

# Model Curriculum

## Hand Knitting Machine Operator

**SECTOR : TEXTILE**  
**SUB-SECTOR : HANDLOOM & KHADI**  
**OCCUPATION : WEAVER**  
**REF ID : TSC/Q7304, VERSION 3.0**  
**NSQF LEVEL : 2**



## 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: 'Hand  
Operated Knitting Machine Operator – (Circular & Flat)' QP No. 'TSC/Q7304 NSQF Level 2'


Date of Issuance:

! \$@a ' -+\*

Valid up to:

! \$@a ' -+\*

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



(Dr. Swapna Mishra)

Director (C&T)

(Textile Sector Skill Council)

## TABLE OF CONTENTS

<b>1. Curriculum</b>	<b>01</b>
<b>2. Trainer Prerequisites</b>	<b>06</b>
<b>3. Annexure: Assessment Criteria</b>	<b>07</b>

# Hand Operated Knitting Machine Operator (Circular & Flat)

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Hand Operated Knitting Machine Operator (Circular & Flat)”, in the “Textile & Handloom” Sector and aims at building the following key competencies amongst the learner.

<b>Program Name</b>	<b>Hand Operated Knitting Machine Operator (Circular &amp; Flat)</b>		
<b>Qualification Pack Name &amp; Reference ID.</b>	Hand Operated Knitting Machine Operator (Circular & Flat) TSC/ Q7304, version 3.0		
<b>Version No.</b>	3.0	<b>Version Update Date</b>	31.03.2022
<b>Pre-requisites to Training</b>	Ability to read and write		
<b>Training Outcomes</b>	<b>After completing this programme, participants will be able to:</b> <ul style="list-style-type: none"> <li>• Undertake knitting process efficiently</li> <li>• Maintain work area and tools in handloom sector</li> <li>• Working in a team in handloom sector</li> <li>• Maintain health, safety and security at work place in handloom sector</li> <li>• Comply with work place requirements in handloom sector</li> </ul>		

This course encompasses 5 out of 5 National Occupational Standards (NOS) of “Hand Operated Knitting Machine Operator – (Circular & Flat)” Qualification Pack issued by “TSC: Textile Sector Skill Council”

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<b>Undertake knitting process efficiently</b>  <b>Theory Duration</b> (hh:mm) 60:00  <b>Practical Duration</b> (hh:mm) 150:00  <b>Corresponding NOS Code</b> TSC/N7308	<ul style="list-style-type: none"> <li>Select the type of knitting machine as per the product's requirement</li> <li>Interpret production and pattern specifications to determine required</li> <li>Adjust machine settings for knitted product</li> <li>Select appropriate tools for the machine as per product's requirement</li> <li>Run the machine at optimum quality and efficiency levels</li> <li>Check the yarn threaded for production for possible impact on operational problems</li> <li>Operate the knitting machine in accordance with manufacturer's and workplace instructions</li> <li>Conduct quality tests to ensure optimal production outcomes are achieved</li> <li>Diagnose and fix knitting problems</li> <li>Assess operational efficiency and safe operation of knitting machines</li> <li>Identify knit faults and determine the root cause</li> </ul>	<p><u>1. common for every batch:</u> poster/video visuals for work method</p> <p><u>Classroom requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
2	<b>Maintain work area and tools in handloom sector</b>  <b>Theory Duration</b> (hh:mm) 05:00  <b>Practical Duration</b> (hh:mm) 10:00  <b>Corresponding NOS Code</b> TSC/N9005	<ul style="list-style-type: none"> <li>Gain knowledge on housekeeping system</li> <li>Identify unique functions of basic hand tools</li> <li>Understand the importance handling equipments</li> <li>Perform maintenance activities for handling equipments</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>Working in a team handloom sector</b></p> <p><b>Theory Duration</b> (hh:mm) 05:00</p> <p><b>Practical Duration</b> (hh:mm) 10:00</p> <p><b>Corresponding NOS Code</b> TSC/N9006</p>	<ul style="list-style-type: none"> <li>Understand the importance of team work</li> <li>Gain knowledge about the basic requirements of team working</li> </ul>	<p><u>Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>
4	<p><b>Maintain health, safety and security at work place in handloom sector</b></p> <p><b>Theory Duration</b> (hh:mm) 15:00</p> <p><b>Practical Duration</b> (hh:mm) 30:00</p> <p><b>Corresponding NOS Code</b> TSC/N 9007</p>	<ul style="list-style-type: none"> <li>Knowledge about the general safety rules</li> <li>Gain knowledge about the importance of personal protective equipment like apron, cap, earplugs, nose mask etc. and their application under different working conditions.</li> <li>Gain knowledge on various health hazards relevant to workplace and basic first aid training.</li> <li>Identify and use the correct extinguisher based on fire type.</li> <li>Perform good practice on first aid, firefighting etc.</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>
5	<p><b>Comply with workplace requirements in handloom sector</b></p> <p><b>Theory Duration</b> 05:00 (hh:mm)</p> <p><b>Practical Duration</b> 10:00 (hh:mm)</p> <p><b>Corresponding NOS Code</b> TSC/N9008</p>	<ul style="list-style-type: none"> <li>Understand the cluster/NGO/ society standard</li> <li>Understand the requirements for self-development</li> <li>Follow the cluster/NGO/Society standard effectively</li> </ul>	<p>Computer with access to Internet</p>

