

Model Curriculum

Machine Maintenance Mechanic: Sewing Machine

**SECTOR: APPAREL, MADE-UP'S AND HOME
FURNISHING**

SUB-SECTOR: Apparel

OCCUPATION: Boutique Operations

REF ID: AMH/Q1901, v1.0

NSQF LEVEL: 5



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

APPAREL MADE-UPS AND HOME FURNISHING SECTOR SKILL COUNCIL

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: 'Machine Maintenance Mechanic: Sewing Machine'
QP No. 'AMH/Q1901 NSQF Level 5'

Date of Issuance: May 2nd, 2019

Valid up to*: May 2nd, 2023

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


Authorised Signatory
(Apparel Made-ups And Home Furnishing Sector Skill Council)

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Machine Maintenance Mechanic: Sewing Machine

CURRICULUM / SYLLABUS

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

Program Name	Machine Maintenance Mechanic: Sewing Machine		
Qualification Pack Name and Reference ID.	AMH/ Q1901, v1.0		
Version No.	1.0	Version Update Date	02/05/2019
Pre-requisites to Training	8th standard, preferably		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Carry out preventive machine maintenance procedures. • Troubleshoot machine related problems. • Maintain work area, tools and machines. • Adhere to health, safety and security requirements at the workplace. 		

This course encompasses 4 out of 4 National Occupational Standards (NOS) of “Machine Maintenance Mechanic: Sewing Machine” 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"> Explain the role and responsibilities of a ‘Machine Maintenance Mechanic: Sewing Machine’. Describe various employment opportunities for a ‘Machine Maintenance Mechanic: Sewing Machine’ in the apparel industry. Describe the relationship between work role of a ‘Machine Maintenance Mechanic: Sewing Machine’ and the overall manufacturing process. Describe the production process and the specific work activities that relate to the whole process. 	<p>White /black Board With Marker and Chalk, Duster</p>
2	<p>Machine set up</p> <p>Theory Duration (hh:mm) 25:00</p> <p>Practical Duration (hh:mm) 70:00</p> <p>Corresponding NOS Code AMH/N1901</p>	<ul style="list-style-type: none"> Explain various types of machine maintenance – preventive, breakdown and routine. Explain the importance of preventive maintenance. State the activities to be performed for preventive maintenance of sewing machines. Identify the organisation’s tools, templates and processes for machine maintenance. State organisation’s policies, procedures, guidelines and standards related to own work. Explain the importance of machine set up as part of preventive maintenance schedule. Explain the importance of checking the details in the specs sheet and tech pack. Identify quality systems and other processes practiced in the organization. Explain types of problems with quality and how to report them to appropriate people. Identify types of industrial sewing machines. Identify different parts of the sewing machine and their functions. Identify types of thickness, shade and sizes of thread. Check the correct position of thread post and stand. Check if all the screws are fitted correctly. Ensure that all parts of the bobbin unit are functioning properly. Check the correct position of the thread guides. Ensure that all thread guides are without rust/damage. Identify types of needles and their suitability 	<p>Industrial Single Needle Lock Stitch (SNLS) sewing machine with needle guard, folders and attachments, Single and Multi-Chain Stitch (SNCS)(Industrial as well as domestic, one each type) , Over Lock Machine (Twin Needle, 5 Thread), Specialised Industrial Sewing Machines(different types eg: flatlock machine, feed of arm, bar tack machine, buttonhole machine, button tacking machine etc.), Students Notes, Documents set(Tech Pack Sheets, size chart, trim card, fabric worksheet, style confirmation sheet, fabric consumption chart, fabric requirement sheet, trims requirement sheet, buyers comment sheet, record maintenance sheet etc) (industrial), stitched samples, Sewing Kit(different types of sewing needles,</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<p>for the job role.</p> <ul style="list-style-type: none"> Identify various types of needle systems. Ensure the needle is fitted correctly and the needle screw is tightly fixed. Replace the needle and the needle screw if damaged. Ensure right sized needle for the machine type and the thread. Ensure that the needle point is correct for the sewing material. Ensure the correct positioning of the presser foot. (loosen the screw of presser roller/foot bar to adjust and then tighten it). Check that the needle plate is not damaged. in case of damage, replace the needle plate or polish. Check the timing between the needle and hook, and make adjustments to correct the same if required. Check the working status of the thread take-up spring and replace the same if required. Ensure that the tension in the spring is adequate for stitching operations. Explain the process and types of stitch formation. Explain various types of feed mechanism in sewing machines. Check the stitch tension, adjust if required. Ensure that the stitch length and SPI (stitches per inch) are as per given specifications. Identify the correct position of knee lifter. adjust the knee lever so that it can be conveniently operated with the right knee. Check if foot pedal is in the right position. adjust/replace/re-align if required. Check the tension after the technical/maintenance work on the machine is completed and check the test stitches. make further adjustments if required. Leave work area safe and secure when work is complete. State reporting procedure in case of faults in own/ other processes. Identify who to refer problems to when they are outside the limit of own authority. Describe how to give inputs for machine improvement to the production line manager. State the importance of complying with written instructions. 	<p>bin/bobbin case, sewing thread, screwdriver, scissors etc), Hook, needle plate, sewing machine spares and sewing needles, the package contains one full-size vinyl machine cover; one needle threader with magnifier; one lint brush with needle inserter; three screwdrivers (flat and Philips); one bottle of sewing machine oiler and one machine needle organizer, Trainees stools, Lufkin Tape, waterproof box, machine repair manual, Fine cut file and Crescent wrench of different sizes, Machine repair tools kit (eg: screws of sizes), Fabric Yardages, surplus fabric, good quality muslin mandatory , other optional, quantity may vary), Machine belts, Sewing thread, Fire Extinguisher and First Aid and Dustbin, Student's Chair With Table Arm, Teacher's Table and Chair , Projector /LCD.</p>
