

Model Curriculum

1. Sewing Machine Operator- Knits

SECTOR: APPAREL, MADE-UPS AND HOME FURNISHING
SUB-SECTOR: APPAREL
OCCUPATION: STITCHING
REF ID: AMH/Q0305
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

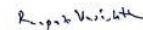
Complying to National Occupational Standards of

Job Role/ Qualification Pack: **'Sewing Machine Operator- knits'** QP No. **'AMH/Q0305
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
3. Annexure: Assessment Criteria	08

Sewing Machine Operator

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Sewing Machine Operator - Knits”, 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 – Knits		
Qualification Pack Name & Reference ID.	Sewing Machine Operator ; AMH/Q0305		
Version No.	1.0	Version Update Date	As per QP
Pre-requisites to Training	Preferably Class V		
Training Outcomes	<ul style="list-style-type: none"> Plan and Prepare for process of sewing of knit fabrics as per plan received from stitching/line supervisor Stitch knitted fabrics as per plan Maintain work-area, tools and machine Maintain health safety and security at workplace 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	Equipment Required
1	<p>Introduction and Orientation</p> <p>Theory Duration (hh:mm) 02:00</p> <p>Practical Duration (hh:mm) 00:00</p> <p>Corresponding NOS Code Bridge Module</p>	<ul style="list-style-type: none"> • Sewing as a profession • Apparel Sector In India • Roles and Responsibilities of a Sewing Machine Operator - Knits 	<p>Computer, Computer Peripherals(optional), White/Black Board, duster, chalk or marker, Board, Eraser</p>
2	<p>Plan and Prepare for Sewing of Knit Fabrics</p> <p>Theory Duration (hh:mm) 38:00</p> <p>Practical Duration (hh:mm) 60:00</p> <p>Corresponding NOS Code AMH/N0305</p>	<ul style="list-style-type: none"> • Set machines according to manufacturers' instructions and production requirements of knitted components • Check machine for needles, foot, spools etc. for working safely • Ensure the materials used meet the specification matching within a product and between a pair of products where applicable • Check for threads quality and color as per requirements for the garment styles • Carry out test sews • Select correct component parts for the style being worked upon • Ask questions from the assigned supervisors to obtain more information on tasks when unclear of instructions given 	<p>Stool (27") (for trainees and trainer) 4 Thread Overlock Machine Flat Lock Machine, Multi needle chain-stitch machine, Shears (8-10 “ iron blade for cutting fabric), Tailor's Chalk, Pins & safety pins Personal Protective Equipment (Nose Mask & Goggles) Thread Clipper, scissors, Sewing Threads, Hand needle (Various gauges) Machine Needle (Various Gauges), Needle Threader, Garment , made ups and home furnishing samples, Fabric Yardages (Knitted, Cotton), Required Trims/Accessory, Machine Folders and Attachments Student's Chair (with Table Arm),Cutting Table, Books on types of knits & stitching, knitted articles, Teacher's Table, Teacher's Chair (revolving) Display Board (60” X 36” ft) ,Dustbin, Boxes and pouches for ,storing Items, White Board, First Aid Box, Machine Oil & sewing kit (screw driver, screw etc.) size chart, Different type of Documents set, customer specification sheet, Dexterity test kit, Job card, Bobbin ,Bobbin case, Designs templates, Cleaning Cloth, Iron, Iron Table, Dress Form, Stationary set, Single Needle Lock Stitch Machine With needle Guard</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
3	<p>Stitch knitted fabrics as per plan</p> <p>Theory Duration (hh:mm) 25:00</p> <p>Practical Duration (hh:mm) 95:00</p> <p>Corresponding NOS Code AMH/N0306</p>	<ul style="list-style-type: none"> • Selection of correct machinery as per the garment or made –ups and home furnishing product plan like single needle machine, top and bottom feet, differential feet, etc. • Selection of appropriate attachments according to the garment requirements like binder, folder, essential mechanism tools, etc. • Optimize positioning and layout of materials to ensure smooth and productive working • Stitch the correct materials in the right sequence as required by the product specification as per the specified stitch type (stitch classes), hems and seams • Perform complex stitching operations with precision and accuracy • Ensure stitched product meets specification as per the techpack and in terms of stitch per inch, labels and trimmings • Ensure stitched product conforms to shape and size requirement • Check the stitched components meet as per the standards and specifications mentioned in the job card • Make adjustments promptly to ensure the stitching work matches the specification • Maintain the required productivity and quality levels 	Equipment same as above

