

## Qualification Pack



# Pirn Winding Machine Operator

QP Code: TSC/Q2206

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

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### TSC/Q2206: Pirn Winding Machine Operator

#### Brief Job Description

Pirn Winding Machine Operator, is a job-role in a weaving department. The responsibility of Winder Automatic Pirn Winding Machine is to run the winding machine efficiently so as to get maximum output with minimum defects giving due importance to safety and environmental aspects.

#### Personal Attributes

A Winder -Automatic Pirn Winding Machine should have good eyesight, eye-hand coordination, motor skills and vision (including near vision, distance vision, colour vision, peripheral vision, depth perception and ability to change focus).

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [TSC/N2211: Taking charge of shift and handing over shift to Pirn Winding Machine Operator](#)
2. [TSC/N2212: Operating Auto Pirn Winding Machine](#)
3. [TSC/N9001: Maintain work area, tools and machines](#)
4. [TSC/N9002: Working in a team](#)
5. [TSC/N9003: Maintain health, safety and security at workplace](#)
6. [TSC/N9004: Comply with industry and organizational requirement](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Textile
<b>Sub-Sector</b>	Weaving
<b>Occupation</b>	Weaving Preparatory
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/8152.99
<b>Minimum Educational Qualification &amp; Experience</b>	10th Class (Preferably)

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<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	Training in weaving department (Suggested but not mandatory)
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	21/01/2015
<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/N2211: Taking charge of shift and handing over shift to Pirn Winding Machine Operator

## Description

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

## Scope

This unit/task covers the following:

- Taking charge of the shift from Pirn Winding Machine Operator
- Handing over the shift to Pirn Winding Machine Operator

## Elements and Performance Criteria

### *Take charge of the shift from Pirn winding machine operator*

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

1. come at least 10 - 15 minutes earlier to the work spot
2. meet the previous shift pirn winder & discuss with him/ her regarding the issues faced by him with respect to the quality, production, spare, safety or any other specific instruction etc
3. check for the running condition of all pirn winding spindles
4. check the running material & the count in the running spindles
5. check the weft stock & the quality of the weft stock
6. ensure whether the said stock is enough to run the machines throughout the shift
7. check for the empty pirns on the magazines
8. check whether all the empty bobbins/ pirns are collected from the empty pirn box & also to ensure that the bunch waste in the said empty pirns are completely stripped
9. check the cleanliness of the machines & other work areas
10. check whether any spare/raw material/ tool / fabric/ any other material are thrown under the machines or in the other work areas
11. question the previous shift winder for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well that of the previous shift

### *Handing over the Shift to Pirn winding machine operator*

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

12. hand over the shift to the incoming winder in a proper manner & get clearance from the incoming counterpart before leaving the work spot
13. report to his/ her shift superiors as well as that of the incoming shift, in case his/ her counterpart doesn't report for work. in that case, the shift has to be properly handed over to the incoming shift superior & get clearance from him/ her, before leaving the work spot
14. 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

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### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization's policies & standard operating procedures (SOP)
- KU2.** should have awareness & knowledge of customers
- KU3.** potential hazards associated with the machines and the safety precautions that must be taken
- KU4.** protocol to obtain more information on work related tasks
- KU5.** contact person in case of queries on procedure or products and for resolving issues related to defective machines, tools, materials & equipments
- KU6.** details of the various job roles & responsibilities
- KU7.** documentation and reporting formats
- KU8.** work targets & review with superiors
- KU9.** protocol and format for reporting work related risks/ problems
- KU10.** method of obtaining /giving feedback with respect to performance.
- KU11.** importance of team work, harmonious working relationships
- KU12.** process for offering /obtaining work related assistance
- KU13.** responsibilities under health, safety and environmental legislation
- KU14.** guidelines for storage & disposal of waste materials
- KU15.** minimum quality requirements of the product with respect to permissible/non-permissible defects
- KU16.** yarns from natural fibers - cotton, silk, wool
- KU17.** yarns from manmade fibers - polyester, nylon, viscose
- KU18.** blended yarns - polyester cotton, polyester viscose
- KU19.** hand winding
- KU20.** power machine - conventional
- KU21.** power machine automatic pirn winding machine
- KU22.** should know the safety mechanisms of the machines & should ensure that the same are in order
- KU23.** should know about the stop motions & should ensure that the same are in order
- KU24.** should know about the indication lamps & should ensure that the same are in order
- KU25.** should know about the functional operations of the machines, where he/she is working