3	<p>Cleaning and Lubrication</p> <p>Theory Duration</p>	<ul style="list-style-type: none"> Explain the importance of cleaning and lubrication as part of preventive maintenance schedule. Identify the right tools for machine 	<p>Industrial Single Needle Lock Stitch (SNLS) sewing machine with needle</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<p>(hh:mm) 30:00</p> <p>Practical Duration (hh:mm) 70:00</p> <p>Corresponding NOS Code AMH/N1901</p>	<p>maintenance.</p> <ul style="list-style-type: none"> Describe safe working practices for the workplace. Use the correct tools for cleaning and maintenance work. Carry out cleaning and maintenance of machines as per the work schedule on a regular basis. Clean the machine using the right solution. Check that the machine should not have rust. Open the tension unit and clean each part. Re-assemble the tension unit again. Clean the thread plate by detaching it from the machine. Clean the bobbin case from the inside. Clean the inside part of the hook. Clean the machine bed. lift the machine and clean all the parts under the machine. Identify oil consumption in the overall process. Check the oil level in the machine. Change or refill the oil depending on the type of machine. Oil the hook set in case of manual machines. Regulate the quantity of oil in the hook. Describe the purpose of lubrication. Identify types of oil used for machines. Identify types of oil used for thread lubrication. Explain types of lubrication systems. Check that the lubrication points are clean. Oil the lubrication points in case of manual machines. 	<p>guard, folders and attachments, Single and Multi-Chain Stitch (SNCS)(Industrial as well as domestic, one each type) , Over Lock Machine (Twin Needle, 5 Thread), Specialised Industrial Sewing Machines(different types eg: flatlock machine, feed of arm, bar tack machine, buttonhole machine, button tacking machine etc.), Students Notes, Documents set (Tech Pack Sheets, size chart, trim card, fabric worksheet, style confirmation sheet, fabric consumption chart, fabric requirement sheet, trims requirement sheet, buyers comment sheet, record maintenance sheet etc) (industrial), stitched samples, Sewing Kit(different types of sewing needles, obin/bobbin case, sewing thread, screwdriver, scissors etc), Hook, needle plate, sewing machine spares and sewing needles, the package contains one full-size vinyl machine cover; one needle threader with magnifier; one lint brush with needle inserter; three screwdrivers (flat and Philips); one bottle of sewing machine oiler and one machine needle organizer, Trainees stools, Lufkin Tape, waterproof box, machine repair manual, Fine cut file and Crescent wrench</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
			of different sizes, Machine repair tools kit (eg: screws of sizes), Fabric Yardages, surplus fabric, good quality muslin mandatory , other optional, quantity may vary), Machine belts, Sewing thread, Fire Extinguisher and First Aid and Dustbin, Student's Chair With Table Arm, Teacher's Table and Chair , Projector /LCD.
3	<p>Identifying machine related problems</p> <p>Theory Duration (hh:mm) 30:00</p> <p>Practical Duration (hh:mm) 70:00</p> <p>Corresponding NOS Code AMH/N1902</p>	<ul style="list-style-type: none"> • Explain the importance of identifying machine related problems as part of preventive maintenance schedule. • List do's and don'ts of sewing. • Identify common hazards in the work area. • Describe procedures for dealing with potential hazards. • Identify procedures with regard to material re-usage and disposal. • State quality standards followed in the organisation. • Identify reporting procedures in the organisation. • State documentation required as part of the process. • Describe the operation of a sewing machine. • Identify types of motors used in the stitching process. • Identify power consumption in the machine. • Identify the machine speed for optimum output. • Describe various types of belts. • State working specification of the sewing machine. • List technical terms associated with sewing machines and apparel industry. • Identify quality standards for stitching work. • Describe different types of machine beds. • Describe different types of stitching defects. • Identify common machine related issues that affect stitching. • Identify the stitching/machine problem. • Resolve the stitching/machine problem as per prescribed norms. • Identify the cause if the machine runs with difficulty. • Identify the method of troubleshooting if the machine runs with difficulty. 	<p>Industrial Single Needle Lock Stitch (SNLS) sewing machine with needle guard, folders and attachments, Single and Multi-Chain Stitch (SNCS)(Industrial as well as domestic, one each type) , Over Lock Machine (Twin Needle, 5 Thread), Specialised Industrial Sewing Machines(different types eg: flatlock machine, feed of arm, bar tack machine, buttonhole machine, button tacking machine etc.), Students Notes, Documents set(Tech Pack Sheets, size chart, trim card, fabric worksheet, style confirmation sheet, fabric consumption chart, fabric requirement sheet, trims requirement sheet, buyers comment sheet, record maintenance sheet etc) (industrial) , stitched samples, Sewing Kit(different types of sewing needles, obin/bobbin case, sewing thread, screwdriver, scissors</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> Identify the cause for slow running of the machine. Identify the cause for upper and lower thread tearing. Identify the method of troubleshooting for upper and lower thread tearing. Resolve issues such as skipping of stitches. Explain various types of feed mechanism in sewing machines. Identify issues with the feed mechanism. Identify the issue when the machine does not start sewing. <p>Issues: little reserve of the lower and/or upper thread where upper thread leaves needle eye at the start of next sewing.</p>	<p>etc), Hook, needle plate, sewing machine spares and sewing needles, the package contains one full-size vinyl machine cover; one needle threader with magnifier; one lint brush with needle inserter; three screwdrivers (flat and Philips); one bottle of sewing machine oiler and one machine needle organizer, Trainees stools, Lufkin Tape, waterproof box, machine repair manual, Fine cut file and Crescent wrench of different sizes, Machine repair tools kit (eg: screws of sizes),, Fabric Yardages, surplus fabric, good quality muslin mandatory , other optional, quantity may vary), Machine belts, Sewing thread, Fire Extinguisher and First Aid andDustbin, Student's Chair With Table Arm, Teacher's Table and Chair , Projector /LCD.</p>
