20.</b> lift heavy objects using correct lifting procedures	-	_	-	-
<b>PC21.</b> recall emergency exits, safe spots, etc. of workplace	-	-	-	-
<b>PC22.</b> practice mock drills and evacuation procedures organized by industry	-	_	-	-
<b>PC23.</b> assist others to reach to safe spots in emergency situations	-	_	-	-
<b>PC24.</b> provide basic first aid for injury to peers and report to superiors	-	-	-	-
<b>PC25.</b> interpret different signs, alarms and take action appropriately	-	-	-	-
<b>PC26.</b> follow the guidelines while working in hazards atmosphere	-	-	-	-
<b>PC27.</b> assist in designing the safety plans with peers and superiors	-	-	-	-







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#### Theory **Practical Project** Viva **Assessment Criteria for Outcomes** Marks Marks Marks Marks PC28. follow the approved safety plans at \_ \_ \_ workplace Organizational standards and policies 16 20 10 \_ PC29. perform assigned duties as per organization's protocol within scheduled time period PC30. follow organization policies, quality standards, rules and regulations for working in textile sector PC31. motivate colleagues to follow operational \_ quidelines of organization **PC32.** wear specified uniform and follow etiquette \_ \_ \_ as per standard guidelines for the textile sector **PC33.** maintain hygienic working atmosphere as \_ \_ \_ \_ per protocol of the textile sector PC34. submit lost and found articles as per \_ \_ \_ \_ standard protocol **NOS Total** 80 65 50 -







# National Occupational Standards (NOS) Parameters

NOS Code	TSC/N9015
NOS Name	Follow machine, safety, and organizational guidelines in textile sector
Sector	Textile
Sub-Sector	Generic - Textiles Handloom
Occupation	Generic - Textiles & Handloom
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	27/01/2022
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022







# TSC/N9016: Follow teamwork, adaptability, and communication guidelines in textile sector

# Description

This unit provides performance criteria, knowledge and skills required to follow team work, communication and adaptability in textile sector

## Scope

The scope covers the following :

- Teamwork and communication
- Adaptability

# **Elements and Performance Criteria**

### Teamwork, trust and communication

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

- PC1. contribute to create a positive work environment in the team
- PC2. carry out tasks as per instructions received from superiors
- **PC3.** contribute to team work as per allocated responsibility to complete the task by using appropriate tools and methods
- PC4. build trust with team mates and superiors
- PC5. implement the ideas after superior's approval at work place
- PC6. communicate clearly with the team members as per standard protocol
- **PC7.** use suggested hand signs, vocal sound signals to convey the information in the production area
- PC8. listen effectively to the ideas and concerns of the peers
- PC9. use correct and respectful terms while communicating as per industry policy
- PC10. express views proactively and effectively
- PC11. make efforts to resolve difference of opinion with superiors and team members
- PC12. report to superior for problems identified in assigned duty
- PC13. report the daily performance to superior in prescribed manner and formats

### Adaptability

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

- PC14. adapt to flexible work environment for the assigned task
- PC15. adapt to work with various members of different ethnicity, gender and PwD without biases
- PC16. consider opinions of colleagues, fitters, superiors for the assigned task
- **PC17.** plan the work-routine within the limits of the responsibility
- PC18. adopt new ideas after due approval from superior for improving the productivity

### Knowledge and Understanding (KU)







The individual on the job needs to know and understand:

- KU1. importance of teamwork and discipline
- KU2. limits and responsibilities for the assigned duties in the textile sector
- KU3. possible conflicts in the assigned job role and methods to resolve the same
- KU4. importance of teamwork, group discussions and healthy work environment
- **KU5.** importance of reporting as per the standard protocol
- **KU6.** hierarchy of communication and communication etiquettes in the textile sector
- KU7. protocol for communication with different ethnicity, gender and PwD
- KU8. report and grievance submission formats
- KU9. importance of hand, vocal sound signals in the textile sector

