



Sewing Machine Operator

QP Code: PWD/AMH/Q0301

Version: 2.0

NSQF Level: 3

Skill Council for PwD || 501, City Centre, 5th Floor, 12/5, Plot 5, Sector 12, Dwaraka
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Adoption of Job Role for PwD : Job mapping is critical for skill training of PwD so that the livelihood

opportunity looks at him/ her not because he/ she is having a disability but because of the skill. Mapping with a disability involves research with subject matter experts (SMEs) with a view on the industry requirement without compromising on performance outcome. In cases, mapping is also supported by the use of assistive tools/ technology.

Expository Mapped Parameters

Sector	PwD
Originating SSC	Apparel
Original QP code	AMH/Q0301
QP Version	2.0
Expository Next Review Date	30/09/2025

Expository Code	Expository Version	Expository Name	Minimum EntryCriteria	Expository Linked On
E001	1.0	Locomoto rDisability	Ability to Read and Write with 5 years of Experience or 5th Class Pass with 3 year of Experience or 8th class pass with 1 year Experience or 8th class Pass +ITI with no experience or 8th Class Pass pursuing continuous regular schooling with no experience or 10th Class Pass with no experience or Previous relevant Qualification of NSQF Level 2 with 1 year experience. *For 5th class with No experience- OJT/internship of 12 months * For 8th class pass with no experience – OJT/internship of 4 months	30/09/2025
E004	1.0	Speech and Hearing Impairment	5th Class Pass with 3 years of Experience or 8th class pass with 1 year Experience or 8th class Pass +ITI with no experience or 8th Class Pass pursuing continuous regular schooling with no experience or 10th Class Pass with no experience or Previous relevant Qualification of NSQF Level 2 with 1 year experience. *For 5th class with No experience- OJT/internship of 12 months * For 8th class pass with no experience – OJT/internship of 4 months	30/09/2025

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AMH/Q0301: Sewing Machine Operator

Brief Job Description

A Sewing Machine Operator, also called a Stitcher or Machinist is an important job-role associated with Apparel sector, Made-Ups and Home Furnishing Industry. The primary responsibility of a machinist is to stitch/ sew fabric panels, fur fabric panels, or synthetic materials to produce apparels or made up with desired quality.

Personal Attributes

A Sewing Machine Operator should have good eyesight, eye- hand-leg coordination, motor skills and vision (including near vision, distance vision, color vision, peripheral vision, depth perception and ability to change focus).). He/she should also have good interpersonal skills, be open to learning, have basic understanding of measurements.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AMH/N0102: Maintain work area, tools and machines](#)
2. [AMH/N0103: Maintain health, safety and secure work place with Gender and PwD Sensitization](#)
3. [AMH/N0104: Comply with industry, regulatory and organizational requirements and Greening of Job roles](#)
4. [AMH/N0301: Carry out stitching activities using machine or by hand](#)
5. [AMH/N0302: Contribute to achieve product quality in stitching operations](#)

Qualification Pack (QP) Parameters

Sector	Apparel
Sub-Sector	Apparel, Made-Ups & Home Furnishing
Occupation	Sewing
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8153.0101
Minimum Educational Qualification & Experience	5th Class with 1 Year of experience in relevant field

Minimum Level of Education for Training in School	
Pre-Requisite License or Training	Preferably training in Sewing Operations
Minimum Job Entry Age	18 Years
Last Reviewed On	30/09/2021
Next Review Date	30/09/2024
NSQC Approval Date	30/09/2021
Version	2.0

AMH/N0102: Maintain work area, tools and machines

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities required to organize/ maintain work areas and activities to ensure tools and machines are maintained as per norms. It also covers procedures and compliance standards to identify, prevent, control, minimize and eliminate hazards and potential risks to self and others at the workplace.

Scope

The scope covers the following :

- Maintain the work area, handle tools and machines

Elements and Performance Criteria

Maintain the work area, handle tools and machines

To be competent, the user/individual on the job must be able to:

- PC1. Handle materials, machinery, equipment and tools safely and correctly to maintain a clean and hazard free working area
- PC2. Use correct lifting and handling procedures
- PC3. Use materials efficiently to minimize wastage and dispose off waste safely at the designated location.
- PC4. Carry out running maintenance and/or cleaning within one's responsibility and agreed schedules
- PC5. Report any unsafe or damaged equipment and other dangerous occurrences to the authorized personnel
- PC6. Ensure that the correct machine guards are in place
- PC7. Work in a comfortable position and maintain correct posture
- PC8. Use cleaning equipment and methods appropriate for the work to be carried out

