

It's Objective, learning outcomes, Modules, assessments and material list

**NAME OF THE COURSE: Shuttle-Less loom weaver-Airjet and Direct
Warping Machine.**

Submitted to :- Bihar Skill Development Mission, Labour Resources Department, GoB	Submitted By :- Sandeep Kumar
	Session :22-27

Course name:

- Course Id- blank
- Candidate Eligibility : 5th
- Course Duration: 760 (In hours)

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

Welspun India Limited

Welspun City, Village Versamedi, Taluka Anjar Kutch, Gujarat 370110

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Shuttle-Less Loom Weaver - Airjet

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a Shuttle-Less Loom Weaver - Airjet”, in the “Textile” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Shuttle-Less Loom Weaver - Airjet		
Qualification Pack Name & Reference ID.	Shuttle-Less Loom Weaver - Airjet TSC/Q2204, version 1.0		
Version No.	1.0	Version Update Date	21-01-2015
Pre-requisites to Training	Preferably equivalent to 5th (Normal literacy of reading, writing and understanding)		
Training Outcomes	After completing this programme, participants will be able to: <ul style="list-style-type: none">• Perform taking charge of shift and handing over shift• Operate the Shuttleless loom - Airjet• 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 6 out of 6 National Occupational Standards (NOS) of “Shuttle-Less Loom Weaver - Airjet” Qualification Pack issued by “TSC: Textile Sector Skill Council”

	Module	Key Learning Outcomes	Equipment Required
1	<p>Taking charge of shift and handing over shift to Shuttle-less Weaving Machine: Airjet</p> <p>Theory Duration (hh:mm) 16:30</p> <p>Practical Duration (hh:mm) 69:30</p> <p>Corresponding NOS Code TSC/N 2207</p>	<ul style="list-style-type: none"> • Gain knowledge about general discipline • Gain Knowledge about basic skills of communication • Understand the role of Shuttleless loom Airjet operator • Perform tasks while taking charge of shift and handing over shift • Familiar in faults identification 	<p><u>Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
2	<p>Run the Airjet loom efficiently</p> <p>Theory Duration (hh:mm) 48:30</p> <p>Practical Duration (hh:mm) 111:00</p> <p>Corresponding NOS Code TSC/N 2208</p>	<ul style="list-style-type: none"> • Gain knowledge on machine parts & its function • Gain knowledge on maintenance of loom parts • Perform warp and weft break attending 	<p><u>1. common for every batch:</u> poster/video visuals for work method</p> <p><u>2.Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
3	<p>Maintain work area, tools and machines</p> <p>Theory Duration (hh:mm) 06:00</p> <p>Practical Duration (hh:mm) 23:00</p> <p>Corresponding NOS Code TSC/N 9001</p>	<ul style="list-style-type: none"> • Gain knowledge on Housekeeping system • Identify and know unique functions of basic hand tools like cleaning hook, cleaning stick, bag, etc. • Handling equipment importances • Perform maintenance activities for handling equipment 	<p><u>1. common for every batch:</u> poster/video visuals for work method</p> <p><u>2.Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>

4	<p>Working in a team</p> <p>Theory Duration (hh:mm) 07:00</p> <p>Practical Duration (hh:mm) 22:00</p> <p>Corresponding NOS Code TSC/N 9002</p>	<ul style="list-style-type: none"> • Understand the team work and its importance • Know about the basic requirements for team working 	<p><u>Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
5	<p>Maintain health, safety and security at work place</p> <p>Theory Duration (hh:mm) 16:30</p> <p>Practical Duration (hh:mm) 31:00</p> <p>Corresponding NOS Code TSC/N 9003</p>	<ul style="list-style-type: none"> • Gain knowledge on general safety Rules • Gain knowledge about the importance of personal protective equipment like apron, cap, earplugs, nose mask etc. and their application under different working conditions. • Gain knowledge on various health hazards relevant to workplace and basic first aid training. • Identify and select right equipment such as fire extinguisher & based on type of fire. • Perform good practice on first aid, fire fighting etc. 	<p>1. A sample of following items for each trainee: apron, head cap, nose mask, ear plug, shoe, 2. common for every batch: first aid materials, fire extinguisher, work method posters/pictures, 3. <u>Class room requirements:</u> 25 people seating capacity with a screen and projector</p>
6	<p>Comply with industry and organisational requirement</p> <p>Theory Duration (hh:mm) 07:00</p> <p>Practical Duration (hh:mm) 22:00</p> <p>Corresponding NOS Code TSC/N 9004</p>	<ul style="list-style-type: none"> • Know about organizational and industry standards • Know the requirements for self-development • Gain knowledge on Organizational & Industry standards 	<p><u>Class room requirements:</u> 25 people seating capacity with a screen and projector</p>