4	<p>Troubleshoot machine related problems</p> <p>Theory Duration (hh:mm) 25:00</p> <p>Practical Duration (hh:mm) 70:00</p> <p>Corresponding NOS Code AMH/N1902</p>	<ul style="list-style-type: none"> Identify various roles, responsibilities and line of reporting within the work area. State protocol to obtain more information on work-related tasks. State organizational policies and procedures. Resolve the problem of slow running of the machine. Troubleshoot when the machine runs with difficulty. Troubleshoot the problem of upper and lower thread tearing. Take appropriate action in case of needle breakage. Resolve the issue of difficult and uneven machine feeding. Take appropriate action in case of incorrect stitch locking i.e. threads locked on the top side or bottom side of sewn material. 	<p>Troubleshooting tools and equipment</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> • Take appropriate action in case of a blocked hook. • Resolve the issue when the machine does not start sewing. • Resolve the issue of the machine starting to sew only after having skipped some stitches. • Resolve machine issues such as when upper thread end projects above the sewn material at the start of the sewing operation. • Replace machine part in case of damage or when necessary. • Make required adjustments in the machine settings to ensure stitching quality is achieved as per given specifications. 	
5	<p>Maintain work area, tools and machines</p> <p>Theory Duration (hh:mm) 25:00</p> <p>Practical Duration (hh:mm) 70:00</p> <p>Corresponding NOS Code AMH/N0102</p>	<ul style="list-style-type: none"> • Describe safe working practices for cleaning and maintenance of equipment. • Describe the effects of contamination on products i.e. Machine oil, dirt etc. • Identify different types of cleaning equipment and substances and their use. • Describe various machines used for layering and spreading processes • Describe various markers and tools that are required for marking. • Describe different types of cutting machines like scissors, straight knife, band knife, laser cutting machine, etc. • List procedures to conduct maintenance of tools and equipment. • Handle materials and tools safely and correctly. • Use cleaning equipment and methods appropriate for the work to be carried out. • Identify common faults with equipment and the method to rectify. • Use correct lifting and handling procedures. • Carry out regular running maintenance of tools and equipment within agreed schedules and limits of responsibility. • Carry out safe working practices for cleaning and maintenance of equipment. • Maintain a comfortable position with correct posture while working. • Identify different ways of minimizing wastage. • Dispose off waste safely in the designated location. • Carry out cleaning according to schedules and limits of responsibility. • Store cleaning equipment safely at the designated place after use. • Explain the importance of effective communication with colleagues and supervisors. • Describe the lines of communication, 	<p>cleaning equipment, cutting machines like scissors, straight knife, band knife, laser cutting machine, etc., lifting and handling equipment, recording equipment</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<p>authority and reporting procedures.</p> <ul style="list-style-type: none"> • Describe the company's quality standards. • Describe the types of records kept and the methods to complete the records. • Describe the importance of keeping accurate quality records. • Describe the importance of complying with written instructions. • Report quality issues to appropriate people. • State the importance of keeping accurate records concerning quality. • State safe working practices and organizational procedures. • Describe the limits of self-responsibility. • Describe ways of resolving problems within the work area. 	
6	<p>Maintain health, safety and security at the workplace</p> <p>Theory Duration (hh:mm) 20:00</p> <p>Practical Duration (hh:mm) 28:00</p> <p>Corresponding NOS Code AMH/N0103</p>	<ul style="list-style-type: none"> • Explain health and safety related practices applicable at the workplace. • Describe the layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points. • State environmental management system related procedures at the workplace. • Follow environment management system related procedures. • Comply with health and safety related instructions applicable in the workplace. • List potential hazards, risks and threats based on the nature of operations. • List potential risks due to own actions and methods to minimize these. • Describe potential accidents, emergencies and response to these scenarios. • Monitor the workplace and work processes for potential risks and threats. • Ensure the work area is free from potential hazards. • Report hazards and potential risks/ threats to supervisors or other authorized personnel. • Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned. • Seek clarifications, from supervisors or other authorized personnel in case of perceived risks. • State reporting protocol and documentation required. • Describe occupational health and safety risks and methods. • State organizational procedures for safe handling of equipment and machine operations. • Explain various personal protective equipment and their method of use. 	<p>White and BlackBoard, White and Black Board Marker, documents related to health and safety measures</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> • Use appropriate personal protective equipment as per protocol. • Report unsafe equipment and other dangerous occurrences. • Explain the identification, handling and storage of hazardous substances. • Describe elements of a proper disposal system for waste and by-products. • Identify signage related to health and safety and their meaning. • List details of personnel trained in first aid, fire-fighting and emergency response. • Describe actions to take in the event of a mock drill/ evacuation procedures or actual accident, emergency or fire. • Participate in mock drills/ evacuation procedures organized at the workplace. • Undertake first aid, fire-fighting and emergency response training. • Take action based on instructions in the event of fire, emergencies or accidents. • Follow organization procedures for shutdown and evacuation when required. • Carry out own activities in line with approved guidelines and procedures. • Minimize health and safety risks to self and others due to own actions. • Identify and correct (if possible) malfunctions in machinery and equipment. • Report any service malfunctions that cannot be rectified. • Store materials and equipment in line with manufacturers and organizational requirements. • Safely handle and move waste and debris. • State importance of sound health, hygiene and good habits. • Describe ill-effects of alcohol, tobacco and drugs. • Maintain a healthy lifestyle and guard against dependency on intoxicants. • Demonstrate basic first aid. • Demonstrate basic CPR. 	
7	<p>Soft Skills</p> <p>Theory Duration (hh:mm) 03:00</p> <p>Practical Duration (hh:mm) 02:00</p>	<ul style="list-style-type: none"> • Explain the importance of effective communication. • Communicate effectively with others. • Identify and follow personal grooming and hygiene. • Follow organization procedures and maintain personal health and hygiene and avoid habits like ghutka, tobacco etc. • Interact effectively in a group. • Manage time effectively. 	White /Black Board with Marker and Chalk, Duster