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. Importance of good health, personal hygiene and duty of care
- KU2. Importance of safe working practices and code of conduct (COC) and Social Accountability standards followed by the organization/ industry
- KU3. The limits of your own responsibility
- KU4. The production process and the specific work activities that relate to the whole process
- KU5. The line and importance of effective communication with superiors and colleagues
- KU6. The organization's rules, codes, quality standards, reporting procedures and guidelines (including timekeeping)
- KU7. The importance of complying with written instructions
- KU8. The instructions of equipment operating procedures / manufacturer's
- KU9. The work instructions and specifications and interpret them accurately

- KU10. Method to make use of the information detailed in specifications and instructions
- KU11. Relation between work role and the overall manufacturing process
- KU12. The importance of taking action when problems are identified
- KU13. Different ways of minimizing waste and proper disposal system for waste and by-products
- KU14. The importance of running maintenance and regular cleaning
- KU15. Effects of contamination on products i.e., Machine oil, dirt
- KU16. Common faults with equipment and the method to rectify
- KU17. Maintenance procedures
- KU18. Hazards likely to be encountered when conducting routine maintenance
- KU19. Different types of cleaning equipment and substances and their use
- KU20. Safe working practices for cleaning and the method of carrying them out

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. Write and document appropriate technical forms, job cards, inspection sheets as per the required format of the company
- GS2. Read and comprehend basic English to interpret indicators in the operating manuals, job cards, visual cards
- GS3. Read and understand manuals, health and safety instructions, memos, reports, job cards etc.
- GS4. Speak and communicate effectively with to peers and supervisors
- GS5. Give clear detailed instructions to co-workers, subordinates and others
- GS6. Use correct technical terms while interacting with supervisor
- GS7. Take appropriate decisions regarding your responsibilities
- GS8. Assess for any damaged faulty component in the concerned machinery and take action accordingly
- GS9. Evaluate the decision and conduct basic trouble shooting
- GS10. Plan and manage work routine based on company procedure
- GS11. Work with supervisors/ team mates to carry out work related tasks
- GS12. Plan for cleaning and lubricating the concerned machinery, tools, and workplace daily before and after operations
- GS13. Ensure and follow organizational procedures pertaining to health and safety are followed
- GS14. Solve operational role related issues
- GS15. Diagnose common problems in the machine based on visual inspection, sound, temperature etc.
- GS16. Analyze, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain the work area, handle tools and machines</i>	14	49	-	7
PC1. Handle materials, machinery, equipment and tools safely and correctly to maintain a clean and hazard free working area	3	10	-	1
PC2. Use correct lifting and handling procedures	2	7	-	1
PC3. Use materials efficiently to minimize wastage and dispose off waste safely at the designated location.	2	4	-	1
PC4. Carry out running maintenance and/or cleaning within one’s responsibility and agreed schedules	2	10	-	1
PC5. Report any unsafe or damaged equipment and other dangerous occurrences to the authorized personnel	1	2	-	0.5
PC6. Ensure that the correct machine guards are in place	2	2	-	0.5
PC7. Work in a comfortable position and maintain correct posture	1	7	-	1
PC8. Use cleaning equipment and methods appropriate for the work to be carried out	1	7	-	1
NOS Total	14	49	-	7

National Occupational Standards (NOS) Parameters

NOS Code	AMH/N0102
NOS Name	Maintain work area, tools and machines
Sector	Apparel
Sub-Sector	Apparel, Made-Ups & Home Furnishing
Occupation	Sewing, Finishing, Cutting, Production Supervision, Sampling, Quality Control, Quality Assurance, Ironing, Tailoring, Machine Embroidery Operation
NSQF Level	4
Credits	TBD
Version	3.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

AMH/N0103: Maintain health, safety and secure work place with Gender and PwD Sensitization

Description

This unit provides performance criteria, knowledge & understanding, and skills & abilities required to comply with health, safety, and security requirements at the workplace and covers procedures to prevent, control and minimize risk to self and others

Scope

The scope covers the following :

- Potential risks associated with hazardous processes and guidelines for medical emergencies.

Elements and Performance Criteria

Hazards and potential risks associated with the process, guidelines for medical emergencies and evacuation process; gender & PwD sensitization

To be competent, the user/individual on the job must be able to:

- PC1. Comply with health, safety gender and PwD (People with disability) related instructions applicable to the workplace.
- PC2. Actively participate in mock drills/evacuation procedures and group discussions related to a safe and secure work place.
- PC3. Training sensitization programs for gender and PwD awareness organized at the workplace.
- PC4. Use and maintain materials and equipment as per protocol.
- PC5. Capable to perform first-aid, firefighting or any other emergency response procedures and follow organization procedures for shutdown and evacuation when required
- PC6. Monitor the work place and processes for potential risks/ threats to supervisors or other authorized personnel and ensure gender equality and PwD (People with disability) security.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. The importance of gender equality being followed in the organization and policies for reporting any harassment or inappropriate behavior
- KU2. How to accommodate employees with disabilities; etiquette to adhere to and proper language and terminology
- KU3. How to communicate, offer help, respecting space, parking etc. for people with disabilities or special needs.
- KU4. Promote a safe, accessible and healthy workplace for disabled employees.
- KU5. Health and safety related practices applicable at the workplace.
- KU6. Potential hazards, risks and threats based on nature of operations; the ways to minimize these and response to these scenarios.
- KU7. The code of conduct (COC) and Social Accountability standards followed by the organization/ industry