# **Generic Skills (GS)**

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

- **GS1.** read and comprehend written instructions
- GS2. listen effectivity for the instructions
- **GS3.** coordinate with team mates for the allotted tasks
- **GS4.** use and comprehend prescribed voice and hand signals in the textile production area
- **GS5.** fill forms and prepare reports such as production report, material requisition forms, leave application, etc. as per standard formats



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### **Qualification Pack**

### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Teamwork, trust and communication	10	15	-	5
<b>PC1.</b> contribute to create a positive work environment in the team	-	-	-	-
<b>PC2.</b> carry out tasks as per instructions received from superiors	-	-	-	-
<b>PC3.</b> contribute to team work as per allocated responsibility to complete the task by using appropriate tools and methods	-	-	-	_
PC4. build trust with team mates and superiors	_	-	-	-
<b>PC5.</b> implement the ideas after superior's approval at work place	-	-	-	-
<b>PC6.</b> communicate clearly with the team members as per standard protocol	-	-	-	-
<b>PC7.</b> use suggested hand signs, vocal sound signals to convey the information in the production area	-	-	-	-
<b>PC8.</b> listen effectively to the ideas and concerns of the peers	-	-	-	-
<b>PC9.</b> use correct and respectful terms while communicating as per industry policy	-	-	-	-
PC10. express views proactively and effectively	-	-	-	-
<b>PC11.</b> make efforts to resolve difference of opinion with superiors and team members	-	-	-	-
<b>PC12.</b> report to superior for problems identified in assigned duty	-	-	-	-
<b>PC13.</b> report the daily performance to superior in prescribed manner and formats	-	-	-	-
Adaptability	5	5	-	5
<b>PC14.</b> adapt to flexible work environment for the assigned task	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> adapt to work with various members of different ethnicity, gender and PwD without biases	-	-	-	-
<b>PC16.</b> consider opinions of colleagues, fitters, superiors for the assigned task	-	-	-	-
<b>PC17.</b> plan the work-routine within the limits of the responsibility	-	-	-	-
<b>PC18.</b> adopt new ideas after due approval from superior for improving the productivity	-	-	-	-
NOS Total	15	20	-	10







# National Occupational Standards (NOS) Parameters

NOS Code	TSC/N9016
NOS Name	Follow teamwork, adaptability, and communication guidelines in textile sector
Sector	Textile
Sub-Sector	Generic - Textiles Handloom
Occupation	Generic - Textiles & Handloom
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	27/01/2022
Next Review Date	31/03/2025
NSQC Clearance Date	17/11/2022







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

# Description

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

## Scope

The scope covers the following :

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

### **Elements and Performance Criteria**

### Introduction to Employability Skills

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

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

Constitutional values - Citizenship

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

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

### Becoming a Professional in the 21st Century

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

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

### Basic English Skills

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

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

### Communication Skills

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

- PC5. follow good manners while communicating with others
- PC6. work with others in a team



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### **Qualification Pack**



### **Diversity & Inclusion**

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

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

### Financial and Legal Literacy

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

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

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

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

### Entrepreneurship

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

PC14. identify and assess opportunities for potential business

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

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

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

### Getting ready for apprenticeship & Jobs

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

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

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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







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

## **Generic Skills (GS)**

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

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



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#### **Qualification Pack**

### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
<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	-	-	-	-
<b>PC8.</b> 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	-	-	-	-







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# **Qualification Pack**

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	ΝΑ
Next Review Date	30/12/2024
NSQC Clearance Date	30/12/2021







# TSC/N0317: Carryout cop creeling, doffing and tenting responsibilities in auto coner department

# Description

This unit is about performance criteria, knowledge and understanding and generic skills and abilities required to carry out, cop creeling, cone doffing and tenting responsibilities in auto coner department.

