

# Model Curriculum

## Two shaft Handloom Weaver

**SECTOR: TEXTILE**  
**SUB-SECTOR: HANDLOOM**  
**OCCUPATION: WEAVER**  
**REF. ID: TSC/Q 7305 V 1.0**  
**NSQF LEVEL: 4**



## 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: 'TWO SHAFT HANDLOOM WEAVER' QP No. 'TSC/ Q 7305' **NSQF Level 4'**

Date of Issuance: **August, 9<sup>th</sup>, 2017**

Valid up to: **August 9<sup>th</sup>, 2020**

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



(Dr. Swapna  
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# TWO SHAFT HANDLOOM WEAVER

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "Two shaft handloom weaver", in the "Textile" Sector/Industry and aims at building the following key competencies amongst the learner.

<b>Program Name</b>	<b>Two Shaft Handloom Weaver</b>		
<b>Qualification Pack Name &amp; Reference ID.</b>	Two Shaft Handloom Weaver, TSC/Q7305, version 1.0		
<b>Version No.</b>	1.0	<b>Version Update Date</b>	09/08/2017
<b>Pre-requisites to Training</b>	Preferably 8 <sup>th</sup> Standard		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ul style="list-style-type: none"> <li>• Carry out pre weaving activities</li> <li>• Operate the Two shaft handloom</li> <li>• Contribute to achieve quality in handloom weaving</li> <li>• Maintain work area, tools and machines</li> <li>• Gain behavioral skill for team working</li> <li>• Maintain health, safety and security at work place</li> <li>• Comply with industry and organizational requirement</li> </ul>		

This course encompasses 7 out of 7 National Occupational Standards (NOS), 1 out of 1 Optional NOS of "Two shaft handloom weaver" Qualification Pack issued by "TSC: Textile Sector Skill Council"