- KU8. Layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points.
- KU9. Reporting protocol and documentation required.
- KU10. The occupational health and safety risks and methods; importance of personal protective equipment and method of use.
- KU11. Identification, handling and storage of hazardous substances.
- KU12. Proper disposal system for waste and by-products.
- KU13. Signage related to health and safety and their meaning.
- KU14. The importance of personal health and hygiene and the ill effects of usage of intoxicants such as alcohol, tobacco and drugs.

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. Create a positive and inclusive workplace atmosphere without any kind of bias/discrimination towards any employee.
- GS2. Actively take part in any discussion/workshop organized for gender sensitization training
- GS3. Read and comprehend written instructions related to gender equality and Pwd awareness/issues in the organization
- GS4. Identify and report any harassment or inappropriate behavior towards any employee
- GS5. Identify and report any distinction, exclusion, harassment or inappropriate behavior towards any employee
- GS6. Document and report any health and safety related incidents/ accidents to the authorized personnel.
- GS7. Read all organizational and equipment related health and safety manuals and documents
- GS8. Read instructions, guidelines/procedures/rules related to the worksite and machine operations
- GS9. Keep abreast with the latest developments for innovative safety services and tools by reading brochures, pamphlets, magazines etc
- GS10. Discuss the latest approach for safety and security with the team
- GS11. Evaluate and use correct PPE kit and other safety gear while at the workplace
- GS12. Work with supervisors/ team mates to carry out work related tasks as per schedule
- GS13. Keep work area free from potential hazards
- GS14. Follow organizational procedures pertaining to health and safety.
- GS15. Take appropriate actions during emergencies, accidents or fire at the workplace
- GS16. Resolve issues pertaining to malfunctions in machineries and report if required
- GS17. Identify emergency situations; their cause & effect relationship and suggest probable solutions
- GS18. Analyze, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently
- GS19. Create a positive and inclusive workplace atmosphere without any kind of bias/discrimination towards any employee
- GS20. Actively take part in any discussion/workshop organized for gender sensitization training
- GS21. Read and comprehend written instructions related to gender equality issues in the organization

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Hazards and potential risks associated with the process, guidelines for medical emergencies and evacuation process; gender & PwD sensitization</i>	22	12	-	6
PC1. Comply with health, safety gender and PwD (People with disability) related instructions applicable to the workplace.	4	2	-	1
PC2. Actively participate in mock drills/evacuation procedures and group discussions related to a safe and secure work place.	4	2	-	1
PC3. Training sensitization programs for gender and PwD awareness organized at the workplace.	4	2	-	1
PC4. Use and maintain materials and equipment as per protocol.	3	2	-	1
PC5. Capable to perform first-aid, firefighting or any other emergency response procedures and follow organization procedures for shutdown and evacuation when required	4	2	-	1
PC6. Monitor the work place and processes for potential risks/ threats to supervisors or other authorized personnel and ensure gender equality and PwD (People with disability) security.	3	2	-	1
NOS Total	22	12	-	6

National Occupational Standards (NOS) Parameters

NOS Code	AMH/N0103
NOS Name	Maintain health, safety and secure work place with Gender and PwD Sensitization
Sector	Apparel
Sub-Sector	Apparel, Made-Ups & Home Furnishing
Occupation	Sewing, Sewing, Specialized Sewing, Sampling, Ironing, Hand Embroidery, Production Supervision, Computerized Embroidery, Laying, Quality Control
NSQF Level	4
Credits	TBD
Version	5.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

AMH/N0104: Comply with industry, regulatory and organizational requirements and Greening of Job roles

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities required for complying with legal, regulatory organizational requirements.

Scope

The scope covers the following :

- Observe organizational norms and follow green procedures at workplace.

