

Model Curriculum

Warper

SECTOR: TEXTILE
SUB-SECTOR: Handloom
OCCUPATION: PRE LOOM OPERATOR
REF. ID: TSC/Q 7302, VERSION 1.0
NSQF LEVEL: 3



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

TEXTILE SECTOR SKILL COUNCIL

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: 'WAPER' QP No. 'TSC/ Q 7302' **NSQF Level 3'**

Date of Issuance: **January, 18th, 2016**

Valid up to: **January 17th, 2017**

* Valid up to the next review date of the Qualification Pack



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WARPER

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “warper”, in the “Textile” Sector/Industry and aims at building the following key competencies amongst the learner.

Program Name	Warper		
Qualification Pack Name & Reference ID.	Warper, TSC/Q7302, version 1.0		
Version No.	1.0	Version Update Date	18-01-2016
Pre-requisites to Training	Preferably equivalent to 8 th standard		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Carry out pre warping activities • Operate the warping machine • Carry out post warping activities • Maintain work area, tools and machines • Gain behavioral skill for team working • Maintain health, safety and security at work place • Comply with industry and organizational requirement 		

This course encompasses 7 out of 7 National Occupational Standards (NOS) of "warper" Qualification Pack issued by "TSC: Textile Sector Skill Council"

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Carry out pre warping activities</p> <p>Theory Duration (hh:mm) 34:00</p> <p>Practical Duration (hh:mm) 52:00</p> <p>Corresponding NOS Code TSC/N 7302</p>	<ul style="list-style-type: none"> Remove the run out cones/bobbins if it is still there on the machine Collect the removed cones/bobbins and place them in the designated box Clean the warping creel area and the warping machine thoroughly Calculate the number of cones/bobbins required as per total number of ends. Check with the supervisor Calculate minimum required weight of cones/bobbins for preparing the required length of warp. Check with the supervisor Collect the required number of cones/bobbins of minimum weight Draw the ends from each creel Creel the cones in the creel stand Splice the new set of ends with old set in the heck box or draw the new set of ends from heck box Ensure that the yarns pass through the designated passage on the machine Wind the creeled yarns on the machine Piece the broken yarn 	<p><u>1. A sample of following items for each trainee:</u> Cones/bobbins</p> <p><u>2. Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
2	<p>Operate the warping machine</p> <p>Theory Duration (hh:mm) 21:00</p> <p>Practical Duration (hh:mm) 43:00</p> <p>Corresponding NOS Code TSC/N 7303</p>	<ul style="list-style-type: none"> Have proper leasing of ends Start the warping machine Ensure that there is no overlapping of ends and pay special attention to the edges Keep a close check if there is any yarn breakage Stop the machine in case of any breakage and mend it Ensure that the yarn should be pieced with minimum overlapping Ensure that minimum time is taken for attending the yarn breakage Ensure that the tension of the pieced yarn is proper Stop the machine when warping of required length is done Complete the warping of first section, as per the set metres, doff the warped yarns Run the number of sections required as per total number of ends and width of warp sheet Transfer the completed warp from warping drum to weaver's beam 	<p><u>1. common for every batch:</u> warping machine, warp beam, weaver beam</p> <p><u>3. Class room requirements:</u> 25 people seating capacity with a screen and projector</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
3	<p>Carry out post warping activities</p> <p>Theory Duration (hh:mm) 16:00</p> <p>Practical Duration (hh:mm) 27:00</p> <p>Corresponding NOS Code TSC/N 7304</p>	<ul style="list-style-type: none"> • Ensure that the warped yarns are doffed properly • Label the warper yarns with required details like count, number of ends etc. • Store the warped yarns properly and ensure it is kept stable • Cover the warped yarns properly so that it does not get stained • Dispose of the waste materials in the approved manner • Leave work area safe and secure when work is complete 	<p><u>1. common for every batch:</u> warp beam, weaver beam</p> <p><u>3. Class room requirements:</u> 25 people seating capacity with a screen and projector</p>