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p><b>Carry out pre weaving activities</b></p> <p><b>Theory Duration</b> (hh:mm) 29:00</p> <p><b>Practical Duration</b> (hh:mm) 57:00</p> <p><b>Corresponding NOS Code</b> TSC/N 7305</p>	<ul style="list-style-type: none"> <li>Gain knowledge on general discipline</li> <li>Gain knowledge on basic skills of communication</li> <li>Understand the role of Two shaft handloom weaver operator</li> <li>Perform tasks while starting operation of the loom</li> <li>Become familiar in faults identification</li> </ul>	<p><u>Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
2	<p><b>Operate the loom</b></p> <p><b>Theory Duration</b> (hh:mm) 27:30</p> <p><b>Practical Duration</b> (hh:mm) 58:00</p> <p><b>Corresponding NOS Code</b> TSC/N 7306</p>	<ul style="list-style-type: none"> <li>Gain knowledge on machine parts &amp; its function</li> <li>Gain knowledge on preparation activities like shuttle checking, treadle lever strap cheking etc.</li> <li>Perform warp and weft break repair</li> <li>Perform proper maintenance of cloth take up tension and warp sheet tension</li> </ul>	<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><b>Contribute to achieve quality in handloom weaving</b></p> <p><b>Theory Duration</b> (hh:mm) 06:00</p> <p><b>Practical Duration</b> (hh:mm) 15:30</p> <p><b>Corresponding NOS Code</b> TSC/N 7307</p>	<ul style="list-style-type: none"> <li>Gain knowledge on quality weaving</li> <li>Identify the defects and able to mend them</li> <li>Make adjustments promptly to ensure the hand-woven fabric matches the specification</li> <li>Carry out quality checks at specified intervals according to the specifications</li> </ul>	<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><b>Maintain work area and tools in Handloom Sector</b></p> <p><b>Theory Duration</b> (hh:mm) 08:00</p>	<ul style="list-style-type: none"> <li>Handle materials and tools safely and correctly</li> <li>Use correct lifting and handling procedures</li> <li>Use materials in a manner to minimize waste</li> <li>Maintain a clean and hazard free working area</li> <li>Maintain the tools and equipment used for</li> </ul>	<p><u>Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<p><b>Practical Duration</b> (hh:mm) 13:30</p> <p><b>Corresponding NOS Code</b> TSC/N 9005</p>	<p>warping</p> <ul style="list-style-type: none"> <li>Carry out maintenance and/or cleaning within one's responsibility</li> </ul>	
5	<p><b>Working in a team in handloom sector</b></p> <p><b>Theory Duration</b> (hh:mm) 08:00</p> <p><b>Practical Duration</b> (hh:mm) 13:30</p> <p><b>Corresponding NOS Code</b> TSC/N 9006</p>	<ul style="list-style-type: none"> <li>Perform all roles with full responsibility</li> <li>Adjust in different work situations</li> <li>Give due importance to others' point of view</li> <li>Avoid conflicting situations</li> <li>Improve upon the existing techniques to increase process efficiency</li> </ul>	<p>1. A sample of following items for each trainee: apron, head cap, nose mask, ear plug, shoes</p> <p>2. common for every batch: first aid materials, fire extinguisher, work method posters/pictures,</p> <p>3. Class room requirements: 25 people seating capacity</p>
6	<p><b>Maintain health, safety and security at work place in handloom sector</b></p> <p><b>Theory Duration</b> (hh:mm) 13:30</p> <p><b>Practical Duration</b> (hh:mm) 29:30</p> <p><b>Corresponding NOS Code</b> TSC/N 9007</p>	<ul style="list-style-type: none"> <li>Comply with health and safety related instructions applicable to the workplace</li> <li>Use and maintain personal protective equipment as per protocol</li> <li>Carry out own activities in line with approved guidelines and procedures</li> <li>Maintain a healthy lifestyle and guard against dependency on in toxicants</li> <li>Follow environment management system</li> </ul>	<p><u>Class room requirements:</u> 25 people seating capacity with a screen and projector</p>
7	<p><b>Comply with work place requirements in handloom sector</b></p> <p><b>Theory Duration</b> (hh:mm) 08:00</p> <p><b>Practical Duration</b> (hh:mm) 13:00</p> <p><b>Corresponding NOS Code</b> TSC/N 9008</p>	<ul style="list-style-type: none"> <li>Perform own duties effectively</li> <li>Take responsibility for own actions</li> <li>Focus on self-learning and improvement</li> <li>Avoid conflicts and miscommunication</li> <li>Know the organizational standards</li> <li>Implement them in your performance</li> <li>Motivate others to follow them</li> </ul>	<p><u>Class room requirements:</u> 25 people seating capacity with a screen and projector</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<b>COMPULSORY NOS:</b> <b>Total Duration</b>  <b>Theory Duration</b> <b>100:00</b>  <b>Practical Duration</b> <b>200:00</b>	<b>Unique Equipment Required:</b>  Laptop, white board, marker, projector, first aid kit, Drawing hook, Magnifying glass, Scissors etc.	

OPTIONS (Optional to choose any or all or none)

OPTION 1: Solar power drive attachment

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<b>Operation and Maintenance of solar attachment</b>  <b>Theory Duration</b> (hh:mm) 10:00  <b>Practical Duration</b> (hh:mm) 20:00  <b>Corresponding NOS Code</b> TSC/N 7904	<ul style="list-style-type: none"> <li>Know about the operation of solar power system and their main components</li> <li>Know the cleaning procedures of solar power system components</li> <li>Gain knowledge on maintenance activities of solar power components such as Batteries, Charge controller, Solar panels etc</li> </ul>	<b>1. common for every batch:</b> poster/video visuals for work method <b>2. Class room requirements:</b> a batch of 25 people seating capacity with a screen and projector
	<b>OPTION 1 : Total Duration</b>  <b>Theory Duration</b> 10:00  <b>Practical Duration</b> 20:00	<b>Unique Equipment Required:</b>  Laptop, white board, marker, projector, first aid kit, Nose mask, hip bag etc.	