### Generic Skills (GS)

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

- GS1.** write clear and short sentences
- GS2.** read and comprehend written instructions
- GS3.** should ensure that weft breaks/loom hour doesn't exceed 2
- GS4.** should ensure that the efficiency is maintained in excess of 85%

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- GS5.** should ensure that the weft waste doesn't exceed 2 %
- GS6.** one should put a minimum of 15 knots/ minute
- GS7.** should ensure that only bunch length of 2-3 meters is there
- GS8.** should be able to fill around 24 pirns in a battery in a maximum period of 2 minutes
- GS9.** one should attend battery filling with proper pick finding in 30 seconds
- GS10.** plan and manage work routine based on instructions from supervisor
- GS11.** should willingly participate in the various programs/ meetings that are conducted by the superiors & put forth the suggestions in the interest of the Company
- GS12.** participate in the Quality Circles that are formed by the Superiors
- GS13.** should extend voluntary supports and adapt to the various procedures that are adopted by the Company with respect to compliances for the different certifications like ISO 9001, ISO 14001, SA 8001 GOTS Certification Fair Trade etc.

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Take charge of the shift from Pirn winding machine operator</i>	<b>31</b>	<b>78</b>	-	<b>15</b>
1. come at least 10 - 15 minutes earlier to the work spot	-	12	-	-
2. meet the previous shift pirn winder & discuss with him/ her regarding the issues faced by him with respect to the quality, production, spare, safety or any other specific instruction etc	6	6	-	-
3. check for the running condition of all pirn winding spindles	3	6	-	3
4. check the running material & the count in the running spindles	3	6	-	3
5. check the weft stock & the quality of the weft stock	4	8	-	-
6. ensure whether the said stock is enough to run the machines throughout the shift	2	8	-	-
7. check for the empty pirns on the magazines	4	6	-	-
8. check whether all the empty bobbins/ pirns are collected from the empty pirn box & also to ensure that the bunch waste in the said empty pirns are completely stripped	2	8	-	2
9. check the cleanliness of the machines & other work areas	3	4	-	3
10. check whether any spare/raw material/ tool / fabric/ any other material are thrown under the machines or in the other work areas	2	6	-	2
11. question the previous shift winder for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well that of the previous shift	2	8	-	2
<i>Handing over the Shift to Pirn winding machine operator</i>	<b>9</b>	<b>22</b>	-	<b>5</b>

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
12. hand over the shift to the incoming winder in a proper manner & get clearance from the incoming counterpart before leaving the work spot	3	8	-	1
13. report to his/ her shift superiors as well as that of the incoming shift, in case his/ her counterpart doesn't report for work. in that case, the shift has to be properly handed over to the incoming shift superior & get clearance from him/ her, before leaving the work spot	3	8	-	1
14. 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	3	6	-	3
<b>NOS Total</b>	<b>40</b>	<b>100</b>	<b>-</b>	<b>20</b>

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N2211
<b>NOS Name</b>	Taking charge of shift and handing over shift to Pirn Winding Machine Operator
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Weaving
<b>Occupation</b>	Weaving Preparatory
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	21/01/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQC Clearance Date</b>	05/08/2015

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### TSC/N2212: Operating Auto Pirn Winding Machine

#### Description

This unit provides performance criteria, knowledge & understanding and skills & abilities required to run automatic pirn winding machine, by attending to thread breakages, so as to get maximum output & minimum defects, without entertaining any damage to the people, the machine etc., without wasting much of raw materials, spares, tools etc., & without spoiling the environmental aspects

#### Scope

This unit/task covers the following:

- Stripping of empty pirns
- Running of pirn winding machine
- Battery filling
- Other work practices

#### Elements and Performance Criteria

##### *Stripping of Empty Pirns*

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

1. collect the empty pirns from the boxes kept on the looms to store the empty pirns falling after transfer of weft pirns effected through automatic weft replenishment
2. ensure that there is no excess weft yarn than the bunch waste left in the empty pirns. the same has to be intimated to the higher authority, so that it can be arrested on the looms. empty pirns with excess weft yarns ( pirns & pirns) have to be run on the looms without giving room for high wastage of yarn
3. see that the empty pirns are left with 2- 3 metres of weft yarn (bunch waste), as otherwise, it illustrates that there was no bunch provided in the pirn winding
4. handstrip the bunch waste from the collected empty pirns
5. fill the stripped empty pirns in the magazine on the pirn winding machine