4	<p>Maintain work area tools and machines in Handloom sector</p> <p>Theory Duration (hh:mm) 08:00</p> <p>Practical Duration (hh:mm) 13:00</p> <p>Corresponding NOS Code TSC/N 9005</p>	<ul style="list-style-type: none"> • Handle materials and tools safely and correctly • Use correct lifting and handling procedures • Use materials in a manner to minimize waste • Maintain a clean and hazard free working area • Maintain the tools and equipment used for warping • Carry out maintenance and/or cleaning within one's responsibility • Identify damaged tools and materials and take action according to the standards followed • Ensure that the correct tools and yarn required are in place • Work with the correct posture • Use cleaning equipment and methods appropriate for the work to be carried out • Dispose of waste safely in the designated location • Store cleaning equipment safely after use • Carry out cleaning according to schedule and limits of responsibility 	<p><u>Class room requirements:</u> 25 people seating capacity with a screen and projector</p>
5	<p>Working in a team in handloom sector</p> <p>Theory Duration (hh:mm) 08:00</p> <p>Practical Duration (hh:mm) 13:00</p> <p>Corresponding NOS Code TSC/N 9006</p>	<ul style="list-style-type: none"> • Be accountable to one's own role in the whole process • Perform all roles with full responsibility • Be effective and efficient at workplace • Properly communicate about workplace policies • Talk politely with other team members and colleagues • Submit daily report of own performance • Adjust in different work situations • Give due importance to others' point of view • Avoid conflicting situations • Improve upon the existing techniques to increase process efficiency 	<p><u>Class room requirements:</u> 25 people seating capacity with a screen and projector</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
6	<p>Maintain health, safety and security at work place in handloom sector</p> <p>Theory Duration (hh:mm) 14:00</p> <p>Practical Duration (hh:mm) 30:00</p> <p>Corresponding NOS Code TSC/N 9007</p>	<ul style="list-style-type: none"> • Comply with health and safety related instructions applicable to the workplace • Use and maintain personal protective equipment as per protocol • Carry out own activities in line with approved guidelines and procedures • Maintain a healthy lifestyle and guard against dependency on in toxicants • Follow environment management system related procedures • Store materials and tools in line with manufacturer’s and Cooperative Society/NGO/SHG requirements • Safely handle and move waste and debris • Minimize health and safety risks to self and others due to own actions • Monitor the work place and work processes for potential risks and threats • Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned • Participate in mock drills/ evacuation procedures organized at the workplace • Undertake first aid, fire-fighting and emergency response training, if asked to do so • Take action based on instructions in the event of fire, emergencies or accidents • Follow Cooperative Society/NGO/SHG procedures for evacuation when required • Identify different kinds of possible hazards (environmental, personal, ergonomic and chemical) of the industry • Recognize other possible security issues existing in the workplace • Plan the safety techniques • Recognize different measures to curb the hazards • Implement the programs • Communicate the safety plans to everyone • Attach disciplinary rules with the implementation 	<p><u>1. A sample of following items for each trainee:</u> apron, head cap, nose mask, ear plug, shoe,</p> <p><u>2. common for every batch:</u> first aid materials, fire extinguisher, work method posters/pictures,</p> <p><u>3. Class room requirements:</u> 25 people seating capacity with a screen and projector</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
7	<p>Comply with work place requirements in handloom sector</p> <p>Theory Duration (hh:mm) 09:00</p> <p>Practical Duration (hh:mm) 12:00</p> <p>Corresponding NOS Code TSC/N 9008</p>	<ul style="list-style-type: none"> • Perform own duties effectively • Take responsibility for own actions • Be accountable towards the job role and assigned duties • Take initiative and innovate the existing methods • Focus on self-learning and improvement • Co-ordinate with all team members and college • Communicate politely • Avoid conflicts and miscommunication • Know the organizational standards • Implement them in your performance • Motivate others to follow them 	<p><u>Class room requirements:</u> 25 people seating capacity with a screen and projector</p>
	<p>Total Duration:</p> <p>Theory Duration 110:00</p> <p>Practical Duration 190:00</p>	<p>Unique Equipment Required:</p> <ul style="list-style-type: none"> • Warp beam, Warping machine • weaver beam • Apron, head cap, nose mask, ear plug, shoe, first aid materials, fire extinguisher, work method posters, work method video visuals, projector, screen 	

Grand Total Course Duration: 300 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by TSC: Textile Sector Skill Council)

