

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR APPAREL MADE-UPS & HOME FURNISHING SECTOR

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack – Embroidery Machine Operator (Zigzag Machine)

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

SUB-SECTOR: Apparel

OCCUPATION: Machine Embroidery Operation

REFERENCE ID: AMH/Q 0801

ALIGNED TO: NCO-2015 / 8153.0601

Brief Job Description: An Embroidery Machine Operator is responsible for operating the embroidery machine to embroider decorative designs on fabric/garments in the apparel industry. The embroidery machine operator is able to perform different kinds of stitches and decorative work such as running shade work, cording & satin stitch, eyelet work, applique work, shade work and round, cut work and open work, pin stitch & pitch stitch, china embroidery & fancy embroidery.

Personal Attributes: An embroidery machine operator should have good eyesight, eye-hand-leg coordination, motor skills and vision (including near vision, distance vision, colour vision, peripheral vision, depth perception and ability to change focus).

Job Details	Qualifications Pack Code	AMH/Q 0801		
	Job Role	Embroidery Machine Operator (Zigzag Machine)		
	Credits (NSQF)	TBD	Version number	1.0
	Sector	Apparel, Made-Up's and Home Furnishing	Drafted on	08/08/14
	Sub-sector	Apparel	Last reviewed on	02/05/19
	Occupation	MachineEmbroideryOperation	Next review date	02/05/2023
	NSQC Clearance On*	20/07/15		

Job Role	Embroidery Machine Operator (Zigzag Machine)
Role Description	To embroider decorative designs on fabric/garments using embroidery machine
NSQF level	4
Minimum Educational Qualifications	5 th standard, preferably
Maximum Educational Qualifications	N/A
Training (Suggested but not mandatory)	Training in sewing operations
Minimum Job Entry Age	18 years
Experience	Preferably 1-2 years of work experience in stitching & embroidery work
National Occupational Standards (NOS)	Compulsory: <ol style="list-style-type: none"> AMH/N 0801 (Carry out different types of embroidery stitches using an embroidery machine) AMH/N 0802 (Embroider decorative designs using embroidery machine) AMH/N 1003 (Contribute to achieve quality in embroidery work) AMH/N 0102 (Maintain work area, tools & machines) AMH/N 0103 (Maintain health, safety and security at workplace)
Performance Criteria	As described in the relevant OS units

Definitions

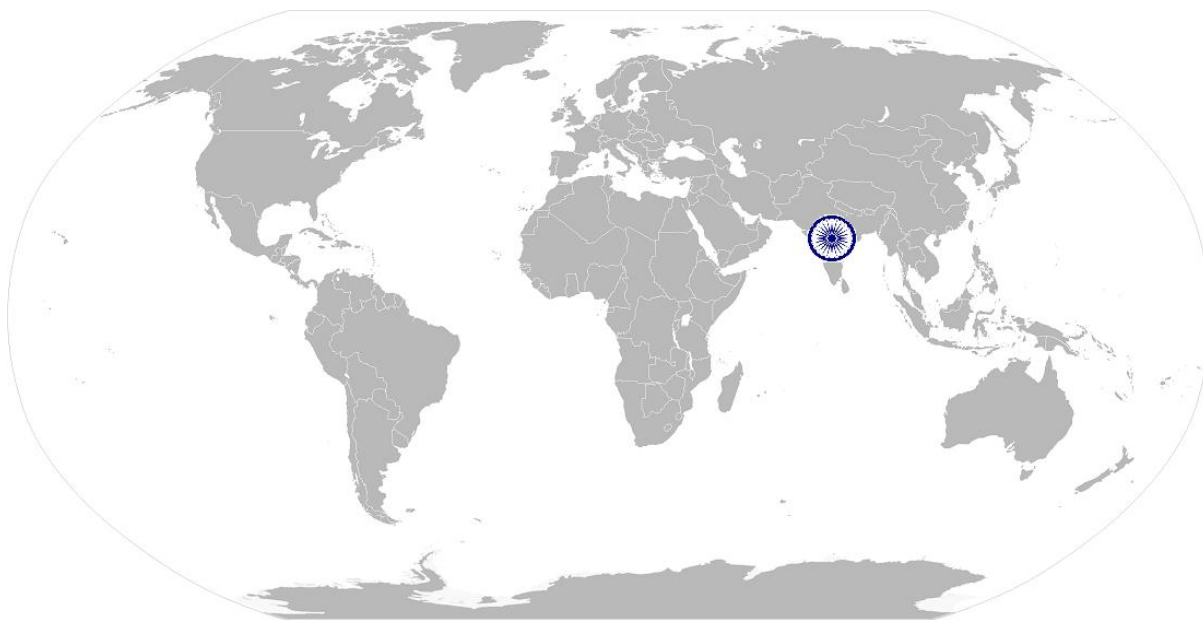
Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Sub-functions	Sub-functions are sub-activities essential to fulfill the achieving the objectives of the function.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
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 they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria 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 Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack (QP)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an OS unit, which can be denoted with either an 'O' or 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 the 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 the quality of performance required.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization 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	Core Skills or Generic Skills are a group of skills that are key to learning and working 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.
Helpdesk	Helpdesk is an entity to which the customers will report their IT problems. IT Service Helpdesk Attendant is responsible for managing the helpdesk.
Keywords /Terms	Description
SSC	Sector Skill Council
OS	Occupational Standard(s)
NOS	National Occupational Standard(s)
QP	Qualifications Pack
UGC	University Grants Commission
MHRD	Ministry of Human Resource Development
MoLE	Ministry of Labor and Employment
NVEQF	National Vocational Education Qualifications Framework
NVQF	National Vocational Qualifications Framework

Acronyms

AMH/N 0801 (Carry out different types of embroidery stitches using an embroidery machine)

National Occupational Standard



Overview

This unit is about carrying out different types of embroidery stitches using an embroidery machine.

