



# Washing Range Operator

QP Code: TSC/Q5301

Version: 1.0

NSQF Level: 4

Textile Sector Skill Council || Textile Sector Skill Council (TSC)15th Floor, Nirmal Tower,26,  
Barakhamba Road, New Delhi - 110 001  
Office: +91-11-43536355-7

## Qualification Pack

### Contents

TSC/Q5301: Washing Range Operator .....	3
<i>Brief Job Description</i> .....	3
Applicable National Occupational Standards (NOS) .....	3
<i>Compulsory NOS</i> .....	3
<i>Qualification Pack (QP) Parameters</i> .....	3
TSC/N5301: Taking charge of shift and handing over shift to Washing Range Operator .....	5
TSC/N5302: Operating the Washing Range Machine .....	11
TSC/N5303: Checking the quality of Washed fabric .....	17
TSC/N9001: Maintain work area, tools and machines .....	21
TSC/N9002: Working in a team .....	25
TSC/N9003: Maintain health, safety and security at workplace .....	29
TSC/N9004: Comply with industry and organizational requirement .....	35
Assessment Guidelines and Weightage .....	39
<i>Assessment Guidelines</i> .....	39
<i>Assessment Weightage</i> .....	39
Acronyms .....	41
Glossary .....	42

## Qualification Pack

### TSC/Q5301: Washing Range Operator

#### Brief Job Description

A Washing Range Operator is responsible to do the specified job of washing of dyed or printed fabric with proper control of parameters to get the desired effect. This job requires the individual to have thorough knowledge of process flow and material flow in a processing mill for fabric production and should know the important functions and operations of a Washing Range machine

#### Personal Attributes

A Washing Range Operator should have good eyesight, motor skills and vision. He/she should also have good interpersonal skills..

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [TSC/N5301: Taking charge of shift and handing over shift to Washing Range Operator](#)
2. [TSC/N5302: Operating the Washing Range Machine](#)
3. [TSC/N5303: Checking the quality of Washed fabric](#)
4. [TSC/N9001: Maintain work area, tools and machines](#)
5. [TSC/N9002: Working in a team](#)
6. [TSC/N9003: Maintain health, safety and security at workplace](#)
7. [TSC/N9004: Comply with industry and organizational requirement](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Textile
<b>Sub-Sector</b>	Processing
<b>Occupation</b>	Post Processing
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/8154.05

## Qualification Pack

<b>Minimum Educational Qualification &amp; Experience</b>	10th Class (Preferably) with 1-2 Years of experience in textile processing (Experience is preferred but not mandatory)
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	3 to 6 months of training in textile processing department (Suggested but not mandatory)
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	25/02/2015
<b>Next Review Date</b>	31/03/2021
<b>Deactivation Date</b>	31/03/2021
<b>NSQC Approval Date</b>	05/08/2015
<b>Version</b>	1.0

## Qualification Pack

# TSC/N5301: Taking charge of shift and handing over shift to Washing Range Operator

## Description

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

## Scope

This unit/task covers the following:

- To take charge of shift from previous shift washing range operator
- To hand over the shift to next shift washing range operator

## Elements and Performance Criteria

### *Taking charge of shift from washing range operator*

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

1. come at least 10 - 15 minutes earlier to the work place
2. bring the necessary operational tools to the department
3. meet the previous shift operator and discuss with him/her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc
4. understand the fabric being processed & process running on the machine
5. ensure the technical details are mentioned on the job card display on the machine
6. check for the availability of the spare trolley for unloading the fabric
7. check the next batch to be processed is ready near the machine
8. ensure the required chemicals are already weighed & prepared
9. check the cleanliness of the machines & other work areas
10. question the previous shift washing range operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift
11. Take charge of the shift from the outgoing washing range operator in a proper manner

### *Handing Over Shift to washing range operator*

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

12. ensure in providing the details regarding fabric quality & the process running on the machine
13. provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine
14. ensure the empty trolley is near the machine for unloading the fabric
15. ensure the next lot to be processed is ready near the machine already stitched & arranged properly
16. ensure the required chemicals for the next lot or next process are weighed & prepared
17. get clearance from the incoming counterpart before leaving the work spot