## Scope

The scope covers the following :

- perform cop creeling operations
- attending the Autoconer for red light malfunctions
- carryout doffing operation
- perform cleaning and other tenting activities

## **Elements and Performance Criteria**

### Perform cop creeling operations

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

- **PC1.** operate control switches in auto coner machine (i.e. stop/start of machine, drum speed, empty tubes conveyor system, etc.)
- **PC2.** follow the different signal lamps indications in machines (i.e. drum exhaust, drum malfunctions, cone doff, etc.)
- PC3. identify and bring the cops in the cop trolley from storage area
- PC4. patrol around the winding machine and identify the cop exhaust in magazine
- PC5. creel the cops as per standard operating procedure
- PC6. verify that the cop is placed in the magazine in the right posture
- PC7. collect hard waste in their coat pocket/waist bag after filling cops

### Attending the Autoconer for red light malfunctions

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

- PC8. attend the machine stoppages as per standard operating procedure
- PC9. verify the drum is running after correction of malfunction

### Carryout doffing operation

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

- PC10. identify and bring the empty cones to auto coner machine as per the prescribed colour code
- PC11. mention drum, machine and winder code in empty cone as required
- PC12. check the cone package for the predetermined wound length/ weight
- PC13. perform doffing and start drum as per the standard procedure
- **PC14.** report cone weight deviations to the shift supervisor

### Carryout cleaning & other tenting responsibilities at Autoconer

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







- **PC15.** sort rejected cops and re-creel good cops in magazine (i.e., full cops, half cops, remnants, empties, etc.)
- PC16. clean remnants, weight and dispose hard waste at specified place
- **PC17.** clean dust chocking at yarn clearer unit using the prescribed tool
- PC18. check and replace exhausted wax roll
- **PC19.** remove the drum lapping manually with prescribed tools (i.e., knife, scissors, etc.) as per standard method
- PC20. report yarn alarm and quality alarms rings to the supervisor and maintenance in charge
- **PC21.** identify different package defects and report to the shift supervisor (i.e., yarn shade variation, stitch cones, ribbon effect, stains, etc.)
- **PC22.** carry out count change as per the instructions of shift supervisor
- PC23. support the maintenance team of auto coner within the limits of responsibility
- **PC24.** clear traffic congestion at the full cop feeding path and rejected cops carrying path in link coner setup
- PC25. check the cops feeding to the winding unit as per the setting

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** functions of auto coner machine
- **KU2.** different parts of auto coner machine, link coner, switch board, signal lamps, accessories, OHTC and their functions
- KU3. basic electrical connections and motor/drum drives used in auto coner machine
- KU4. material flow of auto coner machine and type of supply and finished package
- **KU5.** quality systems and parameters with specifications practiced in the auto coner department
- KU6. colour coding followed in the ring frame and auto coner department
- **KU7.** knowledge of specific terms in auto coner like red light, cop rejections, repeaters, alarm cops, idle drums and common terms like machine speed, production, efficiency, waste percentage, etc.
- **KU8.** significance of priority to red light signals in the auto coner machine
- KU9. different types of defects in supply and finished package and its impacts
- KU10. importance of maintaining standard weight and allowable weight variation
- KU11. relationship between the count, doff weight and machine speed
- **KU12.** objective of under winding coils in ring cops and tail end winding in cone packages
- KU13. objectives of applying wax to the yarn
- KU14. hard waste level in Autoconer machine and control measures to reduce waste
- KU15. importance of machine cleaning on quality of finished package production
- KU16. reporting formats to superiors and log book formats
- **KU17.** protocol for creeling cops, attend malfunctions, doffing, cleaning and other tenting activities in auto coner department
- KU18. protocol for handling tools and equipment used in auto coner department







KU19. impacts of wrong work practices in the auto coner department

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

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

- **GS1.** read and comprehend the machine number, details in display/count board, colour code identification at machine, doff slip, etc write machine number, date, shift and yarn count clearly in doff slip
- **GS2.** read and comprehend the written instructions at machine (i.e. work method poster, cleaning schedule, maintenance and safety instructions)
- **GS3.** write production report, log report, package ID, etc. in respective record book
- **GS4.** communicate with the supervisor and maintenance fitter as per the standard protocol
- **GS5.** perform basic arithmetical calculations to calculate Winding production, waste calculation, etc.