AMH/N 0801 (Carry out different types of embroidery stitches using an embroidery machine)

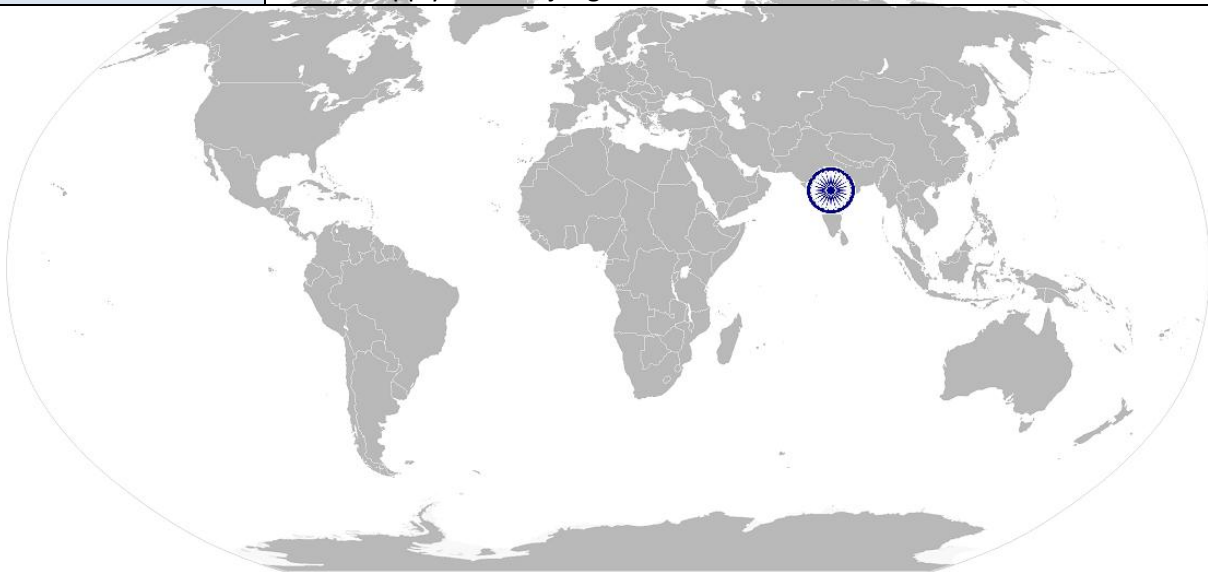
National Occupational Standard	Unit Code	AMH/N0801
	Unit Title (Task)	Carry out different types of embroidery stitches using an embroidery machine
	Description	This unit is about operating the embroidery machine to carry out different types of embroidery stitches on fabric.
	Scope	This unit/task covers the following: <ul style="list-style-type: none"> Prepare for zigzag machine embroidery Carryout different types of embroidery stitches & artwork
	Performance Criteria (PC) w.r.t. the Scope	
	Element	Performance Criteria
	Prepare for ZigZag Machine Embroidery	To be competent, you must be able to: <ul style="list-style-type: none"> PC1. Analyze& interpret the given design which needs to be embroidered & the type of embroidery that is required to be done PC2. Check the materials required for embroidery with the given specifications PC3. Setup the embroidery machine to the suited setting for carrying out the embroidery to be done
	Carry out different Types of Embroidery Stitches & Artwork	<ul style="list-style-type: none"> PC4. Use the embroidery machine to carry out dotted stitch on given fabric / material PC5. Operate the embroidery machine to embroider different designs as per given pattern/art work such as variations of round leafs & pointed leafs PC6. Embroider any given pattern on fabric using the correct thread & materials, using the embroidery machine. PC7. Carry out appliqué work in machine embroidery & its variation PC8. Carry out Dori work in machine embroidery as per given design/art work PC9. Carry out mirror work through machine embroidery as per given design PC10. Execute cut work through machine embroidery as per the given design PC11. Carry out round stitch in machine embroidery PC12. Conform to company quality standards PC13. Check with in charge /others when unsure of new product details PC14. Minimise and dispose the waste materials in the approved manner PC15. Carry out Operations at a rate which maintains workflow PC16. Respond appropriately if the embroidery do not meet product specification & take corrective action
	Knowledge and Understanding (K)	
	A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: <ul style="list-style-type: none"> KA1. your organization's policies, procedures, guidelines and standards for quality KA2. Safe working practices and organisational procedures KA3. Quality systems and other processes practiced in the organization KA4. Types of problems with quality and how to report them to appropriate people KA5. The importance of complying with written instructions KA6. Reporting procedure in case of faults in own/ other processes KA7. who to refer problems to when they are outside the limit of your authority KA8. your organization's tools, templates and processes for embroidery related operations in production

AMH/N 0801 (Carry out different types of embroidery stitches using an embroidery machine)

B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. Different types of embroidery techniques & associated stitch type</p> <p>KB2. Zig-zag machine embroidery</p> <ul style="list-style-type: none"> • Types of thread used in Machine Embroidery • Machine faults & their remedies • Relation Between Thread, Machine needle and Cloth • Care & Maintenance of Embroidery Machine • Quality Control <p>KB3. Required machine setting for different types of embroidery</p> <p>KB4. Colour combination/usage of thread as per the given design</p> <p>KB5. Knowledge of different types of fabrics & other materials and accessories used in embroidery</p> <p>KB6. Technical terms associated with different kinds of embroidery work</p> <p>KB7. The characteristics of the embroidery materials and how they differ</p> <p>KB8. Thread thickness, shade and sizes</p> <p>KB9. Types of needles & their suitability</p> <p>KB10. Different types of trims</p> <p>KB11. Tools & Material requirements for embroidery as per given specifications</p> <p>KB12. Different Types of Embroidery Stitches & Artwork</p> <ul style="list-style-type: none"> • Round Leafs in Different Design • Dotted Stitch • Pointed Leafs in Different Design • Applique work in Machine Embroidery & Its variation • Dori Work in Machine Embroidery • Mirror Work Through Machine Embroidery • Cut Work Through Machine Embroidery • Round Stitch in Machine Embroidery
Skills (S)	
A. Core Skills/ Generic Skills	<p>Writing Skills</p> <p>You need to know and understand how to:</p> <p>SA1. Write in local language</p> <p>Reading Skills</p> <p>You need to know and understand how to:</p> <p>SA2. Read a design specifications sheet</p> <p>SA3. Read art work details for the type of embroidery</p> <p>Oral Communication (Listening and Speaking skills)</p> <p>You need to know and understand how to:</p> <p>SA4. Listen effectively and orally communicate information accurately</p> <p>SA5. Ask for clarification and advice from others</p>
B. Professional Skills	<p>Decision Making</p> <p>You need to know and understand how to:</p> <p>SB1. Follow rule-based decision-making processes</p> <p>SB2. Make decisions on a suitable course of action or response</p> <p>Plan and Organize</p>

AMH/N 0801 (Carry out different types of embroidery stitches using an embroidery machine)

	You need to know and understand how to: SB3. Plan and organize your work to achieve targets and deadlines
	Problem Solving
	You need to know and understand how to: SB4. Apply problem-solving approaches in different situations SB5. Refer anomalies to the supervisor SB6. Seek clarification on problems from others
	Analytical Thinking
	You need to know and understand how to: SB7. Analyze data and activities SB8. Pass on relevant information to others
	Critical Thinking
	You need to know and understand how to: SB9. Provide opinions on work in a detailed and constructive way SB10. Apply balance judgments to different situations



AMH/N 0801 (Carry out different types of embroidery stitches using an embroidery machine)

