







## **Model Curriculum**

## **Sewing Machine Operator**

SECTOR: APPAREL, MADE-UPS AND HOME FURNISHING

**SUB-SECTOR: APPAREL / MADE-UPS / HOME FURNISHING STITCHING** 

OCCUPATION: STITCHING

REF ID: AMH/Q0301

**NSQF LEVEL: 4** 















### Certificate

### CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

APPAREL MADE-UPS HOME FURNISHING SECTOR SKILL COUNCIL

for the

#### **MODEL CURRICULUM**

Complying to National Occupational Standards of Job Role/ Qualification Pack: 'Sewing Machine Operator' QP No. 'AMH/Qo301 NSQF Level4'

Date of Issuance: December 15, 2015

Valid up to: December 15, 2016

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

Dr. Roopak Vasishtha Chief Executive Officer (Apparel Made-ups Home Furnishing Sector Skill Council)









### **TABLE OF CONTENTS**

1.	Curriculum	01
2.	Trainer Prerequisites	07
2	Annovers Assessment Critoria	00









### **CURRICULUM / SYLLABUS**

This program is aimed at training candidates for the job of a "Sewing Machine Operator", in the "Apparel, Made Ups and Home Furnishing" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Sewing Machine Operator					
Qualification Pack Name & Reference ID.	Sewing Machine Operator ; AMH/Q0301					
Version No.	1.0 <b>Version Update Date</b> 14–12 – 2016					
Pre-requisites to Training	Preferably Class V					
Training Outcomes	Carryout Stitching activities using machine or by hand					
	Contribute to a chieve product quality in stitching operations					
	3. Maintain work-area, tools and machine					
	4. Maintain health safety and security at workplace					
	5. Comply with the industry, regulatory and organizational requirements					









This course encompasses 5 out of 5 National Occupational Standards (NOS) of "Sewing Machine Operator" Qualification Pack issued by "APPAREL, MADE-UPS AND HOME FURNISHING SECTOR SKILL COUNCIL".









Sr. No. Module	Key Learning Outcomes	<b>Equipment Required</b>
	B. The individual will develop the skill to stitch components to produce apparels by:  a. carrying out work functions in line with the responsibilities of job role  b. Examining the specific item to identifying what type of stitching is best suited  c. Estimating the expected length of time for the process  d. Using the correct machine, tools (e.g.: attachments, threads, needles, awls, Scissors, Measuring tapes and rulers) and equipment  e. Setting up machine ((Apparel Sewing machine) according to manufacturers' instructions and production requirements.  f. Setting machine controls for the materials being stitched  g. Handling materials, machinery, equipment and tools safely and correctly  h. Using correct lifting and handling procedures  i. cutting the thread appropriately  j. Threading the needle in the machine and adjust the needle as per the requirements  k. Performing a test run to ensure machine is operating correctly  l. Optimizing the positioning and layout of materials to ensure a smooth and rapid throughput  m. Stitching the correct materials in the right sequence as required by the production specification  n. Ensuring stitched products meets specification in terms of labels and trimmings and conforms to the shape and size requirement  o. Inspecting stitched products against specifications and Identifying mark and place rejects in the designated locations  q. Carrying out alterations to meet customer requirements  r. Passing the stitched item to the next stage in the manufacturing process after validation  s. Responding accordingly where stitched items do not meet production specification  t. Seeking feedback from team mates on work  u. Sorting and placing work to assist the next stage of production and minimize the risk of damage  v. Leaving work area safe and secure when work is complete  w. Completing forms, records and other documentation	sample Fabric Yardages Required Trims/Accessory Machine Folders and Attachments Tools for broken needle protocol (Magnet, Tweezers etc.) Student's Chair (with Table Arm) Table ( 30" 20"X 30") Teacher's Table Teacher's Chair (revolving)