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### **Qualification Pack**



Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform cop creeling operations	50	100	-	40
<b>PC1.</b> operate control switches in auto coner machine (i.e. stop/start of machine, drum speed, empty tubes conveyor system, etc.)	-	-	-	-
<b>PC2.</b> follow the different signal lamps indications in machines (i.e. drum exhaust, drum malfunctions, cone doff, etc.)	_	-	-	-
<b>PC3.</b> identify and bring the cops in the cop trolley from storage area	-	-	-	-
<b>PC4.</b> patrol around the winding machine and identify the cop exhaust in magazine	-	-	-	-
<b>PC5.</b> creel the cops as per standard operating procedure	-	-	-	-
<b>PC6.</b> verify that the cop is placed in the magazine in the right posture	-	-	-	-
<b>PC7.</b> collect hard waste in their coat pocket/waist bag after filling cops	_	-	-	-
Attending the Autoconer for red light malfunctions	15	40	-	15
<b>PC8.</b> attend the machine stoppages as per standard operating procedure	_	-	-	-
<b>PC9.</b> verify the drum is running after correction of malfunction	_	-	-	-
Carryout doffing operation	35	75	-	14
<b>PC10.</b> identify and bring the empty cones to auto coner machine as per the prescribed colour code	_	-	-	-
<b>PC11.</b> mention drum, machine and winder code in empty cone as required	-	-	-	-
<b>PC12.</b> check the cone package for the predetermined wound length/ weight	-	-	-	-
<b>PC13.</b> perform doffing and start drum as per the standard procedure	-	-	-	-







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# Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> report cone weight deviations to the shift supervisor	-	-	-	-
<i>Carryout cleaning &amp; other tenting responsibilities at Autoconer</i>	80	115	-	21
<b>PC15.</b> sort rejected cops and re-creel good cops in magazine (i.e., full cops, half cops, remnants, empties, etc.)	-	-	-	-
<b>PC16.</b> clean remnants, weight and dispose hard waste at specified place	-	-	-	-
<b>PC17.</b> clean dust chocking at yarn clearer unit using the prescribed tool	-	-	-	-
PC18. check and replace exhausted wax roll	-	-	-	-
<b>PC19.</b> remove the drum lapping manually with prescribed tools (i.e., knife, scissors, etc.) as per standard method	-	-	-	-
<b>PC20.</b> report yarn alarm and quality alarms rings to the supervisor and maintenance in charge	-	-	-	-
<b>PC21.</b> identify different package defects and report to the shift supervisor (i.e., yarn shade variation, stitch cones, ribbon effect, stains, etc.)	-	-	-	-
<b>PC22.</b> carry out count change as per the instructions of shift supervisor	-	-	-	-
<b>PC23.</b> support the maintenance team of auto coner within the limits of responsibility	_	-	-	-
<b>PC24.</b> clear traffic congestion at the full cop feeding path and rejected cops carrying path in link coner setup	_	-	-	-
<b>PC25.</b> check the cops feeding to the winding unit as per the setting	-	-	-	-
NOS Total	180	330	-	90







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

NOS Code	TSC/N0317
NOS Name	Carryout cop creeling, doffing and tenting responsibilities in auto coner department
Sector	Textile
Sub-Sector	Spinning – Textiles
Occupation	Post Spinning Operations
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	19/02/2021
Next Review Date	30/09/2024
NSQC Clearance Date	17/11/2022







# TSC/N0318: Carryout cop change, knotting, doffing and tenting responsibilities in manual cone winding department

# Description

This unit is about performance criteria, knowledge and understanding and generic skills and abilities required to carry out cop change, knotting, doffing and tenting responsibilities in manual cone winding department.