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> Explain the importance of resume and prepare your resume. Prepare for interview 	
	Total Duration 540:00 Theory Duration 160:00 Practical Duration 380:00	Unique Equipment Required: Industrial Single Needle Lock Stitch (SNLS) sewing machine with needle guard, folders and attachments, Single and Multi-Chain Stitch (SNCS)(Industrial as well as domestic, one of each type) , Over Lock Machine (Twin Needle, 5 Thread), Specialised Industrial Sewing Machines (different types eg: flat lock machine, feed of arm, bar tack machine, button hole machine, button tacking machine etc.), Students Notes, Documents set (Tech Pack Sheets, size chart, trim card, fabric work sheet, style confirmation sheet, fabric consumption chart, fabric requirement sheet, trims requirement sheet, buyers comment sheet, record maintenance sheet etc) (industrial) , stitched samples, Sewing Kit(different types of sewing needles, bobbin/bobbin case, sewing thread, screw driver, scissors etc), Hook, needle plate, sewing machine spares and sewing needles, package contains one full size vinyl machine cover; one needle threader with magnifier; one lint brush with needle inserter; three screwdrivers (flat and phillips); one bottle of sewing machine oiler and one machine needle organizer, Trainees stools, Lufkin Tape, water proof box, machine repair manual, Fine cut file and Crescent wrench of different sizes, Machine repair tools kit (eg: screws of sizes),, Fabric Yardages, surplus fabric, good quality muslin mandatory , other optional, quantity may vary), Machine belts, Sewing thread, Fire Extinguisher and First Aid and Dustbin, Student's Chair With Table Arm, Teacher's Table and Chair , Projector /LCD.	