Trainer Prerequisites for Job role: “Warper” mapped to Qualification Pack: “Warper/TSC Q 7302, Version 1.0”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “Warper/TSC Q7302,
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organized and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	Preferably equivalent to 8th (Normal literacy of reading, writing and understanding)
4a	Domain Certification	Certified for Job Role: ”warper” mapped to QP: “Warper/TSC Q7302, Version 1.0”. Minimum accepted score 80%.
4b	Platform Certification	Required that the Trainer is certified for SSC/Q 1402 Job Role: “Trainer” with atleast 80% score
5	Experience	Minimum 2 years’ experience as warper operator

Annexure: Assessment Criteria

Assessment Criteria for Packing Checker	
Job Role	Warper
Qualification Pack	Warper (TSC/Q 7302)
Sector Skill Council	Textile Sector Skill Council

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each qualification pack will be created by the Sector Skill Council. Each performance criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for theory & skill practical for each PC.
2	The assessment for the theory part will be based on knowledge bank of question 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	To pass the qualification pack, every trainee should score a minimum of 50%.
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

National Occupational Standards (NOS)	Performance Criteria (PO)	Total Mark	Out of	Marks Allocation	
				Theory	Skills Practical /Viva
TSC/N 7302 (Carry out pre warping activities)	PC1.Remove the run out cones/bobbins if it is still there on the machine	202	10	3	7
	PC2.Collect the removed cones/bobbins and place them in the designated box		12	5	7
	PC3.Clean the warping creel area and the warping machine thoroughly		14	4	10
	PC4.Calculate the number of cones/bobbins required as per total number of ends. Check with the supervisor		25	15	10
	PC5.Calculate minimum required weight of cones/bobbins for preparing the required length of warp. Check with the supervisor		25	15	10
	PC6.Collect the required number of cones/bobbins of minimum weight		12	5	7
	PC7.Draw the ends from each creel		16	5	11
	PC8.Creel the cones in the creel stand		16	5	11
	PC9. Splice the new set of ends with old set in the Heck box or draw the new set of ends through heck box		20	6	14
	PC10.Ensure the yarns passes through the designated passage on the machine		12	5	7
	PC11.Wind the creeled yarns on the machine		20	6	14
	PC12.Piece the broken yarn		20	6	14
	Total		202	202	80
TSC/N 7303 (Operate the warping machine)	PC1. Have proper leasing of ends	154	16	5	11
	PC2.Start the warping machine		11	4	7
	PC3.Ensure that there should be no overlapping of ends and pay special attention to the edges		15	6	9
	PC2.Check that the container for carrying out dyeing is clean		16	5	11
	PC5.Stop the machine in case of any breakage and mend it		11	4	7
	PC6.Ensure that the yarn should be pieced with		16	5	11

National Occupational Standards (NOS)	Performance Criteria (PO)	Total Mark	Out of	Marks Allocation	
				Theory	Skills Practical /Viva
	minimum overlapping				
	PC7.Ensure that minimum time is taken for attending the yarn breakage		8	3	5
	PC8.Ensure that the tension of the pieced yarn is proper		11	3	8
	PC9.Stop the machine when warping of required length is done		8	3	5
	PC10. Complete the warping of first section, as per the set metres, doff the warped yarns		16	5	11
	PC11.Run number of sections required as per total number of ends and width of warp sheet		11	4	7
	PC12.Transfer the completed warp from warping drum to weaver's beam		15	5	10
	Total	154	154	52	102
TSC/N 7304 (Carry out post warping activities)	PC1.Ensure the warped yarns are doffed properly	101	12	5	7
	PC2.Label the warper yarns with required details like count, number of ends, width of warp, length of warp etc.		25	10	15
	PC3.Store the warped yarns properly and ensure it is kept stable		26	8	18
	PC4.Cover the warped yarns properly so that it does not get stained		15	6	9
	PC5.Dispose of the waste materials in the approved manner		15	6	9
	PC6.Leave work area safe and secure when work is complete		8	3	5
	Total	101	101	38	63
TSC/N 9005 (Maintain work area, tools and machines in	PC1.Handle materials and tools safely and correctly	50	5	2	3
	PC2.Use correct lifting and handling procedures		3	1	2
	PC3.Use materials to minimize waste		3	1	2