Sr. No.	Module	Key Learning Outcomes	Equipment Required
2	Contribute to achieve product quality in stitching operations  Theory Duration (hh:mm) 15:00  Practical Duration (hh:mm) 45:00  Corresponding NOS Code AMH/N0302	A. The individual will be able to achieve product quality in stitching Operations and will become proficient to:  a. Identify and use materials required based on the job card/ work ticket  b. Take the necessary action when materials do not conform to company quality standards  c. Report and replace identified faulty materials and component parts which do not meet specification  d. Identify modifiable defects and rework on them  e. Report to the responsible person when the work flow of other production areas disrupts work  f. Test, sort, track feed and examine work in progress  g. Carry out quality checks at specified intervals according to instructions  h. Apply the allowed tolerances  i. Identify faults in materials and components for crease, stains, damage etc. and incorrectly made-up component parts and take appropriate action for rectification  j. Make adjustments promptly to return product to specification  k. Maintain the required productivity and quality levels	Equipments same as above
3	Maintain work area, tools and machines  Theory Duration (hh:mm) 10:00  Practical Duration (hh:mm) 20:00  Corresponding NOS Code AMH/N0102	The individual will know the methods to maintain work area, tools and machine by gaining knowledge to:  a. Maintain tools and equipments and handle them safely  b. Use materials to minimize waste c. Carryout running maintenance within agreed schedules d. Carry out maintenance and/or cleaning within one's responsibility e. make sure that the correct machine guards are in place f. Work in a comfortable position with the correct posture g. Use cleaning equipment and methods appropriate for the work to be carried out h. Dispose of waste safely in the designated location i. Store cleaning equipment safely after use j. Carryout cleaning according to schedules and limits of responsibility	Computer Computer Peripherals Computer Computer Peripherals Machinery tools and equipment like:Single Needle Lock Stitch (SNLS) SNLS Machine with UBT Over lock Machine (5 thread over lock machine) Button Hole Machine Button Attach Machine (optional) Pressing Table And Iron Tools & Equipment, Shears (8- 10 " iron blade for cutting fabric) Scissors (plastic handled scissor for cutting paper) Trimmers Seam Ripper Scale (metallic, 6" & 12")/ other scales









Sr. No.	Module	Key Learning Outcomes	Equipment Required
			Measuring Tape ( 0.5" width) Bobbin Bobbin Case Notcher (1/4 X 1/6 " opening) Awl markers Seam Gauge Thread Clipper Thimble, cleaning cloth, Hand needle (Various gauges) Machine Needle (Various Gauges) Needle Threader Machine Folders and Attachments, Tools for broken needle protocol
4	Maintain health,	After going through the session , the	(Magnet, Tweezers etc.) Computer
-7	safety and security at workplace  Theory Duration	individual will be able to know and learn the importance of maintaining health safety and security at Workplace by identifying the need to:	Computer Peripherals, tools and equipments as stated above, documents related to the subject
	(hh:mm) 10:00  Practical Duration (hh:mm)	<ul> <li>a. Comply with health and safety related instructions applicable to the workplace</li> <li>b. Use and maintain personal protective equipment as per protocol</li> <li>c. Maintain a healthy lifestyle and guard against</li> </ul>	the subject
	20:00  Corresponding NOS Code	dependency on intoxicants  d. Follow environment management system related procedures	
	AMH/N0103	e. Identify and correct if possible) malfunctions in machinery and equipment f. Report any service malfunctions that can not be rectified	
		<ul> <li>g. Store materials and equipment in line with manufacturer's and organizational requirements</li> <li>h. Safely handle and move waste and debris</li> </ul>	
		<ul> <li>i. Minimize health and safety risks to self and others due to own actions</li> <li>j. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks</li> </ul>	
		<ul> <li>k. Monitor the workplace and work processes for potential risks and threats</li> <li>l. Carryout periodic walk-through to keep work area free from hazards and obstructions, if</li> </ul>	
		assigned  m. Report hazards and potential risks/threats to supervisors or otherauthorized personnel	
		<b>n.</b> Participate in mock drills/ evacuation procedures organized at the workplace	