Total Duration:	Unique Equipment Required: Apron, head cap, nose mask, earplug, shoe, Drawing hook, Scissors, Thrumbs
Theory Duration 101:30	
Practical Duration 278:30	

Grand Total Course Duration: 380 Hours, 0 Minutes

Trainer Prerequisites for Job role: “Shuttleless Loom Weaver - Airjet ” mapped to Qualification Pack: “Shuttleless Loom Weaver - Airjet / TSC Q 2204, 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 “ <u>Shuttleless Loom Weaver - Airjet /TSC Q 2204,</u>
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
3	Minimum Educational Qualifications	Preferably equivalent to 10th (Normal literacy of reading, writing and understanding)
4a	Domain Certification	Certified for Job Role:“Shuttleless Loom Weaver - Airjet” mapped to QP:“Shuttleless Loom Weaver - Airjet TSC Q2204,Version 1.0”.Minimum accepted score 80%.
4b	Platform Certification	Required that the Trainer is certified for MEP/Q 0102 Job Role: “Trainer” with atleast 80% score
5	Experience	Minimum 2 years’ experience with Shuttleless loom Weaver - Airjet

Annexure: Assessment Criteria

Job Role: Shuttle-Less Loom Weaver - Airjet Qualification Pack: Shuttle less loom Weaver - Airjet (TSC/Q 2204) Sector Skill Council: Textile Sector Skill Council						
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 centre (as per assessment criteria below) 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria. 5. To pass the qualification pack, every trainee should score a minimum of 80%. 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 (PC)	Total Marks	Out Of	Marks Allocation		
				Theory	Skills Practical	Viva
1. TSC/N2207 (Taking charge of shift and handing over shift to Shuttle-Less Loom Weaver -Airjet)	PC1. come at least 10 - 15 minutes earlier to the work spot	160	7	2	5	0
	PC2. bring the necessary operational tools like " weavers' hook", " weft wire" " knife" etc.		6	3	3	0
	PC3. meet the previous shift weaver , discuss with him/ her regarding the issues faced by them with respect to the quality or production or spare or safety or any other specific instruction etc.		7	3	4	0
	PC4. understand the type of fabric produced, specifications of fabrics, followed in the rapier loom for his allocated number of looms or machines		7	3	4	0
	PC5. ensure the technical details are mentioned in the display board		7	2	3	2

	in the rapier loom machine					
	PC6. check for the availability of the weft cones & check the condition of the same	7	2	3	2	
	PC7. check the condition of the running beams , for cross ends, ends pulling out particularly at the selvages, catch card etc.	6	2	2	2	
	PC8. check the availability of the " thrums" , quality & condition of the same	6	2	2	2	
	PC9. check the cloth for the running damages like end out, wrong drawing, wrong denting, double end, reed mark, temple cut/ temple mark let- off mark, take up fault, oil stain, hole, cloth torn, under tuck in , tails. etc.	7	2	3	2	
	PC10. check for the size of the cloth rolls & to see whether any indication is there in the cloth rolls	7	0	4	3	
	PC11. Check whether any spare/raw material/ tool / fabric/ any other material are thrown under the machines or in the other work areas.	7	2	3	2	
	PC12. Question the previous shift weaver 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 as well.	7	0	5	2	
	PC13. ensure proper functioning of rapier loom machine parts and machine	7	3	4	0	
	PC14. ensure the wastes collection boxes are empty while taking charge of shift	6	2	4	0	
	PC15. check the cleanliness of the machines & other work areas	6	2	4	0	

	PC16. ensure the work spot is clean		6	0	5	1
	PC17. hand over the shift to the incoming rapier loom weaver in a proper manner		6	0	6	0
	PC18. ensure in providing the details regarding count produced, color coding followed in the rapier loom for his allocated number of looms or machines		6	1	5	0
	PC19. provide all relevant information regarding the type of fabric production, damaged machine parts if any		6	1	5	0
	PC20. get clearance from the incoming counterpart before leaving the work spot		6	1	5	0
	PC21. 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		6	1	4	1
	PC22. ensure the shift is properly handed over to the incoming shift operator		6	2	4	0
	PC23. 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		6	3	3	0
	PC24. collect the waste from waste collection bags, weigh them and transport to storage area		6	1	5	0
	PC25. ensure the work spot is clean		6	0	5	1
	Total		160	40	100	20
	Weightage %			25%	63%	12%
2. TSC/N2208 (Run Airjet)	PC1. be able to do tiny and firm weaver's knots	340	10	2	6	2