##### *Running of Pirn Winding Machine*

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

6. ensure the spindle numbers are written against each spindle
7. ensure proper identification of the material & the count to be run on each & every pirn winding spindle. same can be written on the corresponding spindles, or boards can be hanged against the individual spindles
8. ensure that the full pirns are dropped in the weft boxes kept below respective pirn winding spindles
9. ensure that the full pirns from one spindle dont fall in the box kept below the adjacent spindles
10. check the material & the count in the cones / cheeses from the bags/ boxes before the same are fixed on the cone/cheese holders on the machine against the respective spindles
11. ensure the auto bunching mechanism on the respective spindles is working properly
12. bring the weft yarn from the cones/ cheeses through the guides on the respective spindles

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13. ensure that the initial threading is with proper bunch length only
14. attend the weft breakage using knitters or by ensuring tiny hand knots.
15. bring any abnormal thread breakage, to the notice of higher authority

### *Battery Filling*

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

16. take the produced weft pirns to the loom shed in separate boxes depending on the material and the count to ensure no weft mix-up
17. store the weft pirns on the pirn boxes kept on the respective looms
18. use weft pirns kept in the boxes on the respective looms only, to fill the batteries on the corresponding looms
19. pull about 2 metres of weft in the pirns in the right hand & hold around 4 - 5 pirns at a time in the left hand
20. press the head of the pirns in the space in the battery disc one by one and press the tips of the pirns in the aligned path of the pirn holders
21. wind the pirn threads in the battery umbrella anti clockwise

### *Other Work Practices*

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

22. write following details on a board hanged/ kept in the winding department: spindle number, material type ( cotton/ viscose/ polyester /p.c./ other etc) running on the respective spindle, material classification ( o. e/ ring spun carded/ ring spun combed/ ring spun compact/other etc. running on the respective spindle, count running on the respective spindle, the loom number against the respective spindle
23. ensure that stripping of empty pirns is done by hands only and no knife to be used as it will damage the empty pirns
24. ensure that the empty pirns are in good condition in respect to both head & tip
25. ensure that brass wrapper in the empty pirn is in good condition. Whenever new empty pirns are engaged see that the brass portion is buffed properly using sand /emery paper
26. do not use any damaged or broken pirn, in case there is breakage /damage the same has to be brought to the notice of the higher authority while collecting empty pirns from the looms
27. clean the machine & the pirn winding area at least twice in a shift
28. collect the waste wound on the umbrella of the loom batteries at the end of the shift
29. weigh the battery waste & bunch waste separately and the same has to be recorded in the note book kept for it
30. store the said wastes separately in the places earmarked
31. tie the waste bag & all the waste generated by the winders are collected in it, which can be ultimately disposed off in the places/ bins provided
32. ensure that the correct weft yarn only is used
33. additional wastage of raw materials for any quality issue or defective cone etc. to be brought to the notice of the superiors
34. give preference to safety should not enter the area, where he/ she are not allowed., should not do a job on which training has not being given
35. ensure that no raw material/ cloth/ spare/ tool / any other material is thrown under/ near the machines or in the other work areas

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36. check for the reasons for frequent weft breaks & take corrective action.
37. Report the same to the mechanics/ fitters/ superiors if it is not corrected
38. write log book for the following: spindle problem for bunch or non functioning of spindle, spare parts breakage, other machine complaints, material complaints for poor performance or damages, pirn breakages (loom wise), pirn breakage in pirn winding,