Sr. No.	Module	Key Learning Outcomes	<b>Equipment Required</b>
		<ul> <li>o. Undertake first aid, fire-fighting and emergency response training, if asked to do so</li> <li>p. Take action based on instructions in the event of fire,</li> <li>q. Follow organization procedures</li> </ul>	
5	Comply with Industry, regulatory and organisational requirements  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 05:00  Corresponding NOS Code AMH/N0104	The session helps the individual to know the importance of Compliance procedures, requirements of industry and organizational and the need to comply to them. He will be able to:  a. Carryout work functions in accordance with legislation and regulations, organizational guidelines and procedures  b. Seek and obtain clarifications on policies and procedures, from your supervisor or other authorized personnel  c. Apply and follow these policies and procedures within your work practices  d. Provide support to your supervisor and team members in enforcing these considerations  e. Identify and report any possible deviation to these requirements	Computer Computer Peripherals, Documents related to Compliance
	Total Duration: 270Hrs  Theory Duration 80Hrs  Practical Duration 190Hrs	Unique Equipments Required  Dexterity kit ,Single Needle Lock Stitch (SNLS)  SNLS Machine with UBT Over lock Machine (5 threa Button Hole Machine Button Attach Machine	d over lock machine)

**Grand Total Course Duration: 270 Hours** 

(This syllabus/ curriculum has been approved by APPAREL, MADE-UP'S AND HOME FURNISHINGSECTOR SKILL COUNCIL)









# Trainer Prerequisites for Job role: "Sewing Machine Operator" mapped to Qualification Pack: "AMH/Q0301, version 1.0"

Sr. No.	Area	Details
1	Job Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with Qualification Pack "Q0301"
2	Personal Attributes	The candidate should have aptitude for conducting training, pre /post work to ensure competent, employable candidates at the end of training. Strong communication skills, interpersonal skills, ability to work as team; diligent and is passionate for maintaining the quality in content and training delivery methodology. Candidate should have basic understanding of English language; however this should not be a restrictive criterion as long as the candidate is willing and open to learn. He/she must be able to speak, read and write in the local language.
3	Minimum Educational Qualifications	Candidate should have a minimum qualification level of XII pass (14 years of schooling) from any board and discipline. The candidate should have a good understanding of basic mathematical functions. ITI/Diploma/AMT, or certificate holders from NIFT, or any other polytechnic/institute who have been working in the industry for some time and have basic knowledge of the above mentioned.
4a	Domain Certification	Certified for Job Role: "Sewing Machine Operator" mapped to QP: "AMH/Q0301", version 1.0. Minimum accepted score as per SSC guidelines is 90%.
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "SSC/Q1402" with scoring of minimum 80%.
5	Experience	The candidate should have a minimum of 2-3 years factory experience and should possess good knowledge of sewing machines, needles etc.









### **Annexure: Assessment Criteria**

Assessment Criteria for Sewing Machine Operator	
Job Role	Sewing Machine Operator
<b>Qualification Pack</b>	AMH/Q0301, version 1.0
Sector Skill Council	APPAREL, MADE-UP'S AND HOME FURNISHING

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 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 this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 70% aggregate in QP
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









				Marks	Allocation	
		Total Marks 400	Out Of	Theory	Skills Practical	Viva
	PC1. Make sure the work area is free from hazards	3	1	1	1	
	PC2. Follow the instructions on the work ticket/ job card in line with the responsibilities of respective job role		3	1	1	1
	PC3. Ask questions to obtain more information on tasks when the instructions you have are unclear	-	3	1	1	1
	PC4. Agree and review your agreed upon work targets with your supervisor and check for special instructions, if any	210	3	1	1	1
1. AMH/N0301	PC5. Use the correct tools and equipments		3	1	1	1
(Carryout Stitching	PC6. Check that equipment is safe and set up in readiness for use		1	1	1	1
activities using machine or by hand)	PC7. Select the correct component parts for the style being worked on		3	1	1	1
	PC8. Check that the materials to be used are free from faults		5	1	3	1
	PC9. Ensure the materials used meet the specification matching		3	1	1	1
	a. Within a product		4	1	2	1
	b. Between a pair of products where applicable		4	1	2	1
	PC10. Carry out test sews		4	1	2	1
	PC11. Check needles, awls and threads Regularly		4	1	2	1
	PC12. Check if fabric / Component is correctly marked and pieces cut as Required		4	1	2	1
	PC13. Fabric pieces and linings are pinned or sewn together as required, and appropriately hung in readiness for Assembly		4	1	2	1