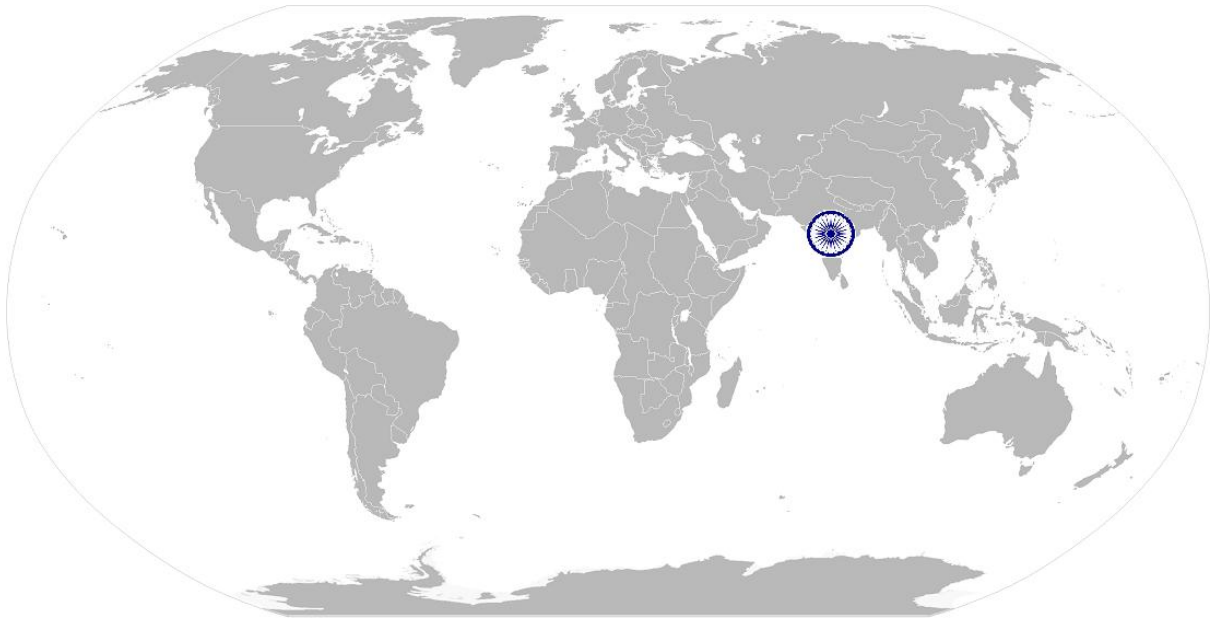
NOS Version Control

NOS Code	AMH/N 0801		
Credits(NSQF)	TBD	Version number	1.0
Industry	Apparel, Made-Up's and Home Furnishing	Drafted on	08/08/14
Industry Sub-sector	Apparel	Last reviewed on	02/05/19
Occupation	Machine Embroidery Operation	Next review date	02/05/2023



AMH/N 0802 Embroider decorative designs using embroidery machine

National Occupational Standard



Overview

This unit is about operating the embroidery machine to embroider decorative design on fabric or a given material as per the design specifications

AMH/N 0802 Embroider decorative designs using embroidery machine

National Occupational Standard	Unit Code	AMH/N 0802
	Unit Title (Task)	Embroider decorative designs using embroidery machine
	Description	This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities required to embroider decorative designs using embroidery machine.
	Scope	This unit/task covers the following: <ol style="list-style-type: none"> 1. Prepare for embroidery related operations 2. Operate the embroidery machine skillfully to achieve the requisite quality of embroidery work
	Performance Criteria (PC) w.r.t. the Scope	
	Element	Performance Criteria
	Prepare for embroidery related operations	<p>To be competent on the job, you must be able to:</p> <p>PC1. Make sure the work area is free from hazards</p> <p>PC2. Follow the instructions & design specifications given for the embroidery to be done</p> <p>PC3. Ask questions to obtain more information on tasks when the instructions you have are unclear</p> <p>PC4. Agree and review your agreed upon work targets with your supervisor and Check for special instructions, if any</p> <p>PC5. Use the correct tools and equipments</p> <p>PC6. Check that equipment is safe and set up in readiness for use</p> <p>PC7. Select the correct component parts/fabric/material for embroidery</p> <p>PC8. Check that the materials to be used are free from faults</p> <p>PC9. Ensure the materials used meet the specification matching</p> <ol style="list-style-type: none"> a. Embroidery Artwork b. Design sample of the embroidered product
	Operate the embroidery machine skillfully to achieve the requisite quality of embroidery work	<p>PC10. Carry out test sews</p> <p>PC11. Check needles and threads regularly</p> <p>PC12. Check if fabric / Component is correctly marked and pieces cut as required</p> <p>PC13. Report faults in the materials</p> <p>PC14. Conform to company quality standards</p> <p>PC15. Report any damaged work to the responsible person</p> <p>PC16. Follow company reporting procedures about defective tools and machines which affect work and report risks/problems likely to affect services to the relevant person promptly and accurately</p> <p>PC17. Leave work area safe and secure when work is complete</p> <p>PC18. Operate embroidery machines safely and in accordance with guidelines</p> <p>PC19. Optimize the positioning and layout of material to ensure as smooth and rapid throughput</p> <p>PC20. Check the equipment prior to making the stitching, including correct controls, correct attachments, correct needle & thread</p> <p>PC21. Ensure the embroidered design conforms to the artwork specifications</p> <p>PC22. Inspect embroidered products against specifications</p> <p>PC23. Perform all embroidery operations with precision & accuracy</p>

AMH/N 0802 Embroider decorative designs using embroidery machine

Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. The organisation's policies and procedures</p> <p>KA2. Responsibilities under health, safety and environmental legislation</p> <p>KA3. Guidelines for storage and disposal of waste materials</p> <p>KA4. Potential hazards associated with the machines and the safety precautions that must be taken</p> <p>KA5. Protocol to obtain more information on work related tasks</p> <p>KA6. Contact person in case of queries on procedure or products and for resolving issues related to defective machines, tools and/or equipment</p> <p>KA7. Details of the job role and responsibilities</p> <p>KA8. Documentation and reporting formats</p> <p>KA9. Work target and review mechanism with your supervisor</p> <p>KA10. Protocol and format for reporting work related risks/ problems</p> <p>KA11. Method of obtaining/ giving feedback related to performance</p> <p>KA12. Importance of teamwork and harmonious working relationships</p> <p>KA13. Process for offering/ obtaining work related assistance</p>
B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. Knowledge of different types of embroidery</p> <p>KB2. Use of design specification sheet & understanding the artwork</p> <p>KB3. Range of techniques most suited to the different types of fabrics/materials</p> <p>KB4. Combination of basic stitches & work styles</p> <p>KB5. Handling & Preparation of Machine Embroidery</p> <p>KB6. Common factors affecting stitching & embroidery</p> <p>KB7. Different types of needles</p> <p>KB8. Broken needle procedure</p> <p>KB9. Thread thickness, shade and sizes and parts of needles</p> <p>KB10. Knowledge about adjusting the top tension</p> <p>KB11. Knowledge of attachments used on the M/C</p> <p>KB12. The action to take in the event of a machine ceasing to function correctly</p> <p>KB13. Common hazards in the work area and workplace procedures for dealing with them</p> <p>KB14. The characteristics of the materials to be embroidered and how they differ</p> <p>KB15. The problems encountered when working on different types of materials</p> <p>KB16. Different types of defects</p> <p>KB17. Knowledge of the embroidery machine parts and its application</p> <p>KB18. Maintenance, adjustment and replacement of worn parts on the machines required for different types of attachment</p>
Skills (S)	
A. Core Skills/ Generic Skills	<p>Writing Skills</p> <p>You need to know and understand how to:</p> <p>SA1. Write the required measurements where applicable</p>

