

Model Curriculum

Twister cum Doubler - Handloom

SECTOR : TEXTILE
SUB-SECTOR : HANDLOOM & KHADI
OCCUPATION : SPINNER
REF ID : TSC/Q7902, 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: 'Twister cum
Doubler - Handloom' QP No. 'TSC/Q7902' **NSQF Level 2**'

Date of Issuance:

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Valid up to:

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

(Dr. Swapna Mishra)
Director (C&T)

(Textile Sector Skill Council)

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TWISTER CUM DOUBLER - HANDLOOM

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Twister cum Doubler - Handloom”, in the “Textile & Handloom” Sector and aims at building the following key competencies amongst the learner

Program Name	Twister cum Doubler - Handloom		
Qualification Pack Name & Reference ID.	Twister cum Doubler - Handloom TSC/Q7902, version 3.0		
Version No.	3.0	Version Update Date	31.03.2022
Pre-requisites to Training	Ability to read and write		
Training Outcomes	After completing this programme, participants will be able to: <ul style="list-style-type: none"> • Carry out twisting or doubling for multi-fold yarn • Maintain work area and tools in handloom sector • Working in a team in handloom sector • Maintain health, safety and security at work place in handloom sector • Comply with work place requirements in handloom sector 		

This course encompasses 5 out of 5 National Occupational Standards (NOS) of “Twister cum doubler - Handloom” Qualification Pack issued by “TSC: Textile Sector Skill Council”

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1.	<p>Carry out twisting or doubling for multi-fold yarn</p> <p>Theory Duration 60:00 (hh:mm)</p> <p>Practical Duration 150:00 (hh:mm)</p> <p>Corresponding NOS Code TSC/N7903</p>	<ul style="list-style-type: none"> Check that the doubling machine has yarn tensioning device for even tension Mount, position or place roll of yarn or bobbin of thread on machine and threads through guides and rollers Start the machine and observe operation to detect malfunctions or defects, such as breaking of material or thread Adjust machine controls, such as width or tension guides, to keep operations within specifications Set control on machine according to width, length, or other specifications Ensure production of long length of knot free yarns, which facilitates better performance in the subsequent processes Examine and inspect yarns for defects and size specifications Unite two or more yarn ends on a package Ensure the ply yarns are free from corkscrew defect due to equalized tensioning of the single yarns Carry out doubling in both the systems efficiently Unite two or more doubled yarn/ compact yarn ends by twisting, in order to obtain a stronger yarn Carry out twisting in parallel state to contribute fully to the yarn strength and yarn lustre Remove full packages or rolls from machine manually, or using hoist Tie the breaks in yarn Record production information, such as lot, number of defects and machine stops, and types of defects 	<p><u>1. common for every batch:</u> poster/video visuals for work method</p> <p><u>2. Twister cum Doubler - Handloom machine</u></p> <p><u>30 Kgs Yarn Package</u></p> <p><u>1 set of relevant maintenance tools and Accessories</u></p> <p><u>3. Class room requirements:</u> a batch of 25 people seating capacity with a screen and projector</p>

2.	<p>Maintain work area, tools in handloom sector</p> <p>Theory Duration (hh:mm) 05:00</p> <p>Practical Duration (hh:mm) 10:00</p> <p>Corresponding code TSC/N9005</p>	<ul style="list-style-type: none"> Gain knowledge on house keeping Identify unique features of basic hand tools Understand the importance of Handling equipments Perform maintenance activities for handling equipments 	<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>Working in a team in handloom sector</p> <p>Theory Duration (hh:mm) 05:00</p> <p>Practical Duration (hh:mm) 10:00</p> <p>Corresponding NOS Code TSC/N9006</p>	<ul style="list-style-type: none"> Understand the importance of team work Gain knowledge about the basic requirements of team working 	<p><u>Class room requirements</u>: a batch of 25 people seating capacity with a screen and projector</p>
4.	<p>Maintain health, safety and security at work place in handloom sector</p> <p>Theory Duration (hh:mm) 15:00</p> <p>Practical Duration (hh:mm) 30:00</p> <p>Corresponding NOS Code TSC/N 9007</p>	<ul style="list-style-type: none"> Knowledge about the 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 use the correct extinguisher based on fire type. Perform good practice on first aid, firefighting etc. 	<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>Comply with workplace requirements in handloom sector</p> <p>Theory Duration 05:00 (hh:mm)</p> <p>Practical Duration 10:00 (hh:mm)</p> <p>Corresponding NOS Code TSC/N9004</p>	<ul style="list-style-type: none"> Understand the cluster/NGO/ society standard Understand the requirements for self-development Follow the cluster/NGO/Society standard effectively 	Computer with access to Internet
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6	<p>Employability Skills (30 Hours)</p> <p>Theory Duration (hh:mm) 12:00</p> <p>Practical Duration (hh:mm) 18:00</p>	<ul style="list-style-type: none"> • Discuss the importance of Employability Skills in meeting the job requirements. • Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. • Show how to practice different environmentally sustainable practices • Discuss 21st century skills. • Display positive attitude, self-motivation, problem solving, time management skills and continuous learning mindset in different situations. • Use appropriate basic English sentences/phrases while speaking • Demonstrate how to communicate in a well-mannered way with others. • Demonstrate working with others in a team • Show how to conduct oneself appropriately with all genders and PwD • Discuss the significance of reporting sexual harassment issues in time • Discuss the significance of using financial products and services safely and securely. • Explain the importance of managing expenses, income, and savings. • Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws • Show how to operate digital devices and use the associated applications and features, safely and securely • Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely. • Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges. • Differentiate between types of customers • Explain the significance of identifying customer needs and addressing them • Discuss the significance of maintaining hygiene and dressing appropriately. • Create a biodata • Use various sources to search and apply for jobs • Discuss the significance of dressing up neatly and maintaining hygiene for an interview • Discuss how to search and register for apprenticeship opportunities. 	<p>Class room requirements: 25 people seating capacity with a screen and projector</p>
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	Total Duration Theory Duration 102:00 Practical Duration 228:00	Unique Equipment Required: Laptop, white board, marker, projector, first aid kit, Twister & doubling 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: “Twister cum Doubler - Handloom” mapped to Qualification Pack: “TSC/Q7902, Version 3.0”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “Twister cum Doubler/ TSC/Q7902, Version 3.0”.
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	Basic Literacy and Numeracy
4a	Domain Certification	Certified for Job Role: “Twister cum Doubler - Handloom” mapped to QP: “TSC/Q7902, Version 3.0” Minimum accepted score 80%.
4b	Platform Certification	Required that the Trainer is certified for MEP/Q2601 Job Role: “Trainer” with at least 80% score
5	Experience	Minimum 6 years of experience as a Twister and Doubler 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:
Current ITI Trainers	Employability Skills Training (3 days full-time course done between 2019-2022)					<ul style="list-style-type: none"> • have good communication skills • be well versed in English • have digital skills • have attention to detail • be adaptable • have willingness to learn
Certified current EEE trainers (155 hours)	from Management SSC (MEPSC)					
Certified Trainer	Qualification Pack: Trainer (MEP/Q0102)					

Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Twister cum Doubler - Handloom
Qualification Pack	TSC/Q7902, 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

Total Marks : 450	Compulsory NOS			Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theroy	Skills Practical
1.TSC/N7903 (Carry out twisting or doubling for multi-fold yarn)	PC1. check that the doubling machine have yarn tensioning device for even tension	200	15	5	10
	PC.2 mount, position or place roll of yarn or bobbin of thread on machine and threads through guides and rollers		15	5	10
	PC3. start the machine and observe operation to detect malfunctions or defects, such as breaking of material or thread		15	5	10
	PC4. adjusts machine controls, such as width or tension guides, to keep operations within specifications		15	5	10
	PC5. set control on machine according to width, length, or other specifications		10	3	7
	PC6. ensure the production of long length of knot free yarns which facilitates better performance in the subsequent processes		10	3	7
	PC7. examine and inspects yarns for defects and size specifications		10	3	7
	PC.8 unite two or more yarn ends on a package		10	3	7
	PC.9 ensure the ply yarns are free from corkscrew defect due to equalized tensioning of the single yarns		10	3	7
	PC.10 carry out doubling in both the systems efficiently		10	3	7
	PC.11 unite two or more doubled yarn/ compact yarn ends by twisting, , in order to obtain a stronger yarn		10	3	7

Total Marks : 450		Compulsory NOS		Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theroy	Skills Practical
	PC.12 carry out twisting in parallel state to contribute fully to the yarn strength and yarn lustre		10	3	7
	PC. 13remove full packages or rolls from machine manually, or using hoist		10	3	7
	PC. 14 tie breaks in yarn		10	3	7
	PC.15 record production information, such as lot, number of defects and machine stops, and types of defects		10	3	7
	PC.16 notify supervisor of defects or machine malfunctions		10	3	7
	PC.17 stack or wrap and pack product for further processing or shipping		10	3	7
	PC.18 clean and lubricate machines		10	3	7
		Total	200	62	138
2.TSC/N9005 (Maintain work area and tools in handloom sector)	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 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
	PC6. carry out maintenance and/or cleaning within one's responsibility		5	2	3

Total Marks : 450		Compulsory NOS		Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theroy	Skills Practical
	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
		Total	50	19	31
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

Total Marks : 450	Compulsory NOS			Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theroy	Skills Practical
	PC10. implement them in your performance		5	2	3
	PC11. motivate others to follow them		2	1	1
		Total	50	20	30
4.TSC/N9007 (Maintain health, safety and security at work place 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

Total Marks : 450	Compulsory NOS			Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theroy	Skills Practical
	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
	PC21. attach disciplinary rules with the implementation		4	1	3
		Total	100	33	67
5.TSC/N9008 (Comply with work place requirements in handloom sector)	PC1. be accountable to one's own role in the whole process		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

Total Marks : 450	Compulsory NOS			Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theroy	Skills Practical
	PC5. talk politely with other team members and colleagues	50	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	19	31

National Occupational Standards (NOS)	Performance Criteria (PC)	Total Marks	Out Of	Marks Allocation	
				Theory Marks	Practical Marks
6. DGT/VSQ/N0101 – Employability Skills	Introduction to Employability Skills			1	1
	1. understand the significance of employability skills in meeting the job requirements				
	Constitutional values – Citizenship			1	1
	2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices.				
	Becoming a Professional in the 21st Century			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.				
	Basic English Skills			2	3
	4. speak with others using some basic English phrases or sentences				
	Communication Skills			1	1
	5. follow good manners while communicating with others				
	6. work with others in a team				
	Diversity & Inclusion			1	1
	7. communicate and behave appropriately with all genders and PwD				
	8. report any issues related to sexual harassment				
	Financial and Legal Literacy			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				

	Essential Digital Skills			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				
	Entrepreneurship			3	5
	14. identify and assess opportunities for potential business				
	15. identify sources for arranging money and associated financial and legal challenges				
	Customer Service			2	2
	16. identify different types of customers				
	17. identify customer needs and address them appropriately.				
	18. follow appropriate hygiene and grooming standards.				
	Getting ready for apprenticeship & Jobs			1	3
	19. create a basic biodata				
	20. search for suitable jobs and apply				
	21. identify and register apprenticeship opportunities as per requirement				
	NOS Total		50	20	30
	Grand Total		500	173	327



Textile Sector Skill Council
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