Loom Efficiently)	PC2. ensure the weavers knot is of minimum size to pass easily through the heald wires and reed	10	0	8	2
	PC3. to check the indicating lamp	10	0	8	2
	PC4. to find out the broken warp end	10	5	5	0
	PC5. find out the location of the broken end, by bringing the hands under the dropper bars , with mechanical droppers	10	5	5	0
	PC6. use electrical warp stop motion , to detect the location using the indication lamp and by bringing the hands over the droppers	8	2	4	2
	PC7. be able to mend the broken warp end in the sized beams with the thrums of the same count of the sized beams, using " weavers ' knots'	10	5	5	0
	PC8. be able to draw the mended warp yarn through the healds properly , as per the drawing order prescribed	8	3	3	2
	PC9. start the loom without inching/ in one stroke	10	3	4	3
	PC10. to check the indicator lamp	8	2	4	2
	PC11. find out the breakage place (whether it is before accumulator or in the accumulator or in the weft feeder or in the air jet)	10	0	8	2
	PC12. to use weft wire if the weft is cut before accumulator or in the accumulator	10	4	4	2
	PC13. be able to find out the last pick inserted in the produced cloth, by ensuring proper pick finding	10	0	8	2
	PC14. start the loom without inching/ in one stroke	8	2	6	0

PC15. correct the fabric defects like wrong drawing, wrong denting , end out , double end etc., immediately and also ensure that the other fabric defects too are corrected at the earliest, before continuing further production	10	2	8	0
PC16. clean the machines and work area, so as to ensure good working atmosphere, without damaging the fabrics in the looms where the cleaning work is carried out as well as in the adjacent & opposite looms. Should not misuse "air". It has to be used for cleaning, only in the areas. " air cleaning " is permitted	10	2	8	0
PC17. in case of any floats, should be able to " unweave " the same & should be able to run the machine without " starting mark or crack"	10	2	8	0
PC18. After attending to the warp breaks, should ensure that the loose threads are hanged in higher length (not more than 4 mm). accordingly, it has to be trimmed	10	4	6	0
PC19. to draw catch card ends properly	10	4	6	0
PC20. to ensure the size of the catch card & the selvages	8	2	4	2
PC21. weft yarn reserve packages have to be tied with tail ends of the running weft yarn package & ensure proper transfer	8	2	4	2
PC22. patrol the machines and do mending so as to minimize the stoppages	8	2	4	2
PC23. Should tie the "waist bag" & all the waste generated by the weavers are collected in the said waist bag, which can be ultimately disposed in the places/ bins provided, at the end of the shift.	8	2	4	2

PC24. ensure that the correct weft yarn, as per the "loom card" only is used	8	2	4	2
PC25. See that the weft yarn is completely used, without giving room for additional wastage of raw materials. for any quality issue or defective cone etc., the same has to be brought to the notice of the superiors	8	2	4	2
PC26. Not pull out warp ends or catch card ends, unnecessarily. if end is getting cut often in the selvages or in the catch card, , the same has to be brought to the notice of the mechanics/ fitters/ superiors & get it corrected	8	2	4	2
PC27. ensure that all the stop motions, indication lamps , preventive mechanisms etc., function properly	10	2	6	2
PC28. ensure correct quality of thrums are there & see that the same are properly tied	10	2	6	2
PC29. check the knotted loom for knotting quality etc. double ends have to be removed	8	4	4	0
PC30. report to superiors for any deviation in the same & for any other quality issue	8	5	3	0
PC31. ensure that his/ her looms are stopped for a minimum possible down time due to whatever reason & see that he/ she gets maximum outputs in his/ her shift	8	5	3	0
PC32. check the fabrics for the defects at least twice in a shift and sign on the cloth in both times	8	6	2	0
PC33. ensure that cloth rolls are doffed whenever/ wherever necessary	8	4	4	0