<p>4</p>	<p>Maintain work area, tools and machines</p> <p>Theory Duration (hh:mm) 10:00</p> <p>Practical Duration (hh:mm) 30:00</p> <p>Corresponding NOS Code AMH/N0102</p>	<ul style="list-style-type: none"> • Maintain tools and equipment and handle them safely • Use materials to minimize waste • Carryout running maintenance within agreed schedules • Carry out maintenance and/or cleaning within one's responsibility • make sure that the correct machine guards are in place • Work in a comfortable position with the correct posture • Use cleaning equipment and methods appropriate for the work to be carried out • Dispose of waste safely in the designated location • Store cleaning equipment safely after use • Carryout cleaning according to schedules and limits of responsibility 	<p>Stool (27") (for trainees and trainer)</p> <p>4 Thread Overlock Machine, Flat Lock Machine, Multi-needle chain-stitch machine</p> <p>Shears (8-10 " iron blade for cutting fabric), Tailor's Chalk Pins & safety pins</p> <p>Personal Protective Equipment (Nose Mask & Goggles)</p> <p>Thread Clipper, scissors, Threads</p> <p>Hand needle (Various gauges), Machine Needle (Various Gauges), Needle Threader, Garment , made ups and home furnishing samples</p> <p>Fabric Yardages, Required Trims/Accessory</p> <p>Machine Folders and Attachments</p> <p>Student's Chair (with Table Arm), Table (30"X 20"X 30")</p> <p>Books on types of knits & stitching knitted articles</p> <p>Boxes and pouches for ,storing Items, White Board, First Aid Box, Machine Oil & sewing kit (screw driver, screw etc.) size chart,</p>
----------	--	---	---

Sr. No.	Module	Key Learning Outcomes	Equipment Required
5	<p>Maintain health, safety and security at workplace</p> <p>Theory Duration (hh:mm) 08:00</p> <p>Practical Duration (hh:mm) 18:00</p> <p>Corresponding NOS Code AMH/N0307</p>	<ul style="list-style-type: none"> • Ensure safe and secure handling of stitching machines and related tools and equipments like thread cutters, shears, seam rippers, etc. • Use and maintain personal protective equipments as per protocol like nose masks, lock guard, etc. • Check the workplace and work processes for potential risks and threats like physical injuries from the machine and tools, fire, etc. • Identify and correct (if possible) malfunctions in sewing machines and other related equipment like loose stitch, missing parts, etc. • Participate in mock-drills/evacuation procedures organized at the workplace • Undertake first-aid, fire-fighting and emergency response training 	<p>Tools and equipment as stated above, documents related to the subject</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
6	<p>Comply with Industry, regulatory and organisational requirements</p> <p>Theory Duration (hh:mm) 03:00</p> <p>Practical Duration (hh:mm) 05:00</p> <p>Corresponding NOS Code AMH/N0104</p>	<ul style="list-style-type: none"> • Carryout work functions in accordance with legislation and regulations, organizational guidelines and procedures • Seek and obtain clarifications on policies and procedures, from your supervisor or other authorized personnel • Apply and follow these policies and procedures within your work practices • Provide support to your supervisor and team members in enforcing these considerations • Identify and report any possible deviation to these requirements 	Documents related to Compliance
7	<p>Professional/Soft Skills</p> <p>Theory Duration (hh:mm) 04:00</p> <p>Practical Duration (hh:mm) 02:00</p> <p>Corresponding NOS Code Bridge Module</p>	<ul style="list-style-type: none"> • Work effectively within a team. • Manage job related stress effectively. • Understand the importance of punctuality. • Recognize the causes of AIDS. • Get familiar with prevention methods for AIDS. • Understand Importance of health and hygiene. • Recognise ill-effects of alcohol and tobacco. 	Documents related to soft skills
	<p>Total Duration: 300Hrs</p> <p>Theory Duration 90Hrs</p> <p>Practical Duration 210 Hrs</p>	<p>Unique Equipment Required Dexterity kit ,Flat Lock Machine and Multi needle chain stitch machine, overlock machine</p>	

Grand Total Course Duration: **300 Hours**

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

Trainer Prerequisites for Job role: “Sewing Machine Operator - Knits” mapped to Qualification Pack: “AMH/Q0305, 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 “AHM/Q0305”
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	AMT/Diploma, from NIFT, or any other polytechnic/reputed institute in the core subject
4a	Domain Certification	Certified for Job Role: “Sewing Machine Operator - Knits” mapped to QP: “AMH/Q0305”, version 1.0. Minimum accepted score as per SSC guidelines is 80%.
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 3 years of industrial experience in stitching and should possess good knowledge of flat lock sewing machines, needles etc. He should be able to communicate in English and local language. He should have knowledge of equipment, tools, material, Safety, Health & Hygiene. * The minimum required experience could be relaxed by the vigilance committee of AMHSSC, if the concerned candidate possesses qualification from premium institutes , like NID, NIFT etc.