## Qualification Pack

18. report to his/her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift
19. ensure the shift has to be properly handed over to the incoming shift operator
20. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and should leave the department only after getting concurrence for the same from his/ her superiors
21. collect the wastes from waste collection bags, weigh them and transport to storage area
22. ensure the machine and its work place is clean

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedure (SOP) and regulations in a processing unit
- KU2.** safe working practices to be adopted in processing unit
- KU3.** quality systems and other processes practiced in the processing unit
- KU4.** reporting to the supervisor or higher authority in case of emergency
- KU5.** color coding adopted for different products in the processing unit
- KU6.** understanding the importance of quality & productivity
- KU7.** understanding various defects in the fabric due to yarn, weaving or processing
- KU8.** reasons for various defects in the fabric due to processing & their remedy
- KU9.** process flow in a processing unit
- KU10.** material flow in a processing unit
- KU11.** functions of various controls of the machine
- KU12.** importance of material handling and types of material handling equipment being used
- KU13.** importance of cleanliness at workplace
- KU14.** functions and methodology for operating different material handling equipment
- KU15.** understanding the functions of various alarm signals
- KU16.** guidelines for operating the machine
- KU17.** guidelines for taking charge of shift from previous shift washing range operator
- KU18.** guidelines for handing over the shift to the next shift washing range operator
- KU19.** safety procedures to be followed while operating the machine

### Generic Skills (GS)

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

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

## Qualification Pack

- 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.** operate the machine
- GS11.** operate various valves & traps
- GS12.** operate different material handling tools and equipment
- GS13.** check the quality of processed fabric
- GS14.** maintain cleanliness at work place

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Taking charge of shift from washing range operator</i>	<b>15</b>	<b>18</b>	-	<b>3</b>
1. come at least 10 - 15 minutes earlier to the work place	2	2	-	1
2. bring the necessary operational tools to the department	2	2	-	1
3. meet the previous shift operator and discuss with him/her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc	2	2	-	-
4. understand the fabric being processed & process running on the machine	1	2	-	-
5. ensure the technical details are mentioned on the job card display on the machine	1	2	-	-
6. check for the availability of the spare trolley for unloading the fabric	1	2	-	-
7. check the next batch to be processed is ready near the machine	1	1	-	-
8. ensure the required chemicals are already weighed & prepared	1	1	-	1
9. check the cleanliness of the machines & other work areas	1	1	-	-
10. question the previous shift washing range operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift	1	1	-	-
11. Take charge of the shift from the outgoing washing range operator in a proper manner	2	2	-	-
<i>Handing Over Shift to washing range operator</i>	<b>8</b>	<b>25</b>	-	<b>6</b>
12. ensure in providing the details regarding fabric quality & the process running on the machine	1	2	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
13. provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine	1	2	-	-
14. ensure the empty trolley is near the machine for unloading the fabric	-	5	-	1
15. ensure the next lot to be processed is ready near the machine already stitched & arranged properly	1	1	-	-
16. ensure the required chemicals for the next lot or next process are weighed & prepared	1	2	-	2
17. get clearance from the incoming counterpart before leaving the work spot	-	3	-	1
18. report to his/her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift	1	2	-	-
19. ensure the shift has to be properly handed over to the incoming shift operator	1	3	-	1
20. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and should leave the department only after getting concurrence for the same from his/ her superiors	1	1	-	-
21. collect the wastes from waste collection bags, weigh them and transport to storage area	-	2	-	-
22. ensure the machine and its work place is clean	1	2	-	1
<b>NOS Total</b>	<b>23</b>	<b>43</b>	<b>-</b>	<b>9</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N5301
<b>NOS Name</b>	Taking charge of shift and handing over shift to Washing Range Operator
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Processing
<b>Occupation</b>	Post Processing
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	25/02/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQC Clearance Date</b>	05/08/2015