	PC34. Give preference to safety.		10	7	3	0
	PC35. Not enter the area, where he/ she are not allowed.		8	5	3	0
	PC36. not do a job in which training has not being given		8	6	1	1
	PC37. Ensure that no raw material/ cloth/ spare/ tool / any other material is thrown under/ near the machines or in the other work areas.		8	6	1	1
	PC38. Check for the reasons for the frequent warp/ weft breaks. The reasons that could be corrected by him/ herself should be corrected. otherwise, the same has to be reported to the mechanics/ fitters/ superiors		8	4	4	0
	Total		340	117	182	41
	Weightage %			34%	54%	12%
3. TSC/N 9001 (Maintain work area, tools and machines)	PC1. handle materials, machinery, equipment and tools with care and use them in the correct way	50	4	2	1	1
	PC2. use correct lifting and handling procedures		4	2	1	1
	PC3. use materials to minimize waste		3	1	1	1
	PC4. maintain a clean and hazard free working area		3	1	1	1
	PC5. maintain tools and equipment		4	1	2	1
	PC6. carry out running maintenance within agreed schedules		4	2	1	1
	PC7. carry out maintenance and/or cleaning within one's responsibility		4	2	1	1
	PC8. report unsafe equipment and other dangerous occurrences		4	2	1	1

	PC9. ensure that the correct machine guards are in place		3	1	1	1
	PC10. work in a comfortable position with the correct posture		3	1	1	1
	PC11. use cleaning equipment and methods appropriate for the work to be carried out		3	1	1	1
	PC12. dispose of waste safely in the designated location		4	2	1	1
	PC13. store cleaning equipment safely after use		3	1	1	1
	PC14. carry out cleaning according to schedules and limits of responsibility		4	2	1	1
	Total		50	21	15	14
	Weightage %			42%	30%	28%
4. TSC/N 9002 (Working in a team)	PC1. be accountable to the own role in whole process	50	5	1	3	1
	PC2. perform all roles with full responsibility		4	1	2	1
	PC3. be effective and efficient at workplace		4	2	1	1
	PC4. properly communicate about company policies		4	1	1	2
	PC5. report all problems faced during the process		4	1	1	2
	PC6. talk politely with other team members and colleagues		4	1	1	2
	PC7. submit daily report of own performance		5	2	2	1
	PC8. adjust in different work situations		4	1	2	1
	PC9. give due importance to others' point of view		4	1	1	2
	PC10. avoid conflicting situations		4	2	1	1

	PC11. develop new ideas for work procedures		4	2	1	1
	PC12. improve upon the existing techniques to increase process efficiency		4	2	1	1
	Total		50	17	17	16
	Weightage %			34%	34%	32%
5. TSC/N 9003 (Maintain health, safety and security at work place)	PC1. Comply with health and safety related instructions applicable to the workplace	100	5	2	2	1
	PC2. Use and maintain personal protective equipment as per protocol		5	2	2	1
	PC3. Carry out own activities in line with approved guidelines and procedures		4	1	2	1
	PC4. Maintain a healthy lifestyle and guard against dependency on intoxicants		4	1	2	1
	PC5. Follow environment management system related procedures		4	1	2	1
	PC6. Identify and correct (if possible) malfunctions in machinery and equipment		5	2	2	1
	PC7. Report any service malfunctions that cannot be rectified		4	1	2	1
	PC8. Store materials and equipment in line with manufacturer's and organizational requirements		4	2	1	1
	PC9. Safely handle and move waste and debris		4	2	1	1
	PC10. Minimize health and safety risks to self and others due to own actions		5	2	2	1
	PC11. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks		4	0	2	2

	PC12. Monitor the workplace and work processes for potential risks and threats		5	2	2	1
	PC13. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned		5	2	2	1
	PC14. Report hazards and potential risks/ threats to supervisors or other authorized personnel		4	2	1	1
	PC15. Participate in mock drills/ evacuation procedures organized at the workplace		4	2	2	0
	PC16. Undertake first aid, fire-fighting and emergency response training, if asked to do so		5	2	2	1
	PC17. Take action based on instructions in the event of fire, emergencies or accidents		5	2	2	1
	PC18. Follow organization procedures for shutdown and evacuation when required		4	1	2	1
	PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry		4	1	2	1
	PC20. recognize other possible security issues existing in the workplace		4	1	2	1
	PC21. recognize different measures to curb the hazards		4	1	2	1
	PC22. communicate the safety plan to everyone		4	1	2	1
	PC23. attach disciplinary rules with the implementation		4	1	2	1
	Total		100	34	43	23
	Weightage %			34%	43%	23%
6. TSC/N 9004	PC1. perform own duties effectively	50	4	2	1	1

(Comply with industry and organizational requirement)	PC2. take responsibility for own actions		4	2	1	1
	PC3. be accountable towards the job role and assigned duties		4	1	2	1
	PC4. take initiative and innovate the existing methods		3	1	1	1
	PC5. focus on self-learning and improvement		4	2	1	1
	PC6. co-ordinate with all the team members and colleagues		4	2	1	1
	PC7. communicate politely		4	1	1	2
	PC8. avoid conflicts and miscommunication		4	2	1	1
	PC9. know the organizational standards		4	1	2	1
	PC10. implement them in your performance		4	2	1	1
	PC11. motivate others to follow them		3	1	1	1
	PC12. know the industry standards		4	1	3	0
	PC13. align them with organization standards		4	1	2	1
	Total		50	19	18	13
	Weightage %			38%	36%	26%
	Total		248	375	127	
Grand Total		750				