AMH/N 0802 Embroider decorative designs using embroidery machine

	Reading Skills
	You need to know and understand how to: SA2. read instructions, guidelines, procedures and rules SA3. Read and understand techpacks, buyer specifications
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA4. ask for clarification and advice from line managers SA5. communicate orally with colleagues
B. Professional Skills	Decision Making
	NA
	Plan and Organize
	NA
	Customer Centricity
	NA
	Problem Solving
	You need to know and understand how to: SB1. refer anomalies to the line manager SB2. seek clarification on problems from others
	Analytical Thinking
	You need to know and understand how to: SB3. provide relevant information to others SB4. analyze needs, requirements and dependencies in order to meet your work requirements
	Critical Thinking
	NA

AMH/N 0802 Embroider decorative designs using embroidery machine

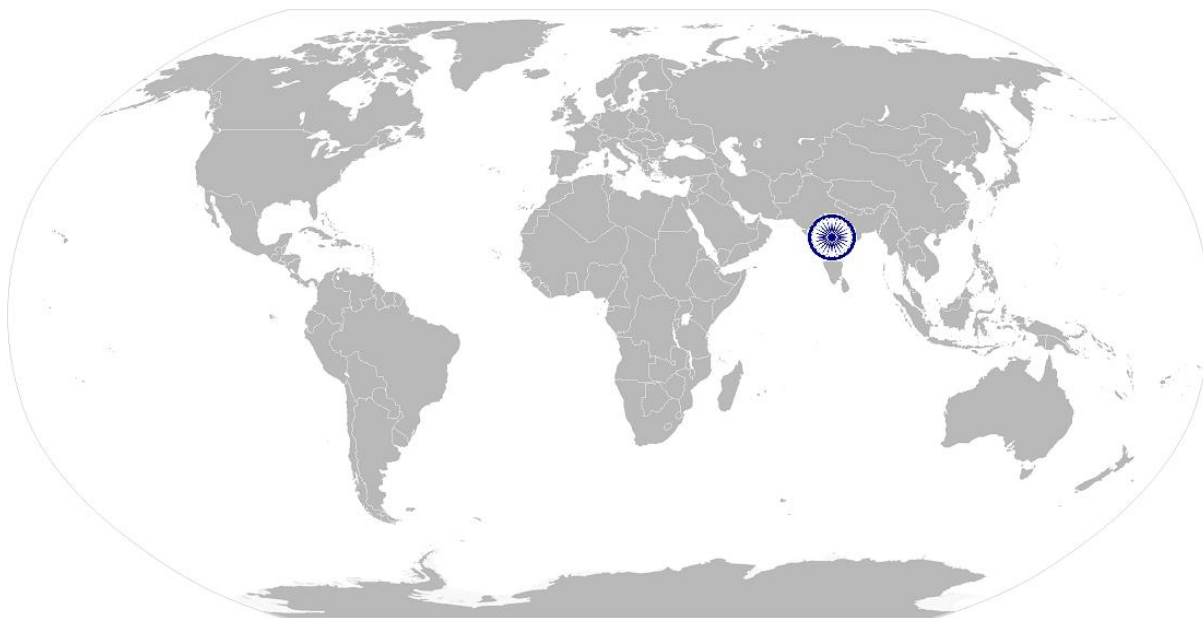
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NOS Code	AMH/N 0802		
Credits(NSQF)	TBD	Version number	1.0
Industry	Apparel, Made-Up's and Home Furnishing	Drafted on	08/08/14
Industry Sub-sector	Apparel	Last reviewed on	02/05/19
Occupation	Machine Embroidery Operation	Next review date	02/05/2023



AMH/N1003 **Contribute to achieve quality in embroidery work**

National Occupational Standard



Overview

This unit provides Performance Criteria, Knowledge & Understanding and Skills & abilities required to ensure the embroidery work meets the quality standards

AMH/N1003 Contribute to achieve quality in embroidery work

Unit Code	AMH/N1003
Unit Title (Task)	Contribute to achieve quality in embroidery work
Description	This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities required to monitor the quality while undertaking embroidery related activities to ensure that the embroidered work meets specifications.
Scope	This unit/task covers the following: 1 Contribute to achieving the quality in machine embroidery related
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Contribute to achieving the product quality in embroidery work	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Identify and use materials required based on the specifications</p> <p>PC2. Take the necessary action when materials do not conform to quality standards</p> <p>PC3. Report and replace identified faulty materials and component parts which do not meet specification</p> <p>PC4. Identify modifiable defects and rework on them</p> <p>PC5. Carry out work safely and at a rate which maintains work flow</p> <p>PC6. Report to the responsible person when the workflow of other production areas disrupts work</p> <p>PC7. Test, sort, track feed and examine work in progress</p> <p>PC8. Carry out quality checks at specified intervals according to instructions</p> <p>PC9. Apply the allowed tolerances</p> <p>PC10. Identify faults and take appropriate action for rectification</p> <p>PC11. Make adjustments promptly to ensure the embroidery work matches the specification</p> <p>PC12. Fault-find materials and components for creased, stained, damage and incorrectly made-up component parts</p> <p>PC13. Report faults in other processes to the appropriate person</p> <p>PC14. Maintain the required productivity and quality levels</p> <p>PC15. Complete and maintain documentation</p>
Knowledge and Understanding (K) w.r.t. the Scope	
Elements	Knowledge and Understanding
A. Organisational Context (Knowledge of the company/organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Safe working practices and organizational procedures</p> <p>KA2. The organisation's procedures and guidelines</p> <p>KA3. Quality systems and machine embroidery processes practiced in the organization</p> <p>KA4. Equipment operating procedures/manufacturer's instructions</p> <p>KA5. Types of problems with quality and how to report them to appropriate people</p> <p>KA6. Methods to present any ideas for improvement to line manager</p> <p>KA7. The importance of complying with written instructions</p> <p>KA8. Limits of personal responsibility</p> <p>KA9. Reporting procedure in case of faults in own/other processes</p>