Elements and Performance Criteria

Comply with industry, and organizational requirements and greening of job roles

To be competent, the user/individual on the job must be able to:

- PC1. Carry out work functions in accordance with organizational standards, greening solutions, procedures, policies, legislation and regulations.
- PC2. Apply and follow organizational policies and procedures and inculcate sustainable consumption practices.
- PC3. Actively get involved in improving the performance of the organization and support adaptation to environmentally friendly processes.
- PC4. Handle materials, equipment, computer and software safely and correctly to maintain a clean and hazard free working area and support adaptation to more environmentally friendly processes
- PC5. Carry out running maintenance and/or cleaning within one's responsibility and agreed schedules and deal with work interruptions effectively.
- PC6. Report unsafe equipment and other dangerous occurrences to concerned personnel.
- PC7. Use cleaning equipment and methods appropriate for the work to be carried out.
- PC8. Request for upgrading of system or software when required for effective working and maintain a backup file when working on various design software
- PC9. All soft copies of design work to be maintained in files as well for future reference

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. Conscious and sustainable decisions/information for achieving an effective and green workplace.
- KU2. The importance of safe working practices and code of conduct (COC) and Social Accountability standards followed by the organization/ industry
- KU3. The production procedures and the specific work activities relate to the whole process.
- KU4. The organization's rules, codes, quality standards, reporting procedures and guidelines (including timekeeping)
- KU5. The work instructions and specifications and interpret them accurately
- KU6. To make use of the information detailed in specifications and instructions

- KU7. The importance of taking action when problems are identified
- KU8. The importance of running maintenance and regular cleaning and Maintenance procedures
- KU9. Effects of contamination on products i.e., Machine oil, dirt and different ways of minimizing waste.
- KU10. The common faults with equipment and the method to rectify.

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. Make conscious and sustainable decisions that help reduce, reuse, and recycle the company resources.
- GS2. Identify and replace processes that create unnecessary waste
- GS3. Communicate with others in writing (wherever applicable)
- GS4. Use the accurate terminology
- GS5. Follow manuals/procedures/and compliance policies
- GS6. Update actively with modifications through written print and mail communication (digital)
- GS7. Listen effectively and orally communicate information accurately and Make decisions on a suitable course of action or response.
- GS8. Communicate proactively on critical issues and Follow rule-based decision-making processes
- GS9. Identify situation that need escalation on quality issues and seek intervention
- GS10. Plan and organize your work to achieve targets and deadlines and consult/coordinate for effective delivery.
- GS11. Apply problem-solving approaches in different situations
- GS12. Refer anomalies to the particular personnel
- GS13. Analyze needs, requirements and dependencies in order to meet your work requirements
- GS14. Seek participation of members from Quality, Production, Audit or any other team for effective solutions
- GS15. Provide opinions on work in a detailed and constructive way to the concerned personnel

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Comply with industry, and organizational requirements and greening of job roles</i>	20	10	-	10
PC1. Carry out work functions in accordance with organizational standards, greening solutions, procedures, policies, legislation and regulations.	2	1	-	1
PC2. Apply and follow organizational policies and procedures and inculcate sustainable consumption practices.	2	1	-	1
PC3. Actively get involved in improving the performance of the organization and support adaptation to environmentally friendly processes.	2	1	-	1
PC4. Handle materials, equipment, computer and software safely and correctly to maintain a clean and hazard free working area and support adaptation to more environmentally friendly processes	3	2	-	2
PC5. Carry out running maintenance and/or cleaning within one's responsibility and agreed schedules and deal with work interruptions effectively.	3	1	-	1
PC6. Report unsafe equipment and other dangerous occurrences to concerned personnel.	2	1	-	1
PC7. Use cleaning equipment and methods appropriate for the work to be carried out.	2	1	-	1
PC8. Request for upgrading of system or software when required for effective working and maintain a backup file when working on various design software	2	1	-	1
PC9. All soft copies of design work to be maintained in files as well for future reference	2	1	-	1
NOS Total	20	10	-	10

National Occupational Standards (NOS) Parameters

NOS Code	AMH/N0104
NOS Name	Comply with industry, regulatory and organizational requirements and Greening of Job roles
Sector	Apparel
Sub-Sector	Apparel, Made-Ups & Home Furnishing
Occupation	Sewing, Ironing, Export Operations, Designing, Boutique Operations, Quality Control, Sewing, Laying, Inventory Management, Hand Embroidery
NSQF Level	4
Credits	TBD
Version	5.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

AMH/N0301: Carry out stitching activities using machine or by hand

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities required to stitch components using machines.