Warper - Direct Warping Machine

CURRICULUM / SYLLABUS

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

Program Name	Warper - Direct Warping Machine		
Qualification Pack Name & Reference ID.	Warper - Direct Warping Machine TSC/Q 2101, version 1.0		
Version No.	1.0	Version Update Date	15-12-2014
Pre-requisites to Training	Preferably equivalent to 5th Standard		
Training Outcomes	After completing this programme, participants will be able to: <ul style="list-style-type: none">• Perform taking charge of shift and handing over shift• Operate the Direct warping machine• Perform piecing broken yarn at warping• 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 - Direct Warping Machine” Qualification Pack issued by “TSC: Textile Sector Skill Council”

	Module	Key Learning Outcomes	Equipment Required
1	<p>Taking charge of shift and handing over shift to Warper – Direct Warping Machine</p> <p>Theory Duration (hh:mm) 12:00</p> <p>Practical Duration (hh:mm) 53:00</p> <p>Corresponding NOS Code TSC/N 2102</p>	<ul style="list-style-type: none"> Gain knowledge on general discipline Gain knowledge about with basic skills of communication Understand the role of Warper - Direct Warping machine Perform tasks while taking charge of shift and handing over shift Become familiar in faults identification 	<p><u>Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
2	<p>Operate Direct Warping Machine</p> <p>Theory Duration (hh:mm) 29:00</p> <p>Practical Duration (hh:mm) 72:00</p> <p>Corresponding NOS Code TSC/N 2102</p>	<ul style="list-style-type: none"> Gain knowledge on machine parts & its function Gain knowledge on maintenance of Warping machine parts Gain knowledge on cleaning procedure of Direct Warping machine 	<p>1. <u>common for every batch:</u> poster/video visuals for work method</p> <p>2. <u>Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
3	<p>Piecing the broken yarn at direct warping machine</p> <p>Theory Duration (hh:mm) 23:00</p> <p>Practical Duration (hh:mm) 56:30</p> <p>Corresponding NOS Code TSC/N 2103</p>	<ul style="list-style-type: none"> Perform piecing the broken yarn Gain knowledge on yarn properties and identification of reason for yarn breakages 	<p>1. <u>common for every batch:</u> poster/video visuals for work method</p> <p>2. <u>Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>

4	<p>Maintain work area, tools and machines</p> <p>Theory Duration (hh:mm) 06:00</p> <p>Practical Duration (hh:mm) 23:00</p> <p>Corresponding NOS Code TSC/N 9001</p>	<ul style="list-style-type: none"> • Gain knowledge on Housekeeping system • Identify and know unique functions of basic hand tools like cleaning hook, cleaning stick, bag, etc. • Handling equipment • Perform maintenance activities for handling equipment 	<p>1. <u>common for every batch</u>: poster/video visuals for work method</p> <p>2. <u>Class room requirements</u>: a batch of 25 people seating capacity with a screen and projector</p>
5	<p>Working in a team</p> <p>Theory Duration (hh:mm) 07:00</p> <p>Practical Duration (hh:mm) 22:00</p> <p>Corresponding NOS Code TSC/N 9002</p>	<ul style="list-style-type: none"> • Understanding the team work and its importance • Knowing the basic requirements for team working 	<p><u>Class room requirements</u>: a batch of 25 people seating capacity with a screen and projector</p>
6	<p>Maintain health, safety and security at work place</p> <p>Theory Duration (hh:mm) 16:30</p> <p>Practical Duration (hh:mm) 31:00</p> <p>Corresponding NOS Code TSC/N 9003</p>	<ul style="list-style-type: none"> • Gain knowledge on the general safety Rules • Gain knowledge on importance of personal protective equipment like apron, cap, earplugs, nose mask etc. and their application under different working conditions. • Gain knowledge on various health hazards relevant to workplace and basic first aid training. • Identify and select right equipment such as fire extinguisher & based on type of fire. • Become good practice on first aid, fire fighting etc. 	<p>1. <u>A sample of following items for each trainee</u>: apron, head cap, nose mask, ear plug, shoe,</p> <p>2. <u>common for every batch</u>: first aid materials, fire extinguisher, work method posters/pictures,</p> <p>3. <u>Class room requirements</u>: 25 people seating capacity with a screen and projector</p>