Grand Total Course Duration: **540 Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Apparel, Made-Ups and Home Furnishing Sector Skill Council](#))

Trainer Prerequisites for Job role: “Machine Maintenance Mechanic: Sewing Machine” mapped to Qualification Pack: “AMH/Q1901 v1.0”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with Qualification Pack “ <u>AMH/Q1901</u> ”
2	Personal Attributes	The candidate should have an 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 a team; diligent and is passionate for maintaining the quality in content and training delivery methodology. Candidate should have a basic understanding of the English language; however, this should not be a restrictive criterion as long as the candidate is willing and open to learning. He/she must be able to speak, read and write in the local language.
3	Minimum Educational Qualifications	<ul style="list-style-type: none"> • The candidate should be 10th pass with six years of supervisory experience in relevant trade • Certificate in relevant trade of minimum 6 months duration • Diploma of minimum 1-year duration in the relevant trade • ITI in relevant trade • Graduate in the relevant trade
4a	Domain Certification	Certified for Job Role: “ <u>Measurement Checker</u> ” mapped to QP: “ <u>AMH/Q1901, v1.0</u> ”. The minimum accepted score is 80%
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “ <u>Trainer</u> ”, mapped to the Qualification Pack: “ <u>MEP/Q2601</u> ”. Minimum accepted score as per MEPSC guidelines is 80%.
5	Experience	<ul style="list-style-type: none"> • The candidate should be 10th pass with six years of supervisory experience in relevant trade • Certificate of a minimum of six months duration in relevant trade with 4 years of work experience in relevant trade • Diploma of minimum 1-year duration in the relevant trade with 2 years of work experience in relevant trade • ITI in relevant trade with minimum of 2 years of work experience in relevant trade • Graduation in relevant trade with minimum of 2 years of work experience in relevant trade, • He should be able to communicate in English and local language. • He should have knowledge of equipment, tools, material, safety, health and hygiene.