Scope

The scope covers the following :

- Prepare for stitching operations
- Stitch components to produce apparels

Elements and Performance Criteria

Prepare for stitching operations

To be competent, the user/individual on the job must be able to:

- PC1. Make sure the work area is free from hazards
- PC2. Follow the instructions on the work ticket/ job card in line with the responsibilities of respective operation
- PC3. Ask questions to obtain more information on tasks when the instructions are unclear
- PC4. Agree and review your work targets given by your supervisor and check for special instructions, if any required
- PC5. Use the correct Patterns and work-aids
- PC6. Check that machine is safe and set up in readiness for use
- PC7. Select the correct component parts and correct fabric grain line for the style being worked on.
- PC8. . Check that the materials to be used as per desired quality and defect free
- PC9. . Ensure the materials used meet the specification matching: -1 within a product.2. between a pair of products where applicable
- PC10.. Carry out test sewing to ensure defect free stitching.
- PC11.. Check needles, and threads regularly
- PC12.. Check if fabric / component is correctly marked and pieces cut as required for operation
- PC13.. Fabric pieces and linings are pinned or sewn together as required.
- PC14.. Report and repair faults in the stitched component
- PC15.. Comply with the company quality standards
- PC16.. Report any damaged in cut panel or fabric to supervisor or quality Checker.
- PC17. . Follow company reporting procedures about defective material and machines which affect work and report risks/ problems likely to affect services to the relevant person promptly and accurately
- PC18.. Sort and do work to assist the next stage of production and minimize the risk of damage
- PC19. . Leave work area safe and secure when work is complete and clean the machine and cover it with machine cover before you leave
- PC20. . Complete forms, records and other documentation as instructed by supervisor or Quality Checker

Stitch components to produce apparels

To be competent, the user/individual on the job must be able to:

- PC21. . Examine the specific operation and stitch the component as directed or required as per approved sample
- PC22. . Carry out the sewing process within the estimated length of time
- PC23. . Set up machine (Apparel Sewing machine) according to manufacturer's instructions and production requirements
- PC24. . Set thread tension as per the thickness of stitching thread and sewing fabric cut panel
- PC25. . Cut the thread appropriately after completion of sewing operation
- PC26. . Thread the needle in the machine and adjust the needle as per the requirements and whenever change in the fabric type
- PC27. . Perform a test sewing run to ensure appropriate stitching
- PC28. . Report defective machines, tools and/or equipment to the responsible person
- PC29. . Report defective machines, tools and/or equipment to the responsible person
- PC30. . Operate machines safely and in accordance with guidelines and use appropriate needle guard
- PC31. . Optimize the correct positioning and layout of materials to ensure a smooth and rapid throughput as directed
- PC32. . Check the equipment prior to making the stitching, including: a) Correct tools b) Correct attachments c) Changing needles d) Changing threads e) Changing awls f) Correct timing
- PC33. . Stitch the correct materials in the right sequence as required by the production specification
- PC34. . Ensure stitched product conforms to shape and size requirement
- PC35. . Ensure stitched products meets specification in terms of labels and trims
- PC36. . Inspect stitched products against specifications or sample provided.
- PC37. . Identify mark and place rejects in the designated locations
- PC38. . Carry out alterations to meet customer requirements
- PC39. . Pass the stitched item to the next stage in the manufacturing process after Self checking
- PC40. . Rectify or repair where stitched items do not meet production specification
- PC41. . Seek feedback from team mates or supervisors and quality checkers on work related performance
- PC42. . Check with in charge /others when any doubts of new product details or construction
- PC43. . Clean and make safe machines after use and cover the machine with machine cover
- PC44. . Carry out basic Autonomous maintenance (Cleaning, Oil Checking, Right Threading, Tightening any loose parts of own machines
- PC45. . Report risks/ problems likely to affect quality of product or specification of product
- PC46. . Carry out Sewing at a rate which maintains workflow and meets production targets

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. The organizations policies and procedures
- KU2. Responsibilities under health, safety and environmental legislation
- KU3. Guidelines for storage and disposal of waste materials

- KU4. Potential hazards associated with the machines and the safety precautions that must be taken
- KU5. Protocol to obtain more information on work related to work tasks
- KU6. Contact person in case of queries on procedure or products and for resolving issues related to defective machines, tools and/or equipment
- KU7. Details of the various job roles and responsibilities
- KU8. Documentation and reporting formats
- KU9. Work on the target and review mechanism with your supervisor
- KU10. Protocol and format for reporting work related or material risks/ problems
- KU11. Method of obtaining/ giving feedback related to performance
- KU12. Importance of team work and harmonious working relationships
- KU13. Fabrics/apparels and garments and types of fabrics/apparels that require stitching by machine stitching
- KU14. Range of techniques most suited to the different types of apparel
- KU15. Different types apparels and their parts
- KU16. Sources of updates on apparels and other related areas
- KU17. Common factors which affect stitching quality
- KU18. Different types of needles and applications on different types of fabric
- KU19. Broken needle procedure
- KU20. Thread thickness, shade and sizes and parts of needles
- KU21. Setting up and adjusting machine controls
- KU22. Procedures to set the SPI stitch Per Inch
- KU23. The importance of machine, needle, foot needle guard and spool checks
- KU24. Adjusting the top and bottom thread tension
- KU25. Attachments used on the M/C for different type of operations.
- KU26. Increase and decrease the pressure foot pressure as applicable
- KU27. Bobbins and its part and procedures to adjust bobbins tension
- KU28. Procedures to use bobbin winder and threading
- KU29. Use treadle
- KU30. The typical faults of stitching machines and methods to rectify them
- KU31. The actions to take in the event of a machine ceasing to function correctly
- KU32. Common hazards in the work area and workplace procedures for correctly
- KU33. The main pieces of equipment needed to stitch the item and their capabilities
- KU34. The characteristics of the materials and how they differ
- KU35. Garment parts (pockets, fronts, backs, collars, cuffs, sleeves, etc.)
- KU36. Assembling different garment parts to make the final product
- KU37. The problems encountered when stitching different types of stitches
- KU38. Different types of sewing defects
- KU39. The sewing machine parts and its application
- KU40. Maintenance, adjustment and replacement of worn parts on the machines required for different types of attachment
- KU41. The manufacturer's instructions for setting up, adjusting and operating the equipment
- KU42. The manufacturers specifications and instructions for maintenance of equipment