7	<p>Comply with industry and organisational requirement</p> <p>Theory Duration (hh:mm) 07:00</p> <p>Practical Duration (hh:mm) 22:00</p> <p>Corresponding NOS Code TSC/N 9004</p>	<ul style="list-style-type: none"> • Know about organizational and industry standards • Know the requirements for self-development • Gain knowledge on Organizational & Industry standards 	<p><u>Class room</u> requirements: 25 people seating capacity with a screen and projector</p>
<p>Total Duration:</p> <p>Theory Duration 100:30</p> <p>Practical Duration 279:30</p>	<p>Unique Equipment Required: Apron, head cap, nose mask, earplug, shoe, Empty beam, Beam trolley, Yarn Package, Hand knotter</p>		

Grand Total Course Duration: 380 Hours, 0 Minutes

**Trainer Prerequisites for Job role: “Warper – Direct Warping machine” mapped to
Qualification Pack: “Warper – Direct Warping machine / TSC Q 2101, 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 “ <u>Warper – Direct warping machine /TSC Q 2101,</u> ”
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 10th (Normal literacy of reading, writing and understanding)
4a	Domain Certification	Certified for Job Role: “ <u>Warper – Direct warping machine</u> ” mapped to QP: “Direct Warping Machine Operator TSC Q2101, Version 1.0”. Minimum accepted score 80%.
4b	Platform Certification	Required that the Trainer is certified for MEP/ Q 0102 Job Role: “Trainer” with atleast 80% score
5	Experience	Minimum 2 years’ experience with Warper – Direct warping machine

Annexure: Assessment Criteria

Job Role: Warper - Direct Warping Machine
Qualification Pack: Warper – Direct warping machine (TSC/Q 2101)
Sector Skill Council: Textile Sector Skill Council

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 centre (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.
5. To pass the qualification pack, every trainee should score a minimum of 80%.
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 (PC)	Total Marks	Out Of	Marks Allocation		
				Theory	Skills Practical	Viva
1. TSC/ N2101 (Taking charge of shift and handing over shift to Warper -Direct Warping Machine)	PC1. Come atleast 10 - 15 minutes earlier to the work spot	110	10	2	6	2
	PC2. Check for the necessary items like " chalk", " pen", " knife" etc		9	2	5	2
	PC3. . Meet the previous shift warper , discuss with him/ her regarding the issues faced by them with respect to the quality or production or spare or safety or any other specific instruction etc.		9	3	3	3
	PC4. Check the condition of the running beams , machine, performance of the yarn running for the running program		9	2	5	2
	PC5. Check whether all the stop motions work in good condition		9	3	3	3
	PC6. Take " job cards" for the next programs, from the higher authority.		8	3	4	1

	PC7. Check availability of the cones/ cheeses & empty warping beams required for the next programs .		8	3	3	2
	PC8. Check the cleanliness of the machines & other work areas .		8	3	4	1
	PC9. Check whether any spare/raw material/ tool /any other material is thrown under the machines or in the other work areas.		8	3	5	0
	PC10. Ask question to the previous shift warper 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 as well.		8	2	6	0
	PC11. Hand over the Shift to the incoming Warper in a proper manner & get clearance from the incoming counterpart before leaving the work spot.		8	2	6	0
	PC12. Report to His/ Her shift Superiors as well as that of the incoming shift, in case His/ Her Counterpart doesn't doesn't come for work for the incoming shift. 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.		8	0	5	3
	PC13. 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		8	2	5	1
	Total		110	30	60	20
	Weightage %			27%	55%	18%
2. TSC/ N2102 (Operating a	PC1. Make tiny & firm warper's knots	220	9	4	5	0

Direct Warping Machine)	PC2. take straight the broken end in the warping beam .	9	4	5	0
	PC3. knot the broken end in the warping beam with the broken end in the creel , using tiny & firm warper knot by hand or by the knotting machine provided.	9	3	5	1
	PC4. leave straight the mended warp yarn in the beam and the machine has to be allowed to be run in slow speed for some time, before the machine is allowed to run in the speed prescribed.	9	3	5	1
	PC5. record the warping breakages details in the “ yarn performance book” kept.	8	4	2	2
	PC6. remove the run out cones/ cheeses of the previous program .	8	5	1	2
	PC7. collect the removed cones/cheeses in trolleys/ bags provided.	8	5	1	2
	PC8. pack the said collected cones/ cheeses as per the instructions given	8	5	1	2
	PC9. write the following details on the packed bags a) Count details b) Mill Name c) Warping Set No. d) No. Of Cones e) Gross wt. in kgs f) Net Wt. in Kgs	9	3	6	0
	PC10. clean the warping creel area & the warping machine thoroughly	8	2	6	0
	PC11. bring the yarn bags required for the next program and keep the same at the centre of the warping creel	9	0	9	0
	PC12. bring the empty trolleys provided to store empty polythene cone covers . cone inserts and	9	0	9	0