6	<p><b>Employability Skills (30 Hours)</b></p> <p><b>Theory Duration</b> (hh:mm) 12:00</p> <p><b>Practical Duration</b> (hh:mm) 18:00</p>	<ul style="list-style-type: none"> <li>• Discuss the importance of Employability Skills in meeting the job requirements.</li> <li>• Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.</li> <li>• Show how to practice different environmentally sustainable practices</li> <li>• Discuss 21st century skills.</li> <li>• Display positive attitude, self-motivation, problem solving, time management skills and continuous learning mindset in different situations.</li> <li>• Use appropriate basic English sentences/phrases while speaking</li> <li>• Demonstrate how to communicate in a well-mannered way with others.</li> <li>• Demonstrate working with others in a team</li> <li>• Show how to conduct oneself appropriately with all genders and PwD</li> <li>• Discuss the significance of reporting sexual harassment issues in time</li> <li>• Discuss the significance of using financial products and services safely and securely.</li> <li>• Explain the importance of managing expenses, income, and savings.</li> <li>• Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws</li> <li>• Show how to operate digital devices and use the associated applications and features, safely and securely</li> <li>• Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely.</li> <li>• Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges.</li> <li>• Differentiate between types of customers</li> <li>• Explain the significance of identifying customer needs and addressing them</li> <li>• Discuss the significance of maintaining hygiene and dressing appropriately.</li> <li>• Create a biodata</li> <li>• Use various sources to search and apply for jobs</li> <li>• Discuss the significance of dressing up neatly and maintaining hygiene for an interview</li> <li>• Discuss how to search and register for apprenticeship opportunities.</li> </ul>	<p>Class room requirements: 25 people seating capacity with a screen and projector</p>
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	<b>Total Duration</b>  <b>Theory Duration</b> <b>102:00</b>  <b>Practical Duration</b> <b>228:00</b>	<b>Unique Equipment Required:</b>  Laptop, white board, marker, projector, first aid kit, Hand knitting machine, Yarn package
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**Grand Total Course Duration: 330 Hours, 0 Minutes**

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



## Trainer Prerequisites for Job role: “Hand Operated Knitting Machine Operator (Circular & Flat)” mapped to Qualification Pack: “TSC/Q7304, Version 3.0”

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 “Hand Operated Knitting Machine Operator (Circular & Flat) / TSC/Q7304, Version 3.0”.
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 field.
3	<b>Minimum Educational Qualifications</b>	Basic Literacy and Numeracy
4a	<b>Domain Certification</b>	Certified for Job Role: “Hand Operated Knitting Machine Operator (Circular & Flat)” mapped to QP: “Hand Operated Knitting Machine Operator (Circular & Flat) / TSC/Q7304, Version 3.0” Minimum accepted score 80%.
4b	<b>Platform Certification</b>	Required that the Trainer is certified for MEP/Q2601 Job Role: “Trainer” with at least 80% score
5	<b>Experience</b>	Minimum 6 years of experience as a Hand Knitting Operator

## Employability Trainer Prerequisites

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Graduate/CITS	Any Discipline			2	Teaching Experience	Prospective ES trainer should: <ul style="list-style-type: none"> <li>• have good communication skills</li> <li>• be well versed in English</li> <li>• have digital skills</li> <li>• have attention to detail</li> <li>• be adaptable</li> <li>• have willingness to learn</li> </ul>
Current ITI Trainers	Employability Skills Training (3 days full-time course done between 2019-2022)					
Certified current EEE trainers (155 hours)	from Management SSC (MEPSC)					
Certified Trainer	Qualification Pack: Trainer (MEP/Q0102)					

## Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Hand Operated Knitting Machine Operator (Circular & Flat)
Qualification Pack	TSC/Q7304, V 3.0
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 SSC.
3	Assessments will be conducted for all compulsory NOS, and where applicable, on the selected elective/ Option NOS/ set of NOS
4	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)
5	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.
6	To pass the qualification pack, every trainee should score a minimum of 50%.
7	In case of unsuccessful completion, the trainee may seek reassessment on the Qualification pack