KU43. Method of sharing Stitching related information with team members

KU44. Safety precautions to be taken when stitching

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** Write in english/ local language as applicable
- GS2.** Fill up appropriate technical forms, process charts, activity logs in the prescribed format of the company
- GS3.** Read english/ local language as applicable
- GS4.** Read and understand manuals, health and safety instructions, memos, reports, job cards etc
- GS5.** Listen actively to the instructions given by superiors
- GS6.** Communicate effectively with supervisors, managers, etc.
- GS7.** Analyze the defects and the procedure for dealing with it
- GS8.** Take appropriate actions in terms of any deviations from the process
- GS9.** Plan and set the targets along with the supervisors and the co workers
- GS10.** Organize tools and equipments to be used
- GS11.** Plan for placing the different components in an organized manner as directed
- GS12.** Work on set targets to produce requisite batch of stitched components/garments
- GS13.** Ensure all customer needs are assessed and every effort is made to ensure apparels are stitched with good quality
- GS14.** Evaluate and stitch components as per client specifications
- GS15.** Clarify instructions given by the supervisors if any doubts
- GS16.** Identify possible defects with the products
- GS17.** Review the defects and take appropriate actions to rectify them
- GS18.** Review to the authority if problems cannot be rectified
- GS19.** Diagnose common problems in the machine based on visual inspection
- GS20.** Access and control the quality standards of the product as per customer standards
- GS21.** Analyze, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare for stitching operations</i>	11	35.5	-	7
PC1. Make sure the work area is free from hazards	0.5	1	-	0.5
PC2. Follow the instructions on the work ticket/ job card in line with the responsibilities of respective operation	0.5	0.5	-	-
PC3. Ask questions to obtain more information on tasks when the instructions are unclear	-	0.5	-	-
PC4. Agree and review your work targets given by your supervisor and check for special instructions, if any required	-	0.5	-	-
PC5. Use the correct Patterns and work-aids	0.5	2	-	0.5
PC6. Check that machine is safe and set up in readiness for use	0.5	2	-	0.5
PC7. Select the correct component parts and correct fabric grain line for the style being worked on.	1	2	-	0.5
PC8. . Check that the materials to be used as per desired quality and defect free	1	2	-	0.5
PC9. . Ensure the materials used meet the specification matching: -1 within a product.2. between a pair of products where applicable	0.5	2	-	0.5
PC10.. Carry out test sewing to ensure defect free stitching.	-	3	-	0.5
PC11.. Check needles, and threads regularly	0.5	2	-	0.5
PC12.. Check if fabric / component is correctly marked and pieces cut as required for operation	1	2	-	-
PC13.. Fabric pieces and linings are pinned or sewn together as required.	1	2	-	0.5
PC14.. Report and repair faults in the stitched component	1	0.5	-	-
PC15.. Comply with the company quality standards	0.5	2	-	0.5