			Marks Allocation		
	Total Marks 400	Out Of	Theory	Skills Practical	Viva
PC14. Report faults in the materials		3	1	1	1
PC15. Conform to company quality Standards		3	1	1	1
PC16. Report any damaged work to the responsible person		3	1	1	1
PC17. Follow company reporting procedures about defective tools and machines which affect work and report risks/ problems likely to affect services to the relevant person promptly and Accurately		4	1	2	1
PC18. Sort and place work to assist the next stage of production and minimise the risk of damage		3	1	1	1
PC19. Leave work area safe and secure when work is complete		4	1	2	1
PC20. Complete forms, records and other documentation		4	2	1	1
PC21. Examine the specific item to identify what type of stitching is best suited		4	1	2	1
PC22. Estimate the expected length of time for the process		4	1	1	2
PC23. Set up machine (Apparel Sewing machine) according to manufacturers' instructions and production requirements		4	1	2	1
PC24. Set machine controls for the materials being stitched		5	1	3	1
PC25. Cut the thread appropriately		4	1	2	1
PC26. Thread the needle in the machine and adjust the needle as per the requirements		4	1	2	1
PC27. Perform a test run to ensure machine is operating correctly		4	1	2	1
PC28. Report defective machines, tools and/or equipment to the responsible person		4	1	2	1









			Marks Allocation		
	Total Marks 400	Out Of	Theory	Skills Practical	Viva
PC29. Operate machines safely and in accordance with guidelines		5	1	3	1
PC30. Optimize the positioning and layout of materials to ensure a smooth and rapid throughput		6	1	4	1
PC31. Check the equipment prior to making the stitching, including:		3	1	1	1
a) Correct controls		4	1	2	1
b) Correct attachments		4	1	2	1
c) Changing needles		4	1	2	1
d) Changing threads		4	1	2	1
e) Changing awls		4	1	2	1
f) Correct Timing		4	1	2	1
PC32. Stitch the correct materials in the right sequence as required by the production specification		6	1	4	1
PC33. Ensure stitched product conforms to shape and size requirement		4	1	2	1
PC34. Ensure stitched products meets specification in terms of labels and trimmings		4	1	2	1
PC35. Inspect stitched products against specifications		4	1	2	1
PC36. Identify mark and place rejects in the designated locations		4	1	2	1
PC37. Carry out alterations to meet customer requirements		4	1	2	1
PC38. Pass the stitched item to the next stage in the manufacturing process after validation		4	1	2	1
PC39. Respond accordingly where stitched items do not meet production specification		4	1	2	1
PC40. Minimize and dispose the waste materials in the approved Manner		4	1	2	1
PC41. Seek feedback from team mates on work related performance		3	1	1	1
PC42. Check with in charge /others when unsure of new product details		4	1	2	1









				Marks	s Allocation	
		Total Marks 400	Out Of	Theory	Skills Practical	Viva
	PC43. Clean and make safe machines after use		5	1	3	1
	PC44. Carry out basic maintenance of own machines		4	1	2	1
	PC45. Report risks/ problems likely to affect services to the relevant person promptly and accurately		4	1	2	1
	PC46. Carry out Operations at a rate which maintains workflow and meets production targets		4	1	2	1
		Total	210	55	100	55
	PC1. Identify and use materials required based on the job card/ work Ticket		4	2	1	1
	PC2. Take the necessary action when materials do not conform to company quality standards		4	1	2	1
	PC3. Report and replace identified faulty materials and component parts which do not meet specification		4	1	2	1
	PC4. Identify modifiable defects and rework on them		5	1	3	1
2. AMH/N0302 (Contribute to Achieve	PC5. Carry out work safely and at a rate which maintains work flow		4	1	2	1
product quality in stitching operations)	PC6. Report to the responsible person when the work flow of other production areas disrupts work	65	4	1	2	1
	PC7. Test, sort, track feed and examine work in progress		5	1	3	1
	PC8. Carry out quality checks at specified intervals according to instructions		5	1	3	1
	PC9. Apply the allowed tolerances		4	1	2	1
	PC10. Identify faults and take appropriate action for rectification		5	1	3	1
	PC11. Make adjustments promptly to return product to specification		4	1	2	1