### Scope

The scope covers the following :

- perform cop replenishments
- knot/splice broken yarn
- carryout doffing operation
- · carryout cleaning and other tenting activities

## **Elements and Performance Criteria**

### Perform cop replenishments

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

- PC1. identify and bring the prescribed colour coded cops in the cop trolley from storage area
- PC2. patrol around the cone winding machine and identify the cop exhaust
- **PC3.** replenish cops and start drum as per standard procedure
- **PC4.** fix the cop in the holder as per standard method
- PC5. collect hard waste in the apron pocket/ waist bag

### Join the broken ends

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

- **PC6.** patrol around the cone winding machine and identify the broken ends
- **PC7.** knot the broken yarn using hand knotter/ splicer as per the standard procedure

### Carryout doffing operation

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

- **PC8.** identify the weight of a cone in the allocated drums
- PC9. identify and bring the empty cones as per the prescribed colour code
- PC10. mention drum, machine and winder code in empty cone as required
- **PC11.** perform doffing and start drum as per the standard procedure
- PC12. report cone weight deviations to the shift supervisor
- PC13. transport and store cone packages in the storage area as instructed

### Carryout cleaning & other tenting activities at Manual cone winding

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







- **PC14.** inform the running machine defects to the shift supervisor (i.e., stop motion ineffectiveness, ribbon breaker failure, cone holder lifting problems, yarn clearer, bad alignment of thread path, etc.)
- PC15. fill and maintain water level in the wet splicer
- **PC16.** remove the drum lapping manually with prescribed tools (i.e., knife, scissors, etc.) as per standard method
- PC17. carry out count change as per the instructions of shift supervisor
- **PC18.** report yarn alarm and quality alarms rings to the supervisor and maintenance in charge
- **PC19.** identify different package defects and report to the shift supervisor (i.e., yarn shade variation, stitch cones, ribbon effect, stains, etc.)
- **PC20.** support the maintenance team of manual cone winding machine within the limits of responsibility
- PC21. store hand knotter/ splicer in the specified place
- **PC22.** clean manual cone winding machine at regular interval (i.e., hopper, conveyor belt, yarn passage, etc.)

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. functions of Manual cone winding machine
- **KU2.** different parts of Manual winding machine, switch board, buttons, signal lamps, accessories, OHTC and their functions
- KU3. basic electrical connections and motor/drum drives used in manual winding machine
- **KU4.** material flow of manual winding machine and type of supply and finished package
- **KU5.** quality systems and parameters with specifications practiced in the manual winding department
- KU6. colour coding followed in the ring frame and manual cone winding department
- **KU7.** knowledge of specific terms like machine speed, production, efficiency, waste percentage, etc.
- KU8. significance of priority to yarn breaks in the manual cone winding machine
- **KU9.** different types of tools used for piecing broken yarn i.e. hand knotter, wet splicer and air splicer and their piecing quality
- KU10. different types of defects in supply and finished package and its impacts
- KU11. importance of maintaining standard weight and allowable weight variation
- KU12. relationship between the count, doff weight and machine speed
- KU13. methods of doffing operation i.e. group doffing and random doffing and their uniqueness
- **KU14.** objective of under winding coils in ring cops and tail end winding in cone packages
- KU15. objectives of applying wax to the yarn
- KU16. importance of machine cleaning on quality of finished package production
- KU17. reporting formats to superiors and log book formats
- **KU18.** protocol for creeling cops, attend malfunctions, doffing, cleaning and other tenting activities in manual cone winding department







- KU19. protocol for handling tools and equipment used in manual cone winding department
- KU20. impacts of wrong work practices in the manual cone winding department

# **Generic Skills (GS)**

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

- **GS1.** read and comprehend the machine number, details in display/count board, colour code identification at machine, doff slip, etc write machine number, date, shift and yarn count clearly in doff slip
- **GS2.** read and comprehend the written instructions at machine (i.e. work method poster, cleaning schedule, maintenance and safety instructions)
- **GS3.** write production report, log report, package ID, etc. in respective record book
- **GS4.** communicate with the supervisor and maintenance fitter as per the standard protocol
- **GS5.** perform basic arithmetical calculations to calculate Winding production, waste calculation, etc.