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization's policies & standard operating procedures (SOP)
- KU2.** should have an awareness & knowledge of customers
- KU3.** potential hazards associated with the machines and the safety precautions that must be taken
- KU4.** protocol to obtain more information on work related tasks
- KU5.** contact person in case of queries on procedure or products and for resolving issues related to defective machines, tools, materials & equipments
- KU6.** details of the various job roles & responsibilities
- KU7.** documentation and reporting formats
- KU8.** work targets & review with superiors
- KU9.** protocol and format for reporting work related risks/ problems
- KU10.** method of obtaining /giving feedback with respect to performance
- KU11.** importance of team work, harmonious working relationships
- KU12.** process for offering /obtaining work related assistance
- KU13.** responsibilities under health, safety and environmental legislation
- KU14.** guidelines for storage & disposal of waste materials
- KU15.** minimum quality requirements of the product with respect to permissible/non-permissible defects
- KU16.** yarns from natural fibers - cotton, silk, wool
- KU17.** yarns from manmade fibers - polyester, nylon, viscose
- KU18.** blended yarns - polyester cotton, polyester viscose
- KU19.** hand winding
- KU20.** power machine - conventional
- KU21.** power machine automatic pirn winding machine
- KU22.** should know the safety mechanisms of the machines & should ensure that the same are in order
- KU23.** should know about the stop motions & should ensure that the same are in order
- KU24.** should know about the indication lamps & should ensure that the same are in order
- KU25.** should know about the functional operations of the machines, where he/she is working

### Generic Skills (GS)

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

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- GS1.** write clear and short sentences
- GS2.** read and comprehend written instructions
- GS3.** ensure that weft breaks/loom hour doesn't exceed 2
- GS4.** ensure that the efficiency is maintained in excess of 85%
- GS5.** ensure that the weft waste doesn't exceed 2 %
- GS6.** one should put a minimum of 15 knots/ minute
- GS7.** ensure that only bunch length of 2-3 meters is there
- GS8.** be able to fill around 24 pirns in a battery in a maximum period of 2 minutes
- GS9.** One should attend battery filling with proper pick finding in 30 seconds
- GS10.** communicate effectively
- GS11.** apply leadership skills wherever required
- GS12.** take initiative at the right place
- GS13.** understand the requirement to be creative
- GS14.** plan and manage work routine based on instructions from supervisor
- GS15.** should willingly participate in the various programs/ meetings that will be conducted by the superiors & put forth the suggestions in the interest of the company
- GS16.** participate in the quality circles formed by the superiors
- GS17.** should extend voluntary supports and adapt to the various procedures that are adopted by the company with respect to compliances for the different certifications like ISO 9001, ISO 14001, SA 8001 GOTS certification fair trade etc.

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Stripping of Empty Pirns</i>	<b>12</b>	<b>32</b>	-	<b>6</b>
1. collect the empty pirns from the boxes kept on the looms to store the empty pirns falling after transfer of weft pirns effected through automatic weft replenishment	2	6	-	2
2. ensure that there is no excess weft yarn than the bunch waste left in the empty pirns. the same has to be intimated to the higher authority, so that it can be arrested on the looms. empty pirns with excess weft yarns ( pirns & pirns) have to be run on the looms without giving room for high wastage of yarn	-	8	-	2
3. see that the empty pirns are left with 2- 3 metres of weft yarn (bunch waste), as otherwise, it illustrates that there was no bunch provided in the pirn winding	-	8	-	2
4. handstrip the bunch waste from the collected empty pirns	5	5	-	-
5. fill the stripped empty pirns in the magazine on the pirn winding machine	5	5	-	-
<i>Running of Pirn Winding Machine</i>	<b>23</b>	<b>54</b>	-	<b>15</b>
6. ensure the spindle numbers are written against each spindle	2	4	-	2
7. ensure proper identification of the material & the count to be run on each & every pirn winding spindle. same can be written on the corresponding spindles, or boards can be hanged against the individual spindles	5	5	-	-
8. ensure that the full pirns are dropped in the weft boxes kept below respective pirn winding spindles	3	3	-	2
9. ensure that the full pirns from one spindle dont fall in the box kept below the adjacent spindles	3	4	-	3