## Qualification Pack

# TSC/N5302: Operating the Washing Range Machine

## Description

This unit is about operating the Washing Range Machine

## Scope

This unit/task covers the following:

- Carry out preparatory activities for operations in the machine
- Operate the machine for specified tasks as per work order
- Clean the machine on a regular basis and carryout preventive maintenance activities

## Elements and Performance Criteria

### *Carry out preparatory activities for operations in the machine*

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

1. understand the task mentioned in the work order
2. ensure that the machine is empty & clean including guide rolls & squeezing rolls
3. feed the fabric from the batch or trolley in the center of the machine using fabric centering& compensating devices
4. ensure fabric is crease-less and evenly fed onto the machine using J-box for continuous operation of machine

### *Operate the machine for specified tasks as per Work Order*

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

5. know the operations of the machine
6. read & understand the process being followed to do the task
7. keep even tension on fabric throughout the process
8. keep optimum pressure of the squeezer rolls to get good results
9. set the required temp in all chambers
10. open the steam valves & drain the condensate in all compartments
11. dispense the chemicals in the chambers
12. start the machine & take out fabric either on batch or trolley
13. check pH& temp & other parameters in all compartments

### *Clean the machine on a regular basis and carryout preventive maintenance activities*

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

14. make sure the machine is kept clean at all times ,before loading, while running & after unloading the fabric
15. follow the preventive maintenance schedule & ensure the machine is running smoothly
16. check that all controls are functioning properly
17. clean & empty out the dirt collector as and when required
18. stop the machine in case of any abnormal sound

## Qualification Pack

19. ensure enough supply of utilities such as water, air & steam for proper functioning of machine

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard operating procedure (SOP) and regulations in processing unit
- KU2.** procedure followed to get the final output in processing unit
- KU3.** safe working practices to be adopted in processing unit
- KU4.** how to report to the supervisor or higher authority about any grievances faced
- KU5.** importance of discipline & punctuality
- KU6.** importance of take over & handover in achieving quality & productivity
- KU7.** any abnormal sound/ noise should be reported to the concerned/ supervisor
- KU8.** how to report to the supervisor if there is any major defect in machine
- KU9.** type of fiber, yarn and fabric- yarn dyed, piece dyed or printed
- KU10.** ensure continuous feeding of fabric using scray/ j- box
- KU11.** various controls of machine
- KU12.** procedure of washing of dyed fabric
- KU13.** procedure of washing of printed fabric
- KU14.** proper use of guide rolls & tensioning devices to avoid unnecessary tension on the fabric
- KU15.** SOP of washing of fabric dyed or printed with reactive, vat or disperse dyestuffs
- KU16.** operation of various valves, traps
- KU17.** use various chemicals for washing of vat, reactive or disperse dyed or printed fabrics
- KU18.** Method of use of batching devices for fabric roll up
- KU19.** Knowledge of various process parameters for washing of dyed & printed fabric
- KU20.** cleaning of machine after washing dark colours to avoid staining on light colours
- KU21.** how to spare the machine when its due for maintenance to avoid breakdown of machine while working
- KU22.** controls functions of the machine
- KU23.** continuous supply of good quality air, steam & water for maximum output

### 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 in local language orally
- 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

## Qualification Pack

- 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.** various functions of washing range machine
- GS14.** various faults due to yarn, weaving, dyeing or printing in the fabric
- GS15.** various fabric qualities / sort no.s running in the mill
- GS16.** Finish width of fabric under process
- GS17.** length & weight of the batch
- GS18.** how to use correct tools for cleaning the machine
- GS19.** use of edge guide sensors or centering device for even & straight feeding of fabric to the machine
- GS20.** proper use of guide rolls & control sensors
- GS21.** basic operation of washing range machine
- GS22.** various control functions of the machine
- GS23.** various operations carried out on washingrange machine
- GS24.** proper use of tensioning devices to get even width of the fabric
- GS25.** requirement of optimum mangle pressure for efficient washing processes
- GS26.** washing temp of various products
- GS27.** how to drain the condensate first from steam line before opening the steam valve
- GS28.** automatic or manual dosing of various chemicals
- GS29.** how to monitor various control parameters for efficient washingresults
- GS30.** use of proper cleaning tools such as blowers or vacuum cleaners
- GS31.** how to drain out condensate or water from steam & air supply line before starting the machine