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# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform cop replenishments	50	85	-	35
<b>PC1.</b> identify and bring the prescribed colour coded cops in the cop trolley from storage area	-	-	-	-
<b>PC2.</b> patrol around the cone winding machine and identify the cop exhaust	-	-	-	-
<b>PC3.</b> replenish cops and start drum as per standard procedure	-	-	-	-
<b>PC4.</b> fix the cop in the holder as per standard method	-	-	-	-
<b>PC5.</b> collect hard waste in the apron pocket/ waist bag	-	-	-	-
Join the broken ends	20	60	-	15
<b>PC6.</b> patrol around the cone winding machine and identify the broken ends	-	-	-	-
<b>PC7.</b> knot the broken yarn using hand knotter/ splicer as per the standard procedure	-	-	-	-
Carryout doffing operation	60	110	-	35
<b>PC8.</b> identify the weight of a cone in the allocated drums	-	-	-	-
<b>PC9.</b> identify and bring the empty cones as per the prescribed colour code	-	-	-	-
<b>PC10.</b> mention drum, machine and winder code in empty cone as required	-	-	-	-
<b>PC11.</b> perform doffing and start drum as per the standard procedure	-	-	-	-
<b>PC12.</b> report cone weight deviations to the shift supervisor	-	-	-	-
<b>PC13.</b> transport and store cone packages in the storage area as instructed	-	-	-	-







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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carryout cleaning &amp; other tenting activities at Manual cone winding</i>	50	65	-	15
<b>PC14.</b> inform the running machine defects to the shift supervisor (i.e., stop motion ineffectiveness, ribbon breaker failure, cone holder lifting problems, yarn clearer, bad alignment of thread path, etc.)	-	-	-	-
<b>PC15.</b> fill and maintain water level in the wet splicer	_	-	-	-
<b>PC16.</b> remove the drum lapping manually with prescribed tools (i.e., knife, scissors, etc.) as per standard method	-	-	-	-
<b>PC17.</b> carry out count change as per the instructions of shift supervisor	-	-	-	-
<b>PC18.</b> report yarn alarm and quality alarms rings to the supervisor and maintenance in charge	-	-	-	-
<b>PC19.</b> identify different package defects and report to the shift supervisor (i.e., yarn shade variation, stitch cones, ribbon effect, stains, etc.)	_	_	-	_
<b>PC20.</b> support the maintenance team of manual cone winding machine within the limits of responsibility	-	-	-	-
<b>PC21.</b> store hand knotter/ splicer in the specified place	-	-	-	-
<b>PC22.</b> clean manual cone winding machine at regular interval (i.e., hopper, conveyor belt, yarn passage, etc.)	-	-	-	-
NOS Total	180	320	-	100







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

NOS Code	TSC/N0318
NOS Name	Carryout cop change, knotting, doffing and tenting responsibilities in manual cone winding department
Sector	Textile
Sub-Sector	Spinning – Textiles
Occupation	Post Spinning Operations
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	19/02/2021
Next Review Date	30/09/2024
NSQC Clearance Date	17/11/2022







# TSC/N0319: Carryout cone change, knotting, doffing and tenting responsibilities in doubler winding department

# Description

This unit is about performance criteria, knowledge and understanding and generic skills and abilities required to carry out cone change, knotting, doffing and tenting responsibilities in Doubler winding department.