				Marks	s Allocation	
		Total Marks 400	Out Of	Theory	Skills Practical	Viva
	PC12. Fault-find materials and components for creased, stained, damage and incorrectly made-up component parts		4	1	2	1
	PC13. Report faults in other processes to the appropriate person		4	1	2	1
	PC14. Maintain the required productivity and quality levels		5	1	3	1
	PC15. Complete and maintain documentation		4	1	2	1
		Total	65	16	34	15
	PC1. Handle materials, machinery, equipment and tools safely and Correctly		3	1	1	1
	PC2. Use correct lifting and handling procedures		3	1	1	1
	PC3. Use materials to minimize waste		3	1	1	1
	PC4. Maintain a clean and hazard free working area		4	1	2	1
	PC5. Maintain tools and equipment		4	1	2	1
	PC6. Carry out running maintenance within agreed schedules		4	1	2	1
3. AMH/N0102 Maintain	PC7. Carry out maintenance and/or cleaning within one's responsibility		4	1	2	1
work area, tools and	PC8. Report unsafe equipment and other dangerous occurrences	50	3	1	1	1
Machines	PC9. Ensure that the correct machine guards are in place		3	1	1	1
	PC10. Work in a comfortable position with the correct posture		4	1	2	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	1	2	1
	PC13. Store cleaning equipment safely after use		4	1	2	1
	PC14. Carry out cleaning according to schedules and limits of responsibility		4	1	2	1









				Marks Allocation			
		Total Marks 400	Out Of	Theory	Skills Practical	Viva	
		Total	50	14	22	14	
	PC1. Comply with health and safety related instructions applicable to the Workplace		3	1	1	1	
	PC2. Use and maintain personal protective equipment as per protocol		4	1	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		3	1	1	1	
	PC5. Follow environment management system related procedures	60	3	1	1	1	
	PC6. Identify and correct (if possible) malfunctions in machinery and equipment		4	1	2	1	
4. AMH/N0103	PC7. Report any service malfunctions that cannot be rectified		3	1	1	1	
Maintain health, safety and security at Workplace	PC8. Store materials and equipment in line with manufacturer's and organisational requirements		4	1	2	1	
Workplace	PC9. Safely handle and move waste and Debris		3	1	1	1	
	PC10. Minimize health and safety risks to self and others due to own Actions		3	1	1	1	
	PC11. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks		3	1	1	1	
	PC12. Monitor the workplace and work processes for potential risks and Threats		3	1	1	1	
	PC13. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned		3	1	1	1	
	PC14. Report hazards and potential risks/ threats to supervisors or other authorized personnel		3	1	1	1	









				Marks Allocation		
		Total Marks 400	Out Of	Theory	Skills Practical	Viva
	PC15. Participate in mock drills/ evacuation procedures organized at the Workplace		4	1.5	2	0.5
	PC16. Undertake first aid, fire-fighting and emergency response training, if asked to do so		4	1.5	2	0.5
	PC17. Take action based on instructions in the event of fire, emergencies or Accidents		3	1.5	1	0.5
	PC18. Follow organization procedures for shutdown and evacuation when required		3	1.5	2	0.5
		Total	60	20	24	16
	PC1. Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures		3	1	1	1
5.AMH/N0104 - Comply with	PC2. Seek and obtain clarifications on policies and procedures, from your supervisor or other authorized personnel		3	1	1	1
industry, regulatory and Organizational Requirements	PC3. Apply and follow these policies and procedures within your work Practices	15	3	1	1	1
	PC4. Provide support to your supervisor and team members in enforcing these considerations		3	1	1	1
	PC5. Identify and report any possible deviation to these requirements		3	1	1	1
		Total	15	5	5	5
	Grand Total		400	110	185	105







### Apparel Made-ups and Home Furnishing Sector Skill Council

Apparel House, Institutional Area, Sector-44, Gurgaon-122003, Haryana