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out preparatory activities for operations in the machine</i>	<b>8</b>	<b>12</b>	-	<b>4</b>
1. understand the task mentioned in the work order	2	3	-	1
2. ensure that the machine is empty & clean including guide rolls & squeezing rolls	2	3	-	1
3. feed the fabric from the batch or trolley in the center of the machine using fabric centering& compensating devices	2	3	-	1
4. ensure fabric is crease-less and evenly fed onto the machine using J-box for continuous operation of machine	2	3	-	1
<i>Operate the machine for specified tasks as per Work Order</i>	<b>17</b>	<b>40</b>	-	<b>11</b>
5. know the operations of the machine	2	9	-	1
6. read & understand the process being followed to do the task	2	4	-	2
7. keep even tension on fabric throughout the process	2	3	-	1
8. keep optimum pressure of the squeezer rolls to get good results	2	3	-	-
9. set the required temp in all chambers	2	6	-	1
10. open the steam valves & drain the condensate in all compartments	2	3	-	-
11. dispense the chemicals in the chambers	2	4	-	3
12. start the machine & take out fabric either on batch or trolley	2	3	-	2
13. check ph& temp & other parameters in all compartments	1	5	-	1
<i>Clean the machine on a regular basis and carryout preventive maintenance activities</i>	<b>6</b>	<b>24</b>	-	<b>3</b>

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
14. make sure the machine is kept clean at all times ,before loading, while running & after unloading the fabric	1	4	-	1
15. follow the preventive maintenance schedule & ensure the machine is running smoothly	1	5	-	1
16. check that all controls are functioning properly	1	4	-	-
17. clean & empty out the dirt collector as and when required	1	3	-	-
18. stop the machine in case of any abnormal sound	1	4	-	1
19. ensure enough supply of utilities such as water, air & steam for proper functioning of machine	1	4	-	-
<b>NOS Total</b>	<b>31</b>	<b>76</b>	<b>-</b>	<b>18</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N5302
<b>NOS Name</b>	Operating the Washing Range Machine
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Processing
<b>Occupation</b>	Post Processing
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	25/02/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQC Clearance Date</b>	05/08/2015



## Qualification Pack

### TSC/N5303: Checking the quality of Washed fabric

#### Description

This unit is about checking the quality of Washed fabric & comparing it with the standard

#### Scope

This unit/task covers the following:

- Taking out the sample after washing & comparing it with the standard

#### Elements and Performance Criteria

##### *Taking out the sample after washing & comparing it with the standard*

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

1. take out the sample near the stitch
2. compare the sample with the standard
3. check the sample for washing or rubbing fastness
4. take the sample to your supervisor if the sample is not matching to the standard for decision

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** procedure followed to get the final output in processing unit
- KU2.** standard operating procedure (SOP) and regulations in processing unit
- KU3.** safe working practices to be adopted in processing unit
- KU4.** how to report to the supervisor or higher authority about any grievances faced
- KU5.** how to cut the required size of sample to avoid wastage
- KU6.** take corrective action immediately to avoid waste of time & production loss

#### 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 with supervisor appropriately
- GS4.** talk to others to convey information effectively
- GS5.** identify the real reason of problem faced
- GS6.** apply problem-solving approaches in different situations
- GS7.** refer anomalies to the supervisor
- GS8.** seek clarification on problems from others

## Qualification Pack

- GS9.** apply good attention to detail
- GS10.** check your work is complete and free from errors
- GS11.** make sure every kind of communication is error free
- GS12.** good matching skills & knowledge about the fabric
- GS13.** washing & rubbing properties of various fabrics
- GS14.** how to adjust speed, temp or roller pressure depending upon the required effect on the fabric