# Scope

The scope covers the following :

- perform cone replenishments
- join the broken ends
- carryout doffing operation
- · carryout cleaning and other tenting activities

# **Elements and Performance Criteria**

#### Perform cone replenishments

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

- PC1. identify and bring the prescribed colour coded cops in the cop trolley from storage area
- PC2. patrol around the doubler winding machine and identify the cone exhaust
- **PC3.** creel two full cones for each drum and knot using hand knotter as per the standard procedures
- PC4. monitor the parallel ends path after replenishment
- PC5. collect hard waste in the apron pocket/ waist bag

## Join the broken ends

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

- PC6. patrol around the doubler winding machine and identify the broken ends
- PC7. knot the broken yarn using hand knotter/ splicer as per the standard procedure

## Carryout doffing operation

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

- PC8. identify and bring the empty cheese as per the prescribed colour code
- PC9. perform doffing and start winder as per the standard procedure
- PC10. report cheese weight deviations to the shift supervisor
- PC11. transport and store cheese packages in the storage area as instructed

## Carryout cleaning & other tenting activities

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

- **PC12.** inform the running machine defects to the shift supervisor (i.e., stop motion ineffectiveness, bad alignment of thread path, etc.)
- PC13. lubricate the knotter at specified intervals







- **PC14.** remove the drum lapping manually with prescribed tools (i.e., knife, scissors, etc.) as per standard method
- PC15. weigh and record the cheese produced in the shift
- **PC16.** identify different package defects and report to the shift supervisor (i.e., yarn shade variation, shade variation, strength variation, twist variation, stains etc.)
- **PC17.** carry out count change as per the instructions of supervisor
- **PC18.** clean the defective cheese as per standard procedure (i.e., loose wound, multi layered, single end cheese, fourfold or multi fold, stained cheese, etc.)
- **PC19.** support the maintenance team of manual cone winding machine within the limits of responsibility
- PC20. store hand knotter/ splicer in the specified place
- **PC21.** clean manual cone winding machine at regular interval (i.e., drum, drum brush, tension washers, etc.)

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. functions of doubler winding machine
- **KU2.** different parts of doubler winding machine, switch board, buttons, signal lamps, accessories, OHTC and their functions
- **KU3.** basic electrical connections and motor/drum drives used in doubler winding machine
- **KU4.** material flow of Doubler winding machine and type of supply and finished package
- **KU5.** quality systems and parameters with specifications practiced in the doubler winding department
- KU6. colour coding followed in the ring frame and doubler cone winding department
- **KU7.** knowledge of specific terms like machine speed, production, efficiency, waste percentage, parallel yarn, fold yarn, etc.
- KU8. significance of priority to yarn breaks in the doubler cone winding machine
- **KU9.** different types of tools used for piecing broken yarn i.e. hand knotter, wet splicer and air splicer and their piecing quality
- KU10. different types of defects in supply and finished package and its impacts
- KU11. importance of maintaining standard weight and allowable weight variation
- **KU12.** relationship between the count, doff weight and machine speed
- **KU13.** objective of tail end wound in supply cone packages
- KU14. objectives of applying wax to the yarn
- KU15. importance of machine cleaning on quality of finished package production
- KU16. reporting formats to superiors and log book formats
- **KU17.** protocol for creeling cops, attend malfunctions, doffing, cleaning and other tenting activities in doubler cone winding department
- KU18. protocol for handling tools and equipment used in doubler cone winding department
- **KU19.** impacts of wrong work practices in the doubler cone winding department







# **Generic Skills (GS)**

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

- **GS1.** read and comprehend the machine number, details in display/count board, colour code identification at machine, details in cone label, etc.
- **GS2.** read and comprehend the written instructions at machine (i.e. cleaning schedule, maintenance and safety instructions)
- **GS3.** write production report, log report, package ID, etc. in respective record book
- GS4. communicate with the supervisor and maintenance fitter as per the standard protocol
- **GS5.** perform basic arithmetical calculations to calculate Winding production, waste calculation, etc.