Assessable Outcomes	Compulsory NOS			Marks Allocation	
	Assessment Criteria	Total Marks	Out of	Theory	Skills Practical
1.TSC/N7308 (Undertake knitting process efficiently)	PC1.select the type of knitting machine as per the product's requirement	200	20	5	15
	PC2.interpret production and pattern specifications to determine required machine settings for knitted product		20	5	15
	PC3. select appropriate tools for the machine as per product's requirement		20	5	15
	PC4. run the machine at optimum quality and efficiency levels		20	5	15
	PC5.check the yarn threaded for production for possible impact on operational problems		20	5	15
	PC6.operate the knitting machine in accordance with manufacturer's and workplace instructions		20	5	15
	PC7. conduct quality tests to ensure optimal production outcomes are achieved		20	5	15
	PC8. diagnose and fix knitting problems		20	5	15
	PC9. assess operational efficiency and safe operation of knitting machines		20	5	15
	PC10. identify knit faults and determine the root cause		20	5	15
		<b>Total</b>	<b>200</b>	<b>50</b>	<b>150</b>
2.TSC/N9005 (Maintain work area and tools in handloom sector)	PC1. handle materials and tools safely and correctly		5	2	3
	PC2. use correct lifting and handling procedures		3	1	2
	PC3. use materials in a manner to minimize waste		3	1	2
	PC4. maintain a clean and hazard free working area		3	1	2
	PC5. maintain the tools and equipment used for winding		5	2	3

Compulsory NOS				Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theory	Skills Practical
	PC6. carry out maintenance and/or cleaning within one's responsibility	50	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 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
		<b>Total</b>	<b>50</b>	<b>19</b>	<b>31</b>
3.TSC/N9006 (Working in a team 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 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
		<b>Total</b>	<b>50</b>	<b>20</b>	<b>30</b>
4.TSC/N9007 (Maintain health, safety and security at work)	PC1. comply with health and safety related instructions applicable to the workplace		6	2	4
	PC2. use and maintain personal protective equipment as per protocol		6	2	4

Assessable Outcomes	Compulsory NOS			Marks Allocation	
	Assessment Criteria	Total Marks	Out of	Theory	Skills Practical
place in handloom sector)	PC3. carry out own activities in line with approved guidelines and procedures	100	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. recognize other possible security issues existing in the workplace		4	1	3
	PC17. plan the safety techniques		5	2	3
	PC18. recognize different measures to curb the hazards		4	1	3
	PC19. implement the programs		5	2	3
	PC20. communicate the safety plans to everyone		4	1	3

	Compulsory NOS			Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theory	Skills Practical
	PC21. attach disciplinary rules with the implementation		4	1	3
		<b>Total</b>	<b>100</b>	<b>33</b>	<b>67</b>
5.TSC/N9008 ) (Comply with work place requirements in handloom sector)	PC1. be accountable to one's own role in the 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 work place 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>19</b>	<b>31</b>

National Occupational Standards (NOS)	Performance Criteria (PC)	Total Marks	Out Of	Marks Allocation	
				Theory Marks	Practical Marks
<b>6. DGT/VSQ/N0101 – Employability Skills</b>	<b>Introduction to Employability Skills</b>			1	1
	1. understand the significance of employability skills in meeting the job requirements				
	<b>Constitutional values – Citizenship</b>			1	1
	2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices.				
	<b>Becoming a Professional in the 21st Century</b>			1	3
	3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.				
	<b>Basic English Skills</b>			2	3
	4. speak with others using some basic English phrases or sentences				
	<b>Communication Skills</b>			1	1
	5. follow good manners while communicating with others				
	6. work with others in a team				
	<b>Diversity &amp; Inclusion</b>			1	1
	7. communicate and behave appropriately with all genders and PwD				
	8. report any issues related to sexual harassment				
	<b>Financial and Legal Literacy</b>			3	4
	9. use various financial products and services safely and securely				
	10. calculate income, expenses, savings etc.				
	11. approach the concerned authorities for any exploitation as per legal rights and laws				

	<b>Essential Digital Skills</b>		4	6
	12. operate digital devices and use its features and applications securely and safely			
	13. use internet and social media platforms securely and safely			
	<b>Entrepreneurship</b>		3	5
	14. identify and assess opportunities for potential business			
	15. identify sources for arranging money and associated financial and legal challenges			
	<b>Customer Service</b>		2	2
	16. identify different types of customers			
	17. identify customer needs and address them appropriately.			
	18. follow appropriate hygiene and grooming standards.			
	<b>Getting ready for apprenticeship &amp; Jobs</b>		1	3
	19. create a basic biodata			
	20. search for suitable jobs and apply			
	21. identify and register apprenticeship opportunities as per requirement			
	<b>NOS Total</b>	<b>50</b>	<b>20</b>	<b>30</b>
	<b>Grand Total</b>	<b>500</b>	<b>161</b>	<b>339</b>





### **Textile Sector Skill Council**

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