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Taking out the sample after washing &amp; comparing it with the standard</i>	<b>11</b>	<b>29</b>	-	<b>10</b>
1. take out the sample near the stitch	4	7	-	3
2. compare the sample with the standard	3	8	-	3
3. check the sample for washing or rubbing fastness	2	7	-	2
4. take the sample to your supervisor if the sample is not matching to the standard for decision	2	7	-	2
<b>NOS Total</b>	<b>11</b>	<b>29</b>	-	<b>10</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N5303
<b>NOS Name</b>	Checking the quality of Washed fabric
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Processing
<b>Occupation</b>	Post Processing
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	25/02/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQC Clearance Date</b>	05/08/2015

## Qualification Pack

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

#### Description

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

#### Scope

This unit/task covers the following:

- Maintaining the work area, tools and machines

#### Elements and Performance Criteria

##### *Maintaining the work area, tools and machines*

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

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

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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

## Qualification Pack

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

## Generic Skills (GS)

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

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

## Qualification Pack

### Assessment Criteria

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N9001
<b>NOS Name</b>	Maintain work area, tools and machines
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Spinning, Weaving, Processing, Knitting
<b>Occupation</b>	Textile Mill sector - Cotton
<b>NSQF Level</b>	3
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	25/02/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQC Clearance Date</b>	05/08/2015



## Qualification Pack

### TSC/N9002: Working in a team

#### Description

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

#### Scope

This unit/task covers the following:

- commitment and trust
- communication
- adaptability
- creative freedom

#### Elements and Performance Criteria

##### *Commitment and trust*

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

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

##### *Communication*

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

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

##### *Adaptability*

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

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

##### *Creative freedom*

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

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

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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

## Qualification Pack

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

## Generic Skills (GS)

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

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

## Qualification Pack

### Assessment Criteria

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N9002
<b>NOS Name</b>	Working in a team
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Spinning, Weaving, Processing, Knitting
<b>Occupation</b>	Textile Mill sector - Cotton
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	25/02/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQC Clearance Date</b>	05/08/2015

## Qualification Pack

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

#### Description

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

#### Scope

This unit/task covers the following:

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

#### Elements and Performance Criteria

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

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

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

##### *Recognizing the hazards*

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

## Qualification Pack

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

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

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

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

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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

## Generic Skills (GS)

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

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

## Qualification Pack

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

## Qualification Pack

### Assessment Criteria

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



### Qualification Pack

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N9003
<b>NOS Name</b>	Maintain health, safety and security at workplace
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Spinning, Weaving, Processing, Knitting
<b>Occupation</b>	Textile Mill sector - Cotton
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	25/02/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQC Clearance Date</b>	05/08/2015

## Qualification Pack

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

#### Description

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

#### Scope

This unit/task covers the following:

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

#### Elements and Performance Criteria

##### *Self development*

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

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

##### *Team work*

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

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

##### *Organisational standards*

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

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

##### *Industry standards*

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

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

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

## Qualification Pack

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

## Generic Skills (GS)

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

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

## Qualification Pack

### Assessment Criteria

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N9004
<b>NOS Name</b>	Comply with industry and organizational requirement
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Spinning, Weaving, Processing, Knitting
<b>Occupation</b>	Textile Mill sector - Cotton
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	25/02/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQC Clearance Date</b>	05/08/2015

## Qualification Pack

### 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/N5301.Taking charge of shift and handing over shift to Washing Range Operator	23	43	-	9	75	15
TSC/N5302.Operating the Washing Range Machine	31	76	-	18	125	25
TSC/N5303.Checking the quality of Washed fabric	11	29	-	10	50	10
TSC/N9001.Maintain work area, tools and machines	17	20	-	13	50	10

### Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N9002.Working in a team	19	20	-	11	50	10
TSC/N9003.Maintain health, safety and security at workplace	32	40	-	28	100	20
TSC/N9004.Comply with industry and organizational requirement	15	20	-	15	50	10
<b>Total</b>	<b>148</b>	<b>248</b>	<b>-</b>	<b>104</b>	<b>500</b>	<b>100</b>



## Acronyms

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

## Glossary

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

## Qualification Pack

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