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
10. check the material & the count in the cones / cheeses from the bags/ boxes before the same are fixed on the cone/cheese holders on the machine against the respective spindles	2	4	-	2
11. ensure the auto bunching mechanism on the respective spindles is working properly	-	8	-	2
12. bring the weft yarn from the cones/ cheeses through the guides on the respective spindles	4	4	-	2
13. ensure that the initial threading is with proper bunch length only	-	8	-	2
14. attend the weft breakage using knitters or by ensuring tiny hand knots.	2	6	-	-
15. bring any abnormal thread breakage, to the notice of higher authority	2	8	-	-
<i>Battery Filling</i>	<b>16</b>	<b>36</b>	-	<b>4</b>
16. take the produced weft pirns to the loom shed in separate boxes depending on the material and the count to ensure no weft mix-up	2	8	-	-
17. store the weft pirns on the pirn boxes kept on the respective looms	2	8	-	-
18. use weft pirns kept in the boxes on the respective looms only, to fill the batteries on the corresponding looms	4	6	-	-
19. pull about 2 metres of weft in the pirns in the right hand & hold around 4 - 5 pirns at a time in the left hand	4	6	-	-
20. press the head of the pirns in the space in the battery disc one by one and press the tips of the pirns in the aligned path of the pirn holders	2	4	-	2
21. wind the pirn threads in the battery umbrella anti clockwise	2	4	-	2
<i>Other Work Practices</i>	<b>66</b>	<b>60</b>	-	<b>16</b>

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
22. write following details on a board hanged/ kept in the winding department: spindle number, material type ( cotton/ viscose/ polyester /p.c./ other etc) running on the espective spindle, material classification ( o. e/ ring spun carded/ ring spun combed/ ring spun compact/other etc. running on the respective spindle, count running on the respective spindle, the loom number against the respective spindle	2	4	-	2
23. ensure that stripping of empty pirns is done by hands only and no knife to be used as it will damage the empty pirns	2	4	-	2
24. ensure that the empty pirns are in good condition in respect to both head & tip	2	4	-	2
25. ensure that brass wrapper in the empty pirn is in good condition. Whenever new empty pirns are engaged see that the brass portion is buffed properly using sand /emery paper	2	4	-	2
26. do not use any damaged or broken pirn, in case there is breakage /damage the same has to be brought to the notice of the higher authority while collecting empty pirns from the looms	2	4	-	2
27. clean the machine & the pirn winding area at least twice in a shift	2	6	-	2
28. collect the waste wound on the umbrella of the loom batteries at the end of the shift	2	6	-	2
29. weigh the battery waste & bunch waste separately and the same has to be recorded in the note book kept for it	4	4	-	-
30. store the said wastes separately in the places earmarked	5	3	-	-
31. tie the waste bag & all the waste generated by the winders are collected in it, which can be ultimately disposed off in the places/ bins provided	5	3	-	-
32. ensure that the correct weft yarn only is used	6	2	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
33. additional wastage of raw materials for any quality issue or defective cone etc. to be brought to the notice of the superiors	4	4	-	-
34. give preference to safety should not enter the area, where he/ she are not allowed., should not do a job on which training has not being given	7	3	-	-
35. ensure that no raw material/ cloth/ spare/ tool / any other material is thrown under/ near the machines or in the other work areas	5	3	-	-
36. check for the reasons for frequent weft breaks& take corrective action.	6	1	-	1
37. Report the same to the mechanics/ fitters/ superiors if it is not corrected	6	1	-	1
38. write log book for the following: spindle problem for bunch or non functioning of spindle, spare parts breakage, other machine complaints, material complaints for poor, performance or damages, pirn breakages (loom wise), pirn breakage in pirn winding,	4	4	-	-
<b>NOS Total</b>	<b>117</b>	<b>182</b>	<b>-</b>	<b>41</b>

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	TSC/N2212
<b>NOS Name</b>	Operating Auto Pirn Winding Machine
<b>Sector</b>	Textile
<b>Sub-Sector</b>	Weaving
<b>Occupation</b>	Weaving Preparatory
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	21/01/2015
<b>Next Review Date</b>	01/03/2016
<b>NSQF 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

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- 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>NSQF 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

## 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/N2211.Taking charge of shift and handing over shift to Pirn Winding Machine Operator	40	100	-	20	160	21
TSC/N2212.Operating Auto Pirn Winding Machine	117	182	-	41	340	45
TSC/N9001.Maintain work area, tools and machines	17	20	-	13	50	7
TSC/N9002.Working in a team	19	20	-	11	50	7

### Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
TSC/N9003.Maintain health, safety and security at workplace	32	40	-	28	100	13
TSC/N9004.Comply with industry and organizational requirement	15	20	-	15	50	7
<b>Total</b>	<b>240</b>	<b>382</b>	<b>-</b>	<b>128</b>	<b>750</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

## Qualification Pack

### Glossary

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

## Qualification Pack

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