AMH/N1003 Contribute to achieve quality in embroidery work

B. Technical/ Domain Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Different types of faults that are likely to be found and how to put them right</p> <p>KB2. Different techniques and methods used to detect faults</p> <p>KB3. Consequences of incorrect settings in the embroidery machine</p> <p>KB4. Types of decorative stitches, embroidery styles & techniques</p> <p>KB5. Types of faults which may occur, how they are identified and methods to deal with it</p> <p>KB6. Different types of defects</p> <p>KB7. Reasons for keeping stitched/embroidered items out of contamination</p> <p>KB8. The importance of marking and segregating rejects</p> <p>KB9. Inspect embroidered products against specifications</p> <p>KB10. Identify mark and place rejects in the designated locations</p> <p>KB11. Appropriate inspection methods that can be used</p> <p>KB12. Acceptable solutions for particular faults</p> <p>KB13. The consequences of not rectifying problems</p> <p>KB14. The types of adjustment suitable for specific types of faults</p> <p>KB15. Own responsibilities at work during production</p>
Skills (S) w.r. to the Scope	
Elements	Skills
A. Core Skills/ Generic Skills	<p>Writing Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Write in English/ local language as applicable</p> <p>SA2. Fill up appropriate technical forms, process charts, activity logs in the prescribed format of the company</p> <p>Reading Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA3. Read English/ local language as applicable</p> <p>SA4. Read and understand manuals, health and safety instructions, memos, reports, job cards etc.</p> <p>Oral Communication (Listening and Speaking Skills)</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA5. Listen actively</p> <p>Communicate effectively with supervisors, managers, etc.</p>
B. Professional Skills	<p>Decision Making</p> <p>NA</p> <p>Plan and Organize</p>

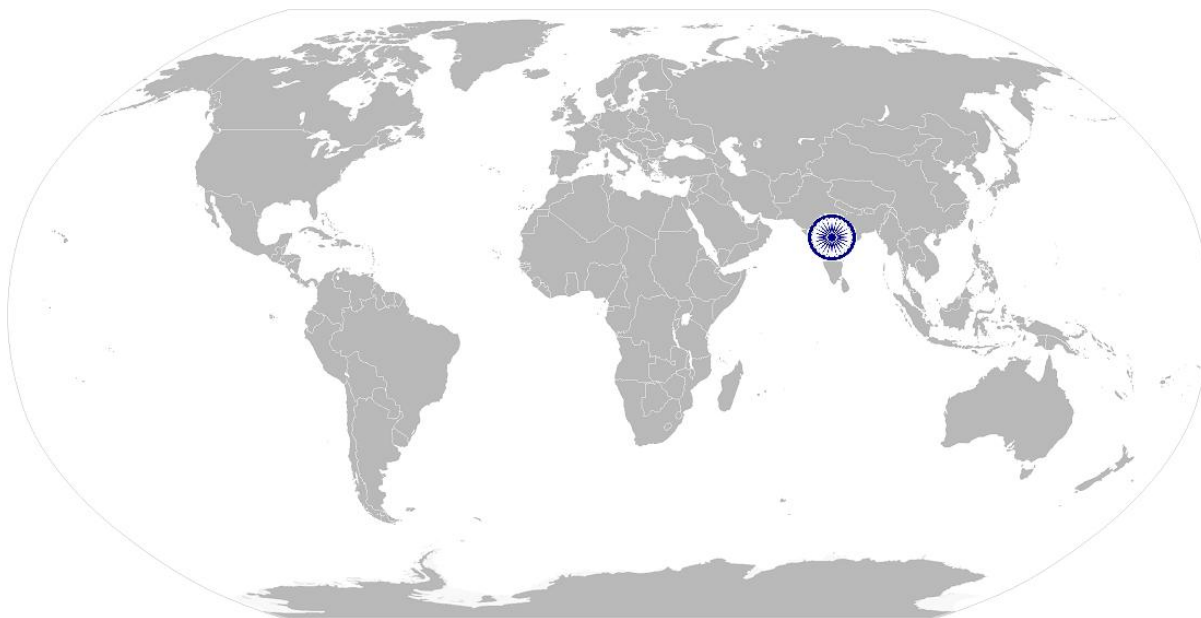
AMH/N1003 Contribute to achieve quality in embroidery work

	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Setup equipment and test it</p> <p>SB2. Setup an efficient workstation</p>
	Customer Centricity
	NA
	Problem Solving
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB3. Use inspection methods appropriate to the work</p>
	Analytical Thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB4. Identify faults, the causes and rectification</p> <p>SB5. Apply the allowed tolerances</p> <p>SB6. Differentiate between correctable and non-correctable faults</p> <p>SB7. Identify equipment maintenance requirements and maintenance procedure</p> <p>SB8. Handling techniques for different materials</p>
	Critical Thinking
	NA

AMH/N1003 Contribute to achieve quality in embroidery work

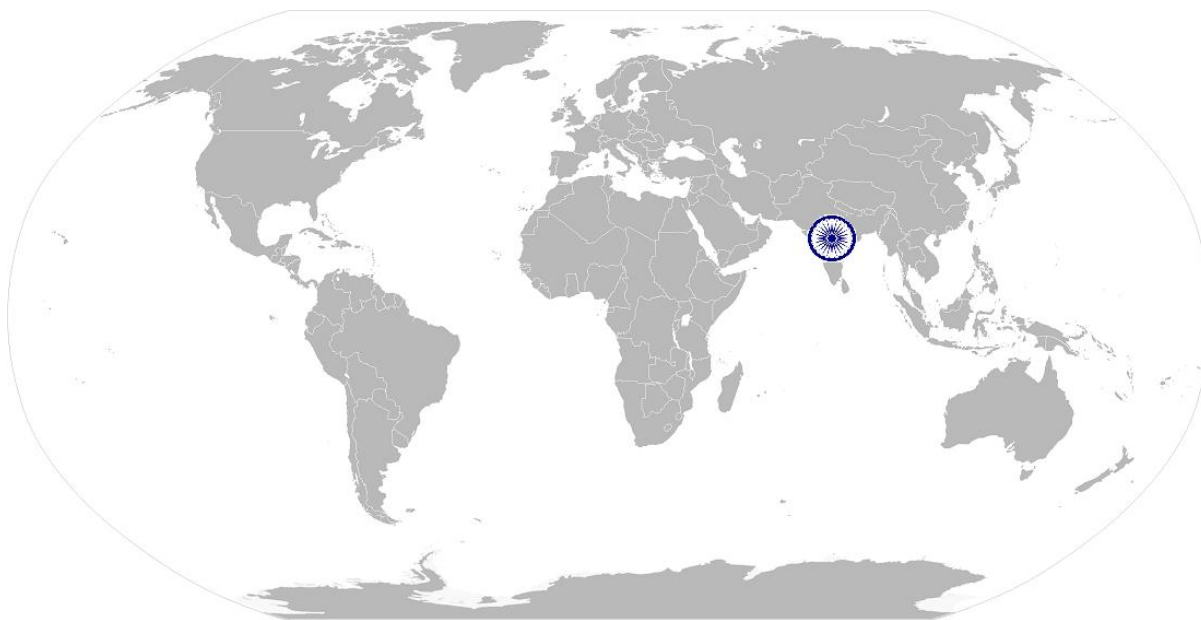
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NOS Code	AMH/N 1003		
Credits (NSQF)	TBD	Version number	1.0
Industry	Apparel, Made-Up's and Home Furnishing	Drafted on	08/08/14
Industry Sub-sector	Apparel	Last reviewed on	02/05/19
Occupation	Machine Embroidery Operation	Next review date	02/05/2023