National Occupational Standards (NOS)	Performance Criteria (PO)	Total Mark	Out of	Marks Allocation		
				Theory	Skills Practical /Viva	
handloom sector)	PC4.Maintain a clean and hazard free working area		3	1	2	
	PC5.Maintain the tools used for winding		5	2	3	
	PC6.Carry out maintenance and/or cleaning within one's responsibility		5	2	3	
	PC7.Identify damaged tools and materials and take action according to the standards followed		5	2	3	
	PC8.Ensure that the correct tools and yarn required are in place		3	1	2	
	PC9.Work in a comfortable position with the correct posture		3	1	2	
	PC10.Use cleaning equipment and methods appropriate for the work to be carried out		3	1	2	
	PC11.Dispose of waste safely in the designated location		4	2	2	
	PC12.Store cleaning equipment safely after use		3	1	2	
	PC13.Carry out cleaning according to schedule and limits of responsibility		5	2	3	
	Total		50	50	19	31
TSC/N 9006 (Working in a team in handloom sector)	PC1.Be accountable to the own role in whole process	50	6	2	4	
	PC2.Perform all roles with full responsibility		5	1	4	
	PC3.Be effective and efficient at workplace		4	2	2	
	PC4.Properly communicate about workplace policies		5	2	3	
	PC5.Talk politely with other team members and colleagues		5	2	3	
	PC6.Submit daily report of own performance		6	2	4	
	PC7.Adjust in different work situations		5	2	3	
	PC8.Give due importance to others' point of view		5	2	3	
	PC9.Avoid conflicting situations		5	2	3	
	PC10.Improve upon the existing techniques to increase process efficiency		4	2	2	
	Total		50	50	19	31

National Occupational Standards (NOS)	Performance Criteria (PO)	Total Mark	Out of	Marks Allocation	
				Theory	Skills Practical /Viva
TSC/N 9007 (Maintain health, safety and security at workplace in handloom sector)	PC1. Comply with health and safety related instructions applicable to the workplace	100	6	2	4
	PC2. Use and maintain personal protective equipment as per protocol		6	2	4
	PC3. Carry out own activities in line with approved guidelines and procedures		4	1	3
	PC4. Maintain a healthy lifestyle and guard against dependency on intoxicants		4	1	3
	PC5. Follow environment management system related procedures		4	1	3
	PC6. Store materials and tools in line with manufacturer's and Cooperative Society/NGO/SHG requirements		4	2	2
	PC7. Safely handle and move waste and debris		4	2	2
	PC8. Minimize health and safety risks to self and others due to own actions		6	2	4
	PC9. Monitor the work place and work processes for potential risks and threats		6	2	4
	PC10. Carry out periodic walk –through to keep work area free from hazards and obstructions, if assigned		6	2	4
	PC11. Participate in mock drills/ evacuation procedures organized at the workplace		4	2	2
	PC12. Undertake first aid, fire-fighting and emergency response training, if asked to do so		6	2	4
	PC13. Take action based on instructions in the event of fire, emergencies or accidents		6	2	4
	PC14. Follow Cooperative Society/NGO/SHG procedures for evacuation when required		4	1	3
	PC15. Identify different kinds of possible hazards (environmental, personal, ergonomic, and chemical) of the industry		4	1	3
	PC16. Recognise other possible security issues existing in the workplace		4	1	3
	PC.17 Planning the safety techniques		5	2	3
	PC18. Recognise different measures to curb the hazards		4	1	3

National Occupational Standards (NOS)	Performance Criteria (PO)	Total Mark	Out of	Marks Allocation	
				Theory	Skills Practical /Viva
	PC19.Implementing the programs		5	2	3
	PC20.Communicate the safety plan to everyone		4	1	3
	PC21.Attach disciplinary rules with the implementation		4	1	3
	Total	100	100	33	67
TSC/N 9008 (Comply with work place requirements in handloom sector)	PC1.Perform own duties effectively	50	5	2	3
	PC2.Take responsibility for own actions		5	2	3
	PC3.Be accountable towards the job role and assigned duties		5	2	3
	PC4.Take initiative and innovate the existing methods		3	1	2
	PC5.Focus on self-learning and improvement		5	2	3
	PC6.Co-ordinate with all the team members and colleagues		5	2	3
	PC7.Communicate politely		5	2	3
	PC8.Avoid conflicts and miscommunication		5	2	3
	PC9.Know the organizational standards		5	2	3
	PC10.Implement them in your performance		5	2	3
	PC11.Motivate others to follow them		2	1	1
	Total		50	50	20
Grand Total		707	707	261	446