Assessment Criteria

Job Role Machine Maintenance Mechanic: Sewing Machine

Qualification Pack AMH/Q1901, version 1.0

Sector Skill Council AMHSSC

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. Assessment 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 this criteria
6. To pass the Qualification Pack, every trainee should score a minimum of 70% aggregate in QP
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

		Marks Allocation				
		Total				
		Marks	Out Of	Theory	Skills	Viva
		400			Practical	
1.AMH/N1901 (Carry out preventive machine maintenance procedures)	PC1. Check the correct position of thread post and stand.	110	3	1	1	1
	PC2. Check if all the screws are fitted correctly.		3	1	1	1
	PC3. Check the entire bobbin unit. Ensure all parts are functioning properly.		3	1	1	1
	PC4. Check the correct position of the thread guides.		3	1	1	1
	PC5. Check and ensure that all thread guides are in good condition - no rust/damage		3	1	1	1
	PC6. Check if the needle is fitted correctly and the needle screw is tightly fixed		3	1	1	1
	PC7. Check the needle. In case of damage replace the needle and the needle screw.		3	1	1	1

PC8. Check the needle system and size Ø Check needle system, i.e. right needle for the machine type Ø Check that the size of the needle is right for the thread Ø Check that the needle point is correct for the sewing material	3	1	1	1
PC9. Check if presser foot is in the right position - Loosen the screw of presser roller/foot bar to adjust and then tighten it	3	1	1	1
PC10. Check that the needle plate is not damaged. In case of damage, replace the needle plate or polish.	4	2	1	1
PC11. Check the timing between the needle and hook, and make adjustments to correct the same if required.	3	1	1	1
PC12. Check that the thread take-up spring is not broken, and replace the same if required.	3	1	1	1
PC13. Check the tension of the spring. Adjust if required.	3	1	1	1
PC14. Check the stitch tension, adjust if required.	3	1	1	1
PC15. Check the stitch length, adjust the SPI as per given Specifications.	3	1	1	1
PC16. Check the correct position of knee lifter. Adjust the knee lever so that it can be conveniently operated with the right knee	3	1	1	1
PC17. Check if foot pedal is in the right position. Adjust/replace/re-align if required.	3	1	1	1
PC18. Check the tension after the technical/maintenance work on the machine is completed and checks the test stitches. Make further adjustments if required.	4	2	1	1
PC19. Minimise and dispose the waste materials in the approved manner	3	1	1	1
PC20. Leave work area safe and secure when work is complete	3	1	1	1
PC21. Clean the machine using the right solution	3	1	1	1
PC22. Check that the machine should not have rust.	3	1	1	1
PC23. Open the tension unit and clean each part.	3	1	1	1
PC24. Re-assemble the tension unit again.	3	1	1	1

	PC25. Loosen the screw, take out the thread plate and clean. Put it back again after cleaning.		3	1	1	1
	PC26. Clean the bobbin case from the inside.		3	1	1	1
	PC27. Clean the inside part of the hook		3	1	1	1
	PC28. Clean the machine bed. Lift the machine and clean all the parts under the machine.		3	1	1	1
	PC29. Use the correct tools for cleaning and maintenance work		3	1	1	1
	PC30. Carry out cleaning and maintenance of machines as per the work schedule on a regular basis.		3	1	1	1
	PC31. Check that the lubrication points are clean.		3	1	1	1
	PC32. Put few drops in the lubrication points (in case of manual machines)		3	1	1	1
	PC33. Open the hook set and oil (in case of manual machines)		3	1	1	1
	PC34. Check the level of oil.		3	1	1	1
	PC35. Put oil if required or change the oil (depending on the type of machine).		3	1	1	1
	PC36. Regulate the quantity of oil in the hook		3	1	1	1
		Total	110	38	36	36
2.AMH/N1902 (Troubleshoot Machine related problems)	PC1. Identify common machine related issues that affect stitching	90	6	2	2	2
	PC2. Identify the cause and method of troubleshooting if machine runs with difficulty		6	1	2	3
	PC3. If machine starts with slow running, identify the cause and take appropriate action to rectify the same.		6	2	2	2
	PC4. Identify the cause and method of troubleshooting for upper thread tearing		8	4	2	2
	PC5. Identify the cause and method of troubleshooting for Lower thread tearing		8	4	2	2
	PC6. Resolve issues such as skipping of stitches		6	2	2	2
	PC7. Take appropriate action in case of Needle breakage		6	2	2	2
	PC8. Resolve the issues of difficult and uneven machine feeding		4	2	1	1