	keep the same at the centre of the warping creel					
	PC13. remove the polythene cone bags, cone inserts etc., & to store the same in the respective trolleys provided	9	0	9	0	
	PC14. creel the cones/ cheeses in the creel stand	9	3	6	0	
	PC15. remove the trolleys wherein the empty polythene covers & cone inserts are collected, from the warping area.	9	0	9	0	
	PC16. check the stop motions & to ensure they are in “ on” position, before the machine is allowed to run.	9	2	5	2	
	PC17. check the counter meter	9	2	5	2	
	PC18. mount the empty warping beam in the machine	9	2	5	2	
	PC19. set the beam mtrs in the counter meter	9	2	5	2	
	PC20. note down the “ beam no”, “ beam ends” “ beam set mtrs” etc. in the job card , immediately after the loading of the empty warping beam in the machine	9	3	4	2	
	PC21. switch on the “ warping drum” so as to ensure no deviation between the “ beam set mtrs” & “ the actual beam mtrs”	9	3	4	2	
	PC22. while starting the machine, ensure that the ends in both the edges are coming properly without any overlapping . it has to be corrected using warping comb.	9	3	4	2	
	PC23. there should not be any “ up” & “ down” portion in the warping beam, particularly in the edges.	9	4	3	2	

	PC24. after the completion of the warping beam, as per the set mtrs, the warped beams have to be doffed.		9	4	3	2
	PC25. immediately after the doffing of the warped beams , the following details have to be written on the warped beams using chalk a. Count b. Warp Set No. c. Warp Beam No. d. No. Of Ends e. Beam Mtrs		9	4	3	2
	Total		220	70	120	30
	Weightage %			32%	55%	13%
3. TSC/N 2103 (Piecing the broken yarn at direct warping)	PC1. Patrol around the Warping machine & identify the yarn breakage.	170	8	4	4	0
	PC2. ensure minimum time is taken for attending the yarn breakages		8	3	5	0
	PC3. check creel break, traveller fly/ loading, undraft& roller lapping		7	2	3	2
	PC4. apply the knee break to stop the spindle		7	2	3	2
	PC5. check the quality		8	3	5	0
	PC6. ensure proper seating of empties in the spindle after yarn piecing		7	2	3	2
	PC7. verify the quality of piecing done in the yarn		8	3	5	0
	PC8. attend to the end breakage as and when they occur.		8	2	6	0
	PC9. take yarn from cop to feed to start piecing		7	2	5	0
	PC10. ensure proper material handling		7	2	5	0
	PC11. piece the yarn between false twister and drafting zone by following standard piecing		7	2	3	2

	techniques					
	PC12. ensure proper seating of empties in the spindle after yarn piecing		7	2	3	2
	PC13. ensure proper traveller running		7	2	3	2
	PC14. ensure minimum time is taken for piecing the yarn		8	0	8	0
	PC15. ensure the yarn should be pieced with minimum overlapping		7	0	7	0
	PC16. Put the roving ends and waste in the bags or pockets of coat / apron while attending the end breakages.		7	2	5	0
	PC17. ensure proper material handling of yarn and cops		7	3	4	0
	PC18. ensure the quality of piecing is as per standard		8	4	4	0
	PC19. ensure the tension of the pieced yarn is proper		7	3	4	0
	PC20. ensure the piecing is perfectly done		7	3	4	0
	PC21. verify proper material passage from drafting zone till the yarn wound		8	3	4	1
	PC22. remove the yarn waste and deposit in the respective waste collection bags		7	3	4	0
	PC23. ensure proper functioning of the machine		8	4	3	1
	Total		170	56	100	14
	Weightage %			33%	59%	8%
4. TSC/ N9001 (Maintain work area, tools and machines)	PC1. Handle materials, machinery, equipment and tools safely and correctly	50	4	2	1	1
	PC2. Use correct lifting and handling procedures		4	2	1	1