<p><b>GRAND Total Duration</b></p> <p><b>Minimum Duration for the QP= <u>300 hrs</u></b></p> <p><b>Theory: <u>100 hrs</u></b></p> <p><b>Practical: <u>200 hrs</u></b></p> <p><b>Maximum Duration for the QP= <u>330 hrs</u></b></p> <p><b>Theory: <u>110 hrs</u></b></p> <p><b>Practical: <u>220 hrs</u></b></p>	<p><b>Unique Equipment Required for the QP:</b></p> <p>Laptop, white board, marker, projector, first aid kit, Nose mask, Drawing hook, Magnifying glass, Scissors etc.</p>
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*(This syllabus/ curriculum has been approved by TSC: Textile Sector Skill Council)*



## Trainer Prerequisites for Job role: “Two Shaft Handloom Weaver” mapped to Qualification Pack: “Two Shaft Handloom Weaver /TSC Q 7305, Version 1.0”

Sr. No.	Area	Details
1	<b>Description</b>	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “Two Shaft Handloom Weaver TSC/Q 7305, Version 1.0
2	<b>Personal Attributes</b>	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
3	<b>Minimum Educational Qualification</b>	Preferably 8th Standard
4a	<b>Domain Certification</b>	Certified for Job Role: “Two Shaft Handloom Weaver” mapped to QP: “Two Shaft Handloom Weaver TSC/ Q7305, Version 1.0”. Minimum accepted score 80 %
4b	<b>Platform Certification</b>	Required that the Trainer is certified for MEP/Q 0102 Job Role: “Trainer” with atleast 80% Score
5	<b>Experience</b>	Minimum 2 years’ experience with Two Shaft Handloom Weaver

## CRITERIA FOR ASSESSMENT OF TRAINEES

**Job Role:** Two Shaft Handloom Weaver

**Qualification Pack:** TSC/Q 7305

**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 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. To pass the Qualification Pack, every trainee should score a minimum of 80% in every NOS
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.

Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theory	Skills Practical
<b>TSC/N 7305 (Carry out pre weaving activities)</b>	PC1. Gait the warp sheet properly and keep the warp sheet in proper tension.	<b>200</b>	24	6	18
	PC2. Check the Shedding, Picking and Beating mechanisms		10	4	6
	PC3. Check the Let-off and Take-up mechanisms		10	4	6
	PC4. Check the condition of the warp beam, for cross ends, ends pulling out particularly at the selvedge		10	4	6
	PC5. Check the cleanliness of the machines and other work areas		10	4	6
	PC6. Check whether any spare/raw material/ tool / fabric/ any other material are thrown under the machines or in the other work areas.		10	4	6
	PC7. Ensure that the attached warp is drafted and dented as per the instructions and design specifications provided		15	6	9
	PC8. Keep ready number of shuttles required and its loading with proper colour of pirns.		15	5	10
	PC9. Check for the availability of the filled pirns and the condition of the same		10	4	6

	PC10.Check the tip of shuttle.		10	4	6
	PC11.Attach the free end of warp with cloth beam properly		20	6	14
	PC12.Read the given design		15	6	9
	PC13.Analyze and interpret the given design (plain or its variations) which needs to be woven		26	8	18
	PC14.Place the filled pirns in the shuttle properly		15	5	10
	<b>Total</b>	<b>200</b>	<b>200</b>	<b>70</b>	<b>130</b>
<b>TSC/N 7306 (Operate the loom)</b>	PC1.Carry-out the primary weaving operations:	<b>200</b>	28	6	22
	o Shedding				
	o Picking				
	o Beating				
	PC2.Carry-out the secondary weaving operations:		27	10	17
	o Take-up				
	o Let-off				
	PC3.Carry –out the auxiliary weaving operations:		28	8	20
	• Temple motion				
	• Shuttle changing				
	PC4.Refer and follow the specifications in case of any doubt.		15	6	9
	PC5.Use the correct tools and materials		18	7	11
	PC6.Ensure that proper tension on warp is maintained		20	8	12
	PC7. Check that the materials to be used are free from faults, in case of any, repair faults		18	5	13
	PC8.Conform to the specified quality standards of weaving		16	8	8
PC9.Identify any damaged work and rectify it	20	4	16		
PC10.Leave the work area safe and secure when work is complete free from hazards	10	4	6		
<b>Total</b>	<b>200</b>	<b>200</b>	<b>66</b>	<b>134</b>	