AMH/N 0102 Maintain work area, tools and machine

National Occupational Standard



Overview

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities required to organise/maintain work areas and activities to ensure tools and machines are maintained as per norms

AMH/N 0102 Maintain work area, tools and machines

National Occupational Standard

Unit Code	AMH/N0102
Unit Title (Task)	Maintain work area, tools and machines
Description	This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities required to organise/maintain work areas and activities to ensure tools and machines are maintained as per norms
Scope	This unit/task covers the following: 1. Maintain the work area, tools and machines
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Maintain the work area, tools and machines	<p>To become competent, the user/individual on the job must be able to:</p> <p>PC1. Handle materials, machinery, equipment and tools safely and correctly</p> <p>PC2. Use correct lifting and handling procedures</p> <p>PC3. Use material to minimize waste</p> <p>PC4. Maintain a clean and hazard-free working area</p> <p>PC5. Maintain tools and equipment</p> <p>PC6. Carry out running maintenance within agreed schedules</p> <p>PC7. Carry out maintenance and/or cleaning within one's responsibility</p> <p>PC8. Report unsafe equipment and other dangerous occurrences</p> <p>PC9. Ensure that the correct machine guards are in place</p> <p>PC10. Work in a comfortable position with the correct posture</p> <p>PC11. Use cleaning equipment and methods appropriate for the work to be carried out</p> <p>PC12. Dispose of waste safely in the designated location</p> <p>PC13. Store cleaning equipment safely after use</p> <p>PC14. Carry out cleaning according to schedules and limits of responsibility</p>
Knowledge and Understanding (K) w.r.t. the Scope	
Elements	Knowledge and Understanding
A. Organisational Context (Knowledge of the company/organisation and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Personal hygiene and duty of care</p> <p>KA2. Safe working practices and organisational procedures</p> <p>KA3. Limits of your own responsibility</p> <p>KA4. Ways of resolving problems within the work area</p> <p>KA5. The production process and the specific work activities that relate to the whole process</p> <p>KA6. The importance of effective communication with colleagues</p> <p>KA7. The lines of communication, authority and reporting procedures</p> <p>KA8. The organisation's rules, codes and guidelines (including time keeping)</p> <p>KA9. The company's quality standards</p> <p>KA10. The importance of complying with written instructions</p> <p>KA11. Equipment operating procedures/manufacturer's instructions</p>

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B. Technical/ Domain Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Work instructions and specifications and interpret them accurately</p> <p>KB2. Method to make use of the information detailed in specifications and instructions</p> <p>KB3. Relation between work role and the overall manufacturing process</p> <p>KB4. The importance of taking action when problems are identified</p> <p>KB5. Different ways of minimising waste</p> <p>KB6. The importance of running maintenance and regular cleaning</p> <p>KB7. Effects of contamination on products i.e. Machine oil, dirt</p> <p>KB8. Common faults with equipment and the method to rectify</p> <p>KB9. Maintenance procedures</p> <p>KB10. Hazards likely to be encountered when conducting routine maintenance</p> <p>KB11. Different types of cleaning equipment and substances and their use</p> <p>KB12. Safe working practices for cleaning and the method of carrying them out</p>
Skills (S) w.r. to the Scope	
Elements	Skills
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to:
	SA1. Write and document appropriate technical forms, job cards, inspection sheets as required format of the company
	Reading Skills
	The user/ individual on the job needs to know and understand how to:
B. Professional	SA2. Read and comprehend the organizational documents pertaining to rules and procedures
	SA3. Read and comprehend basic English to read and interpret indicators in the machine and operating manuals, job cards, visual cards, etc.
	SA4. Read in the local language as applicable
	SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc.
	Oral Communication (Listening and Speaking Skills)
B. Professional	The user/ individual on the job needs to know and understand how to:
	SA6. Positively influence the team members into following procedures
	Decision Making
	On the job the individual needs to be able to:
	SB1. Take appropriate decisions regarding to responsibilities
B. Professional	Plan and Organize
	NA
	Customer Centricity

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	NA
	Problem Solving
	On the job the individual needs to be able to: SB2. Solve operational role related issues
	Analytical Thinking
	NA
	Critical Thinking
	NA

NOS Version Control

NOS Code	AMH/N 0102		
Credits (NSQF)	TBD	Version number	1.0
Industry	Apparel, Made-Up's and Home Furnishing	Drafted on	08/08/14
Industry Sub-sector	Apparel	Last reviewed on	02/05/19
Occupation	Machine Embroidery Operation	Next review date	02/05/2023

National Occupational Standard

Overview

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 minimise risk to self and others.

National Occupational Standard	Unit Code	AMH/N0103
	Unit Title (Task)	Maintain health, safety and security at workplace
	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 minimise risk to self and others.
	Scope	This unit/task covers the following: 1. Comply with health, safety and security requirements at work
	Performance Criteria (PC) w.r.t. the Scope	
	Elements	Performance Criteria
	Comply with health, safety and security requirements at work	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Comply with health and safety related instructions applicable to the workplace</p> <p>PC2. Use and maintain personal protective equipment as per protocol</p> <p>PC3. Carry out own activities in line with approved guide lines and procedures</p> <p>PC4. Maintain a healthy lifestyle and guard against dependency on intoxicants</p> <p>PC5. Follow environment management system related procedures</p> <p>PC6. Identify and correct (if possible) malfunctions in machinery and equipment</p> <p>PC7. Report any service malfunctions that cannot be rectified</p> <p>PC8. Store materials and equipment in line with manufacturer's and organisational requirements</p> <p>PC9. Safely handle and move waste and debris</p> <p>PC10. Minimise health and safety risks to self and others due to own actions</p> <p>PC11. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks</p> <p>PC12. Monitor the workplace and work processes for potential risks and threats</p> <p>PC13. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned</p> <p>PC14. Report hazards and potential risks/ threats to supervisors or other authorized personnel</p> <p>PC15. Participate in mock drills/ evacuation procedures organized at the workplace</p> <p>PC16. Undertake first aid, fire-fighting and emergency response training, if asked to do so</p> <p>PC17. Take action based on instructions in the event of fire, emergencies or accidents</p> <p>PC18. Follow organisation procedures for shutdown and evacuation when required</p>
	Knowledge and Understanding (K) w.r.t. the Scope	
	Elements	Knowledge and Understanding