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC16.. Report any damaged in cut panel or fabric to supervisor or quality Checker.	0.5	0.5	-	0.5
PC17. . Follow company reporting procedures about defective material and machines which affect work and report risks/ problems likely to affect services to the relevant person promptly and accurately	0.5	1	-	-
PC18.. Sort and do work to assist the next stage of production and minimize the risk of damage	0.5	3	-	0.5
PC19. . Leave work area safe and secure when work is complete and clean the machine and cover it with machine cover before you leave	-	5	-	0.5
PC20. . Complete forms, records and other documentation as instructed by supervisor or Quality Checker	1	2	-	0.5
<i>Stitch components to produce apparels</i>	19	64.5	-	8
PC21. . Examine the specific operation and stitch the component as directed or required as per approved sample	1	3	-	0.5
PC22. . Carry out the sewing process within the estimated length of time	0.5	1	-	-
PC23. . Set up machine (Apparel Sewing machine) according to manufacturer's instructions and production requirements	2	2	-	0.5
PC24. . Set thread tension as per the thickness of stitching thread and sewing fabric cut panel	0.5	2	-	0.5
PC25. . Cut the thread appropriately after completion of sewing operation	0.5	0.5	-	-
PC26. . Thread the needle in the machine and adjust the needle as per the requirements and whenever change in the fabric type	0.5	2	-	0.5
PC27. . Perform a test sewing run to ensure appropriate stitching	0.5	2	-	-
PC28. . Report defective machines, tools and/or equipment to the responsible person	0.5	1	-	0.5
PC29. . Report defective machines, tools and/or equipment to the responsible person	-	6	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC30. . Operate machines safely and in accordance with guidelines and use appropriate needle guard	0.5	3	-	-
PC31. . Optimize the correct positioning and layout of materials to ensure a smooth and rapid throughput as directed	2	5	-	0.5
PC32. . Check the equipment prior to making the stitching, including: a) Correct tools b) Correct attachments c) Changing needles d) Changing threads e) Changing awls f) Correct timing	1	10	-	0.5
PC33. . Stitch the correct materials in the right sequence as required by the production specification	1	3	-	0.5
PC34. . Ensure stitched product conforms to shape and size requirement	1	3	-	0.5
PC35. . Ensure stitched products meets specification in terms of labels and trims	1	3	-	0.5
PC36. . Inspect stitched products against specifications or sample provided.	1	3	-	0.5
PC37. . Identify mark and place rejects in the designated locations	1	8	-	0.5
PC38. . Carry out alterations to meet customer requirements	0.5	0.5	-	-
PC39. . Pass the stitched item to the next stage in the manufacturing process after Self checking	0.5	0.5	-	-
PC40. . Rectify or repair where stitched items do not meet production specification	0.5	0.5	-	0.5
PC41. . Seek feedback from team mates or supervisors and quality checkers on work related performance	0.5	0.5	-	-
PC42. . Check with in charge /others when any doubts of new product details or construction	1	0.5	-	0.5
PC43. . Clean and make safe machines after use and cover the machine with machine cover	0.5	0.5	-	0.5
PC44. . Carry out basic Autonomous maintenance (Cleaning, Oil Checking, Right Threading, Tightening any loose parts of own machines	0.5	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC45. . Report risks/ problems likely to affect quality of product or specification of product	0.5	-	-	0.5
PC46. . Carry out Sewing at a rate which maintains workflow and meets production targets	-	2	-	-
NOS Total	30	100	-	15

National Occupational Standards (NOS) Parameters

NOS Code	AMH/N0301
NOS Name	Carry out stitching activities using machine or by hand
Sector	Apparel
Sub-Sector	Apparel, Made-Ups & Home Furnishing
Occupation	Sewing, Sewing
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	30/09/2021
Next Review Date	30/09/2024
NSQC Clearance Date	30/09/2021

AMH/N0302: Contribute to achieve product quality in stitching operations

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities required to monitor the quality of the production while undertaking stitching related activities to ensure products meet specifications

Scope

The scope covers the following :

- Contribute to achieving the product quality in stitching operations

Elements and Performance Criteria

Contribute to achieving the product quality in stitching operations

To be competent, the user/individual on the job must be able to:

- PC1. Identify and use materials required based on the job card/ work ticket
- PC2. Take the necessary action when materials do not conform to company quality standards
- PC3. Report and replace identified faulty materials and component parts which do not meet specification or quality standards
- PC4. Identify defects and rework on them
- PC5. Carry out work safely and at a rate which maintains work flow
- PC6. Report to the responsible person when the work flow of other production areas disrupts work
- PC7. Test, sort, track feed and examine work in progress
- PC8. . Carry out quality checks at specified intervals according to instructions
- PC9. . Apply the allowed tolerances during sewing
- PC10.. Identify faults and take appropriate action for rectification
- PC11.. Make adjustments promptly to return product to specification
- PC12.. Fault-find materials and components for creased, stained, damage and incorrectly made-up component parts
- PC13.. Report faults in other processes to the appropriate person
- PC14.. Maintain the required productivity and quality levels
- PC15.. Maintain documentation as directed by supervisor

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. Safe working practices and organizational procedures
- KU2. The organization's procedures and guidelines
- KU3. Quality systems and sewing processes practiced in the organization
- KU4. Equipment operating procedures / manufacturers instructions
- KU5. Types of problems with quality and how to report them to appropriate people