	PC3. Use materials to minimize waste		3	1	1	1
	PC4. Maintain a clean and hazard free working area		3	1	1	1
	PC5. Maintain tools and equipment		4	1	2	1
	PC6. Carry out running maintenance within agreed schedules		4	2	1	1
	PC7. Carry out maintenance and/or cleaning within one's responsibility		4	2	1	1
	PC8. Report unsafe equipment and other dangerous occurrences		4	2	1	1
	PC9. Ensure that the correct machine guards are in place		3	1	1	1
	PC10. Work in a comfortable position with the correct posture		3	1	1	1
	PC11. Use cleaning equipment and methods appropriate for the work to be carried out		3	1	1	1
	PC12. Dispose of waste safely in the designated location		4	2	1	1
	PC13. Store cleaning equipment safely after use		3	1	1	1
	PC14. Carry out cleaning according to schedules and limits of responsibility		4	2	1	1
	Total		50	21	15	14
	Weightage %			42%	30%	28%
5.TSC/ N9002 (Working in a team)	PC1. Be accountable to the own role in whole process	50	5	1	3	1
	PC2. Perform all roles with full responsibility		4	1	2	1
	PC3. Be effective and efficient at workplace		4	2	1	1
	PC4. Properly communicate about company policies		4	1	1	2
	PC5. Report all problems faced		4	1	1	2

	during the process					
	PC6. Talk politely with other team members and colleagues		4	1	1	2
	PC7. Submit daily report of own performance		5	2	2	1
	PC8. Adjust in different work situations		4	1	2	1
	PC9. Give due importance to others' point of view		4	1	1	2
	PC10. Avoid conflicting situations		4	2	1	1
	PC11. Develop new ideas for work procedures		4	2	1	1
	PC12. Improve upon the existing techniques to increase process efficiency		4	2	1	1
	Total		50	17	17	16
	Weightage %			34%	34%	32%
6. TSC/ N9003 (Maintain health, safety and security at workplace)	PC1. Comply with health and safety related instructions applicable to the workplace	100	5	2	2	1
	PC2. Use and maintain personal protective equipment as per protocol		5	2	2	1
	PC3. Carry out own activities in line with approved guidelines and procedures		4	1	2	1
	PC4. Maintain a healthy lifestyle and guard against dependency on intoxicants		4	1	2	1
	PC5. Follow environment management system related procedures		4	1	2	1
	PC6. Identify and correct (if possible) malfunctions in machinery and equipment		5	2	2	1
	PC7. Report any service malfunctions that cannot be rectified		4	1	2	1

PC8. Store materials and equipment in line with manufacturer's and organisational requirements	4	2	1	1
PC9. Safely handle and move waste and debris	4	2	1	1
PC10. Minimize health and safety risks to self and others due to own actions	5	2	2	1
PC11. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks	4	0	2	2
PC12. Monitor the workplace and work processes for potential risks and threats	5	2	2	1
PC13. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned	5	2	2	1
PC14. Report hazards and potential risks/ threats to supervisors or other authorized personnel	4	2	1	1
PC15. Participate in mock drills/ evacuation procedures organized at the workplace	4	2	2	0
PC16. Undertake first aid, fire-fighting and emergency response training, if asked to do so	5	2	2	1
PC17. Take action based on instructions in the event of fire, emergencies or accidents	5	2	2	1
PC18. Follow organisation procedures for shutdown and evacuation when required	4	1	2	1
PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry	4	1	2	1
PC20. recognise other possible security issues existing in the workplace	4	1	2	1

	PC21. recognise different measures to curb the hazards		4	1	2	1
	PC22. communicate the safety plan to everyone		4	1	2	1
	PC23. attach disciplinary rules with the implementation		4	1	2	1
	Total		100	34	43	23
	Weightage %			34%	43%	23%
7. TSC/ N9004 (Comply with industry and organisational requirement)	PC1. perform own duties effectively	50	4	2	1	1
	PC2. take responsibility for own actions		4	2	1	1
	PC3. be accountable towards the job role and assigned duties		4	1	2	1
	PC4. take initiative and innovate the existing methods		3	1	1	1
	PC5. focus on self-learning and improvement		4	2	1	1
	PC6. co-ordinate with all the team members and colleagues		4	2	1	1
	PC7. communicate politely		4	1	1	2
	PC8. avoid conflicts and miscommunication		4	2	1	1
	PC9. know the organisational standards		4	1	2	1
	PC10. implement them in your performance		4	2	1	1
	PC11. motivate others to follow them		3	1	1	1
	PC12. know the industry standards		4	1	3	0
	PC13. align them with organisation standards		4	1	2	1
	Total		50	19	18	13
Weightage %			38%	36%	26%	
	Total		750	247	373	130