A. Organisational Context Knowledge of the company / organisation and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Health and safety related practices applicable at the workplace</p> <p>KA2. Potential hazards, risks and threats based on nature of operations</p> <p>KA3. Organizational procedures for safe handling of equipment and machine operations</p> <p>KA4. Potential risks due to own actions and methods to minimize these</p> <p>KA5. Environmental management system related procedures at the workplace</p> <p>KA6. Layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points</p> <p>KA7. Potential accidents and emergencies and response to these scenarios</p> <p>KA8. Reporting protocol and documentation required</p> <p>KA9. Details of personnel trained in first aid, fire-fighting and emergency response</p> <p>KA10. Actions to take in the event of a mock drills/ evacuation procedures or actual accident, emergency or fire</p>
B. Technical / Domain Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Occupational health and safety risks and methods</p> <p>KB2. Personal protective equipment and method of use</p> <p>KB3. Identification, handling and storage of hazardous substances</p> <p>KB4. Proper disposal system for waste and by-products</p> <p>KB5. Signage related to health and safety and their meaning</p> <p>KB6. Importance of sound health, hygiene and good habits</p> <p>KB7. Ill-effects of alcohol, tobacco and drugs</p>
Skills (S) w.r. to the Scope	
Elements	Skills
A. Core Skills/ Generic Skills	<p>Writing Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Document and report any health and safety related incidents/ accidents</p> <p>Reading Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA2. Read and comprehend manuals of operations</p> <p>SA3. Read all organizational and equipment related health and safety manuals and documents</p> <p>Oral Communication (Listening and Speaking Skills)</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA4. Give clear instructions to co-workers, subordinates and other personnel</p> <p>Use correct technical terms while interacting with supervisor</p>
B. Professional Skills	<p>Decision Making</p> <p>NA</p> <p>Plan and Organize</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Keep work area free from potential hazards</p>

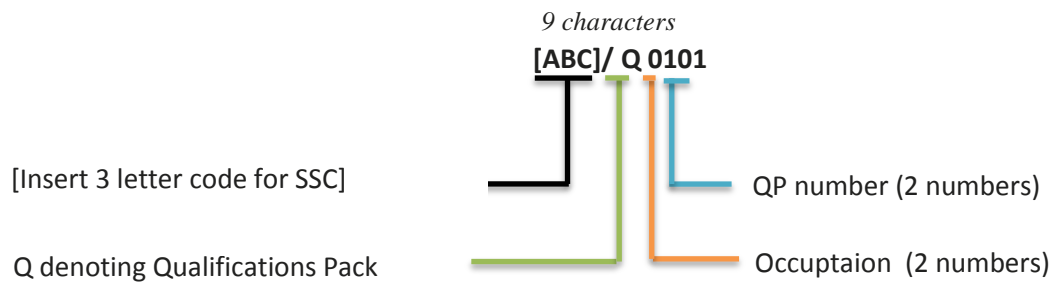
	Customer Centricity
	NA
	Problem Solving
	The user/individual on the job needs to know and understand how to:
	SB2. Raise alarm
	SB3. Safe and correct procedure of handling equipment and machinery
	SB4. Report to supervisors and other authorized personnel for assistance
	Analytical Thinking
	The user/individual on the job needs to know and understand how to:
	SB5. Identify and report service malfunctions and chemical leaks
	Critical Thinking
	NA

NOS Version Control

NOS Code	AMH/N 0103		
Credits (NSQF)	TBD	Version number	1.0
Industry	Apparel, Made-Up's and Home Furnishing	Drafted on	08/08/14
Industry Sub-sector	Apparel	Last reviewed on	02/05/19
Occupation	Machine Embroidery Operation	Next review date	02/05/2023

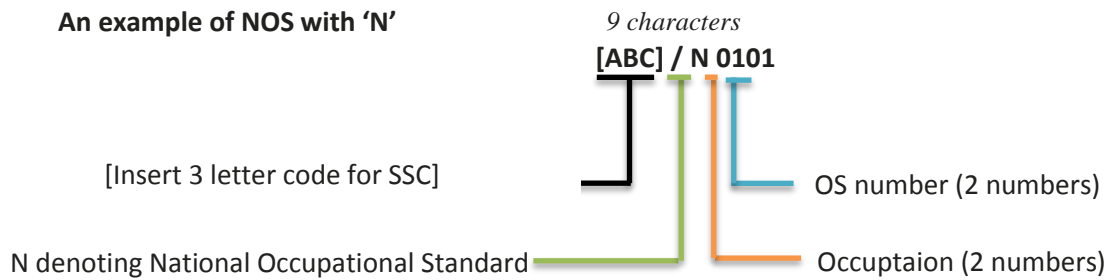
Annexure

Nomenclature for QP and NOS



Occupational Standard

An example of NOS with 'N'



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The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
Apparel	0-40
Made-ups	41-55
Home Furnishing	56-70
Fututue Jobroles	71-89
Generic Job roles	90-99

Sequence	Description	Example
Three letters	Industry name	AMH
Slash	/	/
Next letter	Whether QP or NOS	Q or N
Next two numbers	Occupation code	01
Next two numbers	OS number	01

Criteria For Assessment Of Trainees

Job Role Embroidery Machine Operator (ZigZag Machine)

Qualification Pack AMH/Q0801

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 center (as per assessment criteria below)
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