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# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform cone replenishments	50	75	-	30
<b>PC1.</b> identify and bring the prescribed colour coded cops in the cop trolley from storage area	-	-	-	-
<b>PC2.</b> patrol around the doubler winding machine and identify the cone exhaust	-	-	-	-
<b>PC3.</b> creel two full cones for each drum and knot using hand knotter as per the standard procedures	-	-	-	-
<b>PC4.</b> monitor the parallel ends path after replenishment	-	-	-	-
<b>PC5.</b> collect hard waste in the apron pocket/ waist bag	-	-	-	_
Join the broken ends	30	70	-	20
<b>PC6.</b> patrol around the doubler winding machine and identify the broken ends	-	-	-	-
<b>PC7.</b> knot the broken yarn using hand knotter/ splicer as per the standard procedure	-	-	-	-
Carryout doffing operation	50	105	-	30
<b>PC8.</b> identify and bring the empty cheese as per the prescribed colour code	-	-	-	-
<b>PC9.</b> perform doffing and start winder as per the standard procedure	-	-	-	-
<b>PC10.</b> report cheese weight deviations to the shift supervisor	-	-	-	-
<b>PC11.</b> transport and store cheese packages in the storage area as instructed	-	_	-	-
Carryout cleaning & other tenting activities	50	70	-	20
<b>PC12.</b> inform the running machine defects to the shift supervisor (i.e., stop motion ineffectiveness, bad alignment of thread path, etc.)	-	-	-	_







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. lubricate the knotter at specified intervals	-	-	-	-
<b>PC14.</b> remove the drum lapping manually with prescribed tools (i.e., knife, scissors, etc.) as per standard method	-	-	-	-
<b>PC15.</b> weigh and record the cheese produced in the shift	-	-	-	-
<b>PC16.</b> identify different package defects and report to the shift supervisor (i.e., yarn shade variation, shade variation, strength variation, twist variation, stains etc.)	-	-	-	-
<b>PC17.</b> carry out count change as per the instructions of supervisor	-	-	-	-
<b>PC18.</b> clean the defective cheese as per standard procedure (i.e., loose wound, multi layered, single end cheese, fourfold or multi fold, stained cheese, etc.)	-	-	-	-
<b>PC19.</b> support the maintenance team of manual cone winding machine within the limits of responsibility	-	-	-	-
<b>PC20.</b> store hand knotter/ splicer in the specified place	-	-	-	-
<b>PC21.</b> clean manual cone winding machine at regular interval (i.e., drum, drum brush, tension washers, etc.)	-	-	-	-
NOS Total	180	320	-	100







# National Occupational Standards (NOS) Parameters

NOS Code	TSC/N0319
NOS Name	Carryout cone change, knotting, doffing and tenting responsibilities in doubler winding department
Sector	Textile
Sub-Sector	Spinning – Textiles
Occupation	Post Spinning Operations
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	19/02/2021
Next Review Date	30/09/2024
NSQC Clearance Date	17/11/2022

# Assessment Guidelines and Assessment Weightage

# **Assessment Guidelines**

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.

The assessment for the theory part will be based on knowledge bank of questions created by the SSC.

Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).

Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.

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.

In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

## Minimum Aggregate Passing % at QP Level : 50

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(**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/N0316.Carryout shift change activities in winding department	18	20	-	22	60	6
TSC/N9015.Follow machine, safety & organizational guidelines in Textile sector	65	80	-	50	195	20
TSC/N9016.Follow teamwork, adaptability, and communication guidelines in textile sector	15	20	-	10	45	4
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	0	0	50	5
Total	118	150	0	82	350	35

#### Elective: 1 Autoconer

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N0317.Carryout cop creeling, doffing and tenting responsibilities in auto coner department	180	330	-	90	600	65
Total	180	330	-	90	600	65

Elective: 2 Manual cone winding







National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N0318.Carryout cop change, knotting, doffing and tenting responsibilities in manual cone winding department	180	320	-	100	600	65
Total	180	320	-	100	600	65

## Elective: 3 Doubler winding

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N0319.Carryout cone change, knotting, doffing and tenting responsibilities in doubler winding department	180	320	-	100	600	65
Total	180	320	-	100	600	65







# 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.