<b>TSC/N 7307 (Contribute to achieve quality in handloom weaving)</b>	PC1. Identify and use raw materials as per the specifications provided	<b>50</b>	8	2	6
	PC2. Identify faulty materials and component parts and get it rectified		8	2	6
	PC3. Identify mendable defects and rework on them		8	2	6
	PC4. Make adjustments promptly to ensure the hand-woven fabric matches the specification		4	1	3
	PC5. Carry out work safely and at a rate which maintains required work flow		4	1	3
	PC6. Carry out quality checks at specified intervals according to specifications		4	1	3
	PC7. Apply the allowed tolerances		8	3	5
	PC8. Identify materials and components which can cause crease, stain, damage		6	2	4
	<b>Total</b>	<b>50</b>	<b>50</b>	<b>14</b>	<b>36</b>
<b>TSC/N 9005 (Maintain work area, tools and machines in handloom sector)</b>	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
	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		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 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		5	2	3

	schedule and limits of responsibility				
	<b>Total</b>	<b>50</b>	<b>50</b>	<b>19</b>	<b>31</b>
<b>TSC/N 9006 (Working in a team in handloom sector)</b>	PC1.Be accountable to the own role in whole process	<b>50</b>	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
	<b>Total</b>		<b>50</b>	<b>50</b>	<b>19</b>
<b>TSC/N 9007 (Maintain health, safety and security at workplace in handloom sector)</b>	PC1.Comply with health and safety related instructions applicable to the workplace	<b>100</b>	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
	PC17. Planning the safety techniques		5	2	3
	PC18. Recognise different measures to curb the hazards		4	1	3
	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
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>33</b>	<b>67</b>
<b>TSC/N 9008 ( Comply with work place requirements in handloom sector)</b>	PC1. Perform own duties effectively	<b>50</b>	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 organisational standards		5	2	3
	PC10.Implement them in your performance		5	2	3
	PC11.Motivate others to follow them		2	1	1
	<b>Total</b>	<b>50</b>	<b>50</b>	<b>20</b>	<b>30</b>
	<b>Grand Total</b>	<b>700</b>	<b>700</b>	<b>241</b>	<b>459</b>

OPTIONS					
Option 1: Solar power drive attachment					
TOTAL MARKS: 50				Marks Allocation	
Assessible Outcomes	Assessment Criteria	Total Marks	Out of	Theory	Skills Practical
TSC/N7904 Operation and Maintenance of solar attachment	PC1. Clear the weed/ Grass near the solar panels if any	50	3	1	2
	PC2. Clean the surface of the solar panel for dust with wet sponge/cloth		3	1	2
	PC3. Ensure the Charge controller, Batteries are working properly as instructed		3	1	2
	PC4. Prepare Solar powered Handloom/ Khadi machine for operation		4	1	3
	PC5. Switch on the main motor and start the machine for production		3	1	2
	PC6. Check periodically for the working of light indicators and display panel for voltage fluctuation		5	2	3
	PC7. Ensure that the battery is kept at a dry place		4	1	3
	PC8. Check the Electrolyte level of battery and top up the electrolyte whenever required		5	2	3
	PC9. Check for electrolyte/ Distilled water leak from batteries		5	2	3
	PC10. Clean the battery at prescribed intervals for fluff accumulation		3	1	2

	PC11. Clean the inverter, Battery Charger and Charge controller for fiber dust		3	1	2
	PC12. Inspect and ensure the cleanliness of panel boxes		3	1	2
	PC13. Use Personal Protective Equipments while topping up of Distilled water and cleaning		3	1	2
	PC14. Use appropriate tools such as cloth, brush for to various parts of the power system		3	1	2
		<b>Total</b>	<b>50</b>	<b>17</b>	<b>33</b>