	PC9. Take appropriate action in case of Incorrect stitch locking. Threads locked on the top side or bottom side of sewn material.		4	2	1	1
	PC10. Take appropriate action if hook is blocked.		4	1	2	1
	PC11. Troubleshoot the issue of little reserve of upper thread for which machine does not start sewing, upper thread leaves needle eye at the start of next sewing.		4	1	2	1
	PC12. Troubleshoot the issue of little reserve of lower thread, when machine does not start sewing		6	2	3	1
	PC13. Resolve the issue of machine starting to sew only after having skipped some stitches		4	1	2	1
	PC14. Resolve machine issues such as when starting sewing operation, upper thread end projects above the sewing material		4	2	1	1
	PC15. Replace machine part in case of damage or as appropriate.		4	2	1	1
	PC16. Make required adjustments in the machine settings to ensure stitching quality is achieved as per given specifications		6	3	2	1
	PC17. Analyze the stitching/machine problem, check for solution and take appropriate action		4	2	1	1
		Total	90	35	30	25
3.AMH/N0102 (Maintain work area, tools and machines)	PC1.Handle materials, machinery, equipment and tools safely and correctly	100	10	4	2	4
	PC2.Use correct lifting and handling procedures		8	4	2	2
	PC3. Use materials to minimize waste		6	2	2	2
	PC4.Maintain a clean and hazard free working area		6	2	2	2
	PC5. Maintain tools and equipment's		6	2	2	2
	PC6.Carry out running maintenance within agreed schedules		7	3	2	2
	PC7.Carry out maintenance and/or cleaning within one's responsibility		8	4	2	2
	PC8.Report unsafe equipment and other dangerous occurrences		7	3	2	2
	PC9.Ensure that the correct machine guards are in place		6	2	2	2
	PC10. Work in a comfortable position with the correct posture		6	2	2	2

	PC11. Use cleaning equipment and methods appropriate for the work to be carried out		8	4	2	2
	PC12. Dispose of waste safely in the designated location		8	3	3	2
	PC13. Store cleaning equipment safely after use		6	2	2	2
	PC14. Carry out cleaning according to schedules and limits of responsibility		8	3	3	2
		Total	100	40	30	30
5. AMH/N0103 (Maintain Health and safety and security at work place)	PC1. Comply with health and safety related instructions applicable to the workplace	100	8	4	1	3
	PC2. Use and maintain personal protective equipment as per protocol		6	2	2	2
	PC3. Carry out own activities in line with approved guidelines and procedures		6	2	2	2
	PC4. Maintain a healthy lifestyle and guard against dependency on intoxicants		6	3	1	2
	PC5. Follow environment management system related procedures		8	4	2	2
	PC6. Identify and correct (if possible) malfunctions in machinery and equipment		6	2	2	2
	PC7. Report any service malfunctions that cannot be rectified		4	2	1	1
	PC8. Store materials and equipment in line with manufacturer's and organisational requirements		6	2	2	2
	PC9. Safely handle and move waste and debris		6	2	2	2
	PC10. Minimize health and safety risks to self and others due to own actions		4	2	1	1
	PC11. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks		6	3	1	2
	PC12. Monitor the workplace and work processes for potential risks and threats		6	2	2	2
	PC13. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned		4	1	1	2
	PC14. Report hazards and potential risks/ threats to supervisors or other authorized personnel		6	1	2	3
	PC15. Participate in mock drills/ evacuation procedures organized at the workplace		4	1	2	1
	PC16. Undertake first aid, fire-fighting and emergency response training, if asked to do so		4	1	2	1

	PC17. Take action based on instructions in the event of fire, emergencies or accidents		4	1	2	1
	PC18. Follow organisation procedures for shutdown and evacuation when required		6	2	1	3
			100	37	29	34
	Grand Total	Total	400	150	125	125