		Total Marks	Out Of	Marks Allocation		
				Theory	Skills Practical	Viva
1. AMH/N 0801 (Carry out different types of embroidery stitches using an embroidery machine)	PC1. Analyse & interpret the given design which needs to be embroidered & the type of embroidery that is required to be done	90	7	2	3	2
	PC2. Check the materials required for embroidery with the given specifications		5	1	3	1
	PC3. Setup the embroidery machine to the suited setting for carrying out the embroidery to be done		5	1	3	1
	PC4. Use the embroidery machine to carry out dotted stitch on given fabric / material		5	1	3	1
	PC5. Operate the embroidery machine to embroider different designs as per given pattern/art work such as variations of round leafs & pointed leafs		7	2	3	2
	PC6. Embroider any given pattern on fabric using the correct thread & materials, using the embroidery machine.		6	1	3	2
	PC7. Carry out appliqué work in machine		5	1	3	1

	embroidery & its variation					
	PC8. Carry out Dori work in machine embroidery as per given design/art work		5	1	3	1
	PC9. Carry out mirror work through machine embroidery as per given design		5	1	3	1
	PC10. Execute cut work through machine embroidery as per the given design		5	1	3	1
	PC11. Carry out round stitch in machine embroidery		5	1	3	1
	PC12. Conform to company quality standards		7	3	3	1
	PC13. Check with in charge /others when unsure of new product details		6	1	3	2
	PC14. Minimise and dispose the waste materials in the approved manner		5	1	3	1
	PC15. Carry out Operations at a rate which maintains workflow		5	1	3	1
	PC16. Respond appropriately if the embroidery do not meet product specification & take corrective action		7	2	3	2
	Total		90	21	48	21
2. AMH/N0802 (Embroider decorative designs using embroidery machine)	PC1. Make sure the work area is free from hazards		5	1	3	1
	PC2. Follow the instructions & design specifications given for the embroidery to be done		5	3	1	1
	PC3. Ask questions to obtain more information on tasks when the instructions you have are unclear		3	1	1	1
	PC4. Agree and review your agreed upon work targets with your supervisor and check for special instructions, if any		4	1	2	1
	PC5. Use the correct tools and equipment's		5	1	3	1
	PC6. Check that equipment is safe and set up in readiness for use		4	1	2	1
	PC7. Select the correct component parts/fabric/material for embroidery	100	6	1	3	2
	PC8. Check that the materials to be used are free from faults		4	1	2	1
	PC9. Ensure the materials used meet the specification matching a. Embroidery Artwork b. Design sample of the embroidered product		4	2	1	1
	PC10. Carry out test sews		4	1	2	1
	PC11. Check needles and threads regularly		4	1	2	1
	PC12. Check if fabric / Component is correctly marked and pieces cut as required		5	1	3	1
	PC13. Report faults in the materials		4	1	2	1
	PC14. Conform to company quality standards		4	1	2	1
	PC15. Report any damaged work to the responsible		4	1	2	1

	person					
	PC16. Follow company reporting procedures about defective tools and machines which affect work and report risks/ problems likely to affect services to the relevant person promptly and accurately		3	1	1	1
	PC17. Leave work area safe and secure when work is complete		4	1	2	1
	PC18. Operate embroidery machines safely and in accordance with guidelines		6	1	3	2
	PC19. Optimize the positioning and layout of materials to ensure a smooth and rapid throughput		5	3	1	1
	PC20. Check the equipment prior to making the stitching, including correct controls, correct attachments, correct needle & thread		4	1	2	1
	PC21. Ensure the embroidered design conforms to the artwork specifications		4	1	2	1
	PC22. Inspect embroider products against specifications		4	1	2	1
	PC23. Perform all embroidery operations with precision & accuracy		5	1	3	1
	Total		100	28	47	25
3. AMH/N1003 (Contribute to achieve quality in embroidery work)	PC1. Identify and use materials required based on the specifications	100	10	5	2	3
	PC2. Take the necessary action when materials do not conform to quality standards		5	3	1	1
	PC3. Report and replace identified faulty materials and component parts which do not meet specification		6	1	2	3
	PC4. Identify modifiable defects and rework on them		5	1	3	1
	PC5. Carry out work safely and at a rate which maintains work flow		10	2	5	3
	PC6. Report to the responsible person when the work flow of other production areas disrupts work		5	2	2	1
	PC7. Test, sort, track feed and examine work in progress		6	1	4	1
	PC8. Carry out quality checks at specified intervals according to instructions		6	1	4	1
	PC9. Apply the allowed tolerances		6	1	4	1
	PC10. Identify faults and take appropriate action for rectification		6	1	4	1
	PC11. Make adjustments promptly to ensure the embroidery work matches the specification		5	1	3	1
	PC12. Fault-find materials and components for creased, stained, damage and incorrectly made-up component parts		10	7	2	1

	PC13. Report faults in other processes to the appropriate person		5	1	3	1
	PC14. Maintain the required productivity and quality levels		5	1	3	1
	PC15. Complete and maintain documentation		10	5	2	3
	Total		100	33	44	23
4.AMH/N0102(Maintain work area, tools and machines)	PC1. Handle materials, machinery, equipment and tools safely and correctly	50	4	1	2	1
	PC2. Use correct lifting and handling procedures		3	1	1	1
	PC3. Use materials to minimize waste		4	1	2	1
	PC4. Maintain a clean and hazard free working area		4	1	2	1
	PC5. Maintain tools and equipment		4	1	2	1
	PC6. Carry out running maintenance within agreed schedules		4	1	2	1
	PC7. Carry out maintenance and/or cleaning within one's responsibility		4	2	1	1
	PC8. Report unsafe equipment and other dangerous occurrences		4	2	1	1
	PC9. Ensure that the correct machine guards are in place		3	1	1	1
	PC10. Work in a comfortable position with the correct posture		4	2	1	1
	PC11. Use cleaning equipment and methods appropriate for the work to be carried out		3	1	1	1
	PC12. Dispose of waste safely in the designated location		3	1	1	1
	PC13. Store cleaning equipment safely after use		3	1	1	1
	PC14. Carry out cleaning according to schedules and limits of responsibility		3	1	1	1
	Total		50	17	19	14
5. AMH/N0103 (Maintain health, safety and security at workplace)	PC1. Comply with health and safety related instructions applicable to the workplace	60	3	1	1	1
	PC2. Use and maintain personal protective equipment as per protocol		3	1	1	1
	PC3. Carry out own activities in line with approved guidelines and procedures		4	1.5	2	0.5
	PC4. Maintain a healthy lifestyle and guard against dependency on intoxicants		4	2	1	1
	PC5. Follow environment management system related procedures		3	1.5	1	0.5
	PC6. Identify and correct (if possible) malfunctions in machinery and equipment		4	2	1	1
	PC7. Report any service malfunctions that cannot be rectified		3	1	1	1

	PC8. Store materials and equipment in line with manufacturer's and organisational requirements		3	1	1	1
	PC9. Safely handle and move waste and debris		4	1	2	1
	PC10. Minimize health and safety risks to self and others due to own actions		3	1	1	1
	PC11. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks		4	1	2	1
	PC12. Monitor the workplace and work processes for potential risks and threats		3	1	1	1
	PC13. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned		3	1	1	1
	PC14. Report hazards and potential risks/ threats to supervisors or other authorized personnel		3	1	1	1
	PC15. Participate in mock drills/ evacuation procedures organized at the workplace		3	1	1	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		3	1	1	1
	PC18. Follow organisation procedures for shutdown and evacuation when required		3	1	1	1
	Total		60	21	22	17
Grand Total			400	120	180	100