- KU6. Methods to present any ideas for improvement to line manager
- KU7. The importance of complying with written instructions
- KU8. Limits of personal responsibility
- KU9. Reporting procedure in case of faults in own/ other processes
- KU10. Importance of documentation
- KU11. Different types of faults that are likely to be found and how to put them right
- KU12. Different techniques and methods used to detect faults and rectify the same
- KU13. Consequences of stitching components out of sequence and how to prevent it occurring
- KU14. Types of seams/hems/finish used and purposes they serve
- KU15. Effect of seams/hems not sewn to specifications
- KU16. Types of faults which may occur, how they are identified and methods to deal with it
- KU17. Different types of defects
- KU18. Reasons for keeping stitched items out of contamination
- KU19. The importance of marking and segregating rejects
- KU20. Inspect stitched products against specifications
- KU21. Identify mark and place rejects in the designated locations
- KU22. Carry out alterations to meet customer requirements
- KU23. Appropriate inspection methods that can be used for self checking
- KU24. Acceptable solutions for particular faults
- KU25. The consequences of not rectifying problems
- KU26. The types of adjustments suitable for specific types of faults
- KU27. Own responsibilities at work during production
- KU28. Own quality and production targets and the effect of not meeting these on self and/or the team manufacturers instructions

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. Write in English/ local language as applicable
- GS2. Fill up appropriate technical forms, process charts, activity logs in the prescribed format of the company
- GS3. Read english/ local language as applicable
- GS4. Read and understand manuals, health and safety instructions, memos, reports, job cards etc.
- GS5. Listen actively
- GS6. Communicate effectively with supervisors, managers, etc.
- GS7. Analyze the defects and the procedure for dealing with it
- GS8. Take appropriate actions in terms of any deviations from the process
- GS9. Plan and set the targets along with the supervisors and the co workers
- GS10. Organize tools and equipment to be used
- GS11. Plan for placing the different components in an organized manner on a daily basis
- GS12. Set targets to produce requisite batch of stitched components/garment
- GS13. Ensure all customer needs are assessed and every effort is made to provide satisfactory service

- GS14. Evaluate and stitch components as per client specifications
- GS15. Clarify instructions given by the supervisors.
- GS16. Identify possible defects with the products
- GS17. Review the defects and take appropriate actions to rectify them
- GS18. Report to the authority if problems cannot be rectified
- GS19. Diagnose common problems in the machine based on visual inspection
- GS20. Assess and control the quality standards of the product as per customer standards
- GS21. Analyze , evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Contribute to achieving the product quality in stitching operations</i>	20	75	-	10
PC1. Identify and use materials required based on the job card/ work ticket	1	5	-	1
PC2. Take the necessary action when materials do not conform to company quality standards	1	5	-	0.5
PC3. Report and replace identified faulty materials and component parts which do not meet specification or quality standards	2	5	-	0.5
PC4. Identify defects and rework on them	2	8	-	1
PC5. Carry out work safely and at a rate which maintains work flow	1	5	-	0.5
PC6. Report to the responsible person when the work flow of other production areas disrupts work	1	1	-	0.5
PC7. Test, sort, track feed and examine work in progress	1	5	-	0.5
PC8. . Carry out quality checks at specified intervals according to instructions	2	5	-	0.5
PC9. . Apply the allowed tolerances during sewing	1	2	-	0.5
PC10.. Identify faults and take appropriate action for rectification	2	10	-	1
PC11.. Make adjustments promptly to return product to specification	1	4	-	0.5
PC12.. Fault-find materials and components for creased, stained, damage and incorrectly made-up component parts	1	6	-	1
PC13.. Report faults in other processes to the appropriate person	1	1	-	0.5
PC14.. Maintain the required productivity and quality levels	1	10	-	0.5
PC15.. Maintain documentation as directed by supervisor	2	3	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	20	75	-	10

National Occupational Standards (NOS) Parameters

NOS Code	AMH/N0302
NOS Name	Contribute to achieve product quality in stitching operations
Sector	Apparel
Sub-Sector	Apparel, Made-Ups & Home Furnishing
Occupation	Sewing
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	30/09/2021
Next Review Date	30/09/2024
NSQC Clearance Date	30/09/2021

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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. examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each.
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center 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.

Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to

successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AMH/N0102.Maintain work area, tools and machines	14	49	-	7	70	18
AMH/N0103.Maintain health, safety and secure work place with Gender and PwD Sensitization	22	12	-	6	40	10
AMH/N0104.Comply with industry, regulatory and organizational requirements and Greening of Job roles	20	10	-	10	40	10
AMH/N0301.Carry out stitching activities using machine	30	100	-	15	145	36
AMH/N0302.Contribute to achieve product quality in stitching operations	20	75	-	10	105	26
Total	106	246	-	48	400	100

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.
Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
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Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.

Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an N
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organization specific knowledge that an individual needs in order to perform to the required standard.
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