Annexure: Assessment Criteria

Assessment Criteria for Sewing Machine Operator Knits	
Job Role	Sewing Machine Operator - Knits
Qualification Pack	AMH/Q0305, 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 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 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

Assessable Outcome	Assessment Criteria	Total Marks	Out Of	Marks Allocation		
				Theory	Skills Practical	Viva
1. AMH/N0305 (Plan and Prepare for process of sewing of knit fabrics as per plan received from stitching/line supervisor)	PC1. Set machines according to manufacturer's instructions and production requirements of knitted components	75	9	4	4	1
	PC2. Check machine for needles, foot, spools etc. for working safely		14	4	8	2
	PC3. Ensure the materials used meet the specification matching within a product and between a pair of products where applicable		8	3	4	1
	PC4. Check for threads quality and color as per requirements for the garment styles		12	2	8	2
	PC5. Carry out test sews		11	1	9	1
	PC6. Select correct component parts for the style being worked upon		11	4	5	2
	PC7. Ask questions from the assigned supervisors to obtain more information on tasks when unclear of instructions given		10	1	8	1
		Total	75	19	46	10
2. AMH/N0306 (Stitch knitted fabrics as per plan)	PC1. Selection of correct machinery as per the garment or made-ups and home furnishing product plan like single needle machine, top and bottom feet, differential feet, etc.		16	7	8	1
	PC2. Selection of appropriate attachments according to the garment requirements like binder, folder, essential mechanism tools, etc.		8	2	5	1

	PC3. Optimize positioning and layout of materials to ensure smooth and productive working		9	5	4	0
	PC4. Stitch the correct materials in the right sequence as required by the product specification as per the specified stitch type (stitch classes), hems and seams	115	16	4	10	2
	PC5. Perform complex stitching operations with precision and accuracy		16	4	10	2
	PC6. Ensure stitched product meets specification in terms of stitch per inch, labels and trimmings		14	3	10	1
	PC7. Ensure stitched product conforms to shape and size requirement		11	3	7	1
	PC8. Check the stitched components meet as per the standards and specifications mentioned on the job card		10	3	6	1
	PC9. Make adjustments promptly to ensure the stitching work matches the specification		10	2	7	1
	PC10. Maintain the required productivity and quality levels		5	2	3	0
		Total	115	35	70	10
3. AMH/N0307 (Maintain health, safety and security in the production line)	PC1. Ensure safe and secure handling of stitching machines and related tools and equipments like thread cutters, shears, seam rippers, etc.		5	1	3	1
	PC2. Use and maintain personal protective equipment as per protocol like nose mask, lock guard, etc.		5	2	2	1

	PC3. Check the workplace and work processes for potential risks and threats like physical injuries from the machines and tools, fire, etc.		6	2	3	1
	PC4. Identify and correct (if possible) malfunctions in sewing machines and other related equipment like loose stitch, missing parts, etc.	30	6	2	3	1
	PC5. Participate in mock-drills/evacuation procedures organized at the workplace		4	1	3	0
	PC6. Undertake first-aid, fire-fighting and emergency response training		4	1	3	0
	Total		30	9	17	4
4. AMH/N0102 (Maintain Work area, tools and machines)	PC1. Handle materials, machinery, equipment and tools safely and correctly	50	3	1	2	0
	PC2. Use correct lifting and handling procedures		4	2	2	0
	PC3. Use materials to minimize waste		3	2	1	0
	PC4. Maintain a clean and hazard free working area		3	1	2	0
	PC5. Maintain tools and Equipment		4	1	3	0
	PC6. Carry out running maintenance within agreed schedules		4	2	2	0
	PC7. Carry out maintenance and/or cleaning within one's responsibility		3	1	2	0
	PC8. Report unsafe equipment and other dangerous occurrences			3	1	1
	PC9. Ensure that the correct machine guards are in place		3	1	2	0

	PC10. Work in a comfortable position with the correct posture		4	1	3	0
	PC11. Use cleaning equipment and methods appropriate for the work to be carried out		4	1	3	0
	PC12. Dispose of waste safely in the designated location		4	1	3	0
	PC13. Store cleaning equipment safely after use		3	1	2	0
	PC14. Carry out cleaning according to schedules and limits of responsibility		5	2	2	1
		Total	50	18	30	2
5. AMH/N0104 (Comply with industry, regulatory and organizational requirements)	PC1. Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures	30	6	2	3	1
	PC2. Seek and obtain clarifications on policies and procedures, from your supervisor or other authorized personnel		5	1	3	1
	PC3. Apply and follow these policies and procedures within your work practices		5	2	3	0
	PC4. Provide support to your supervisor and team members in enforcing these considerations		7	2	4	1
	PC5. Identify and report any possible deviation to these requirements		7	2	4	1
		Total	30	9	17	4
	Grand Total		300	90	180	30



Apparel Made-ups and Home Furnishing Sector Skill Council
Indian Buildings Congress, 1st Floor, Sector-6, R K Puram, Kama Koti Marg New Delhi-110 022