



COMPETENCY STANDARD
FOR
Leather Sewing Machine Operations
(Leather and Leather Goods Sector)

Level: 02

Competency Standard Code: I03S001L2V1

National Skills Development Authority
Prime Minister's Office, Bangladesh

NSDA

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Introduction

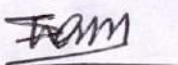
The National Skills Development Authority (NSDA) aims to enhance an individual's employability by certifying competiveness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skill ecosystem and delivery mechanism through a combination of well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training programmes. "**Leather Sewing Machine Operations**" is selected as one of the priority occupations of **Leather and Leather Goods** Sector. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

Generally a competency standard informs curriculum, learning materials, assessment and certification of students enrolled in TVET. Students who successfully pass the assessment will receive a qualification in the National Technical and Vocational Qualification Framework (NTVQF) and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

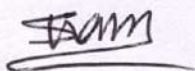
The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding Elements.



**Competency Standards for National Skill Certificate – II in
Leather Sewing Machine Operations in Leather and Leather Goods Sector**

NTVQF with Job Classifications

NTVQF LEVELS	EDUCATION SECTORS			Job Classification
	Pre-Vocation Education	Vocational Education	Technical Education	
NTVQF 6			Diploma in engineering or equivalent	Middle Level Manager / Sub Assistant Engr. etc.
NTVQF 5		National Skill Certificate 5 (NSC 5)		Highly Skilled Worker / Supervisor
NTVQF 4		National Skill Certificate 4 (NSC 4)		Skilled Worker
NTVQF 3		National Skill Certificate 3 (NSC 3)		Semi-Skilled Worker
NTVQF 2		National Skill Certificate 2 (NSC 2)		Basic Skilled Worker
NTVQF 1		National Skill Certificate 1 (NSC 1)		Basic Worker
Pre-Voc 2	National Pre-Vocation Certificate 2 (NPVC 2)			Pre-Vocation Trainee
Pre-Voc 1	National Pre-Vocation Certificate 1 (NPVC 1)			Pre-Vocation Trainee



NTVQF Level Descriptors

NTVQF Level	Knowledge	Skill	Responsibility	Job Class.
6	<ul style="list-style-type: none"> Comprehensive actual and theoretical knowledge within a specific study area with an awareness of the limits of that knowledge 	<ul style="list-style-type: none"> Specialised and restricted range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems 	<ul style="list-style-type: none"> Manage a team or teams in workplace activities where there is unpredictable change Identify and design learning programs to develop performance of team members 	Supervisor / Middle Level Manager / Sub Assistant Engr. etc.
5	<ul style="list-style-type: none"> Very broad knowledge of the underlying, concepts, principles, and processes in a specific study area 	<ul style="list-style-type: none"> Very broad range of cognitive and practical skills required to generate solutions to specific problems in one or more study areas. 	<ul style="list-style-type: none"> Take overall responsibility for completion of tasks in work or study Apply past experiences in solving similar problems 	Highly Skilled Worker / Supervisor
4	<ul style="list-style-type: none"> Broad knowledge of the underlying, concepts, principles, and processes in a specific study area 	<ul style="list-style-type: none"> Range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information 	<ul style="list-style-type: none"> Take responsibility, within reason, for completion of tasks in work or study Apply past experiences in solving similar problems 	Skilled Worker
3	<ul style="list-style-type: none"> Moderately broad knowledge in a specific study area. 	<ul style="list-style-type: none"> Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools 	<ul style="list-style-type: none"> Work or study under supervision with some autonomy 	Semi-Skilled Worker
2	<ul style="list-style-type: none"> Basic underpinning knowledge in a specific study area. 	<ul style="list-style-type: none"> Basic skills required to carry out simple tasks 	<ul style="list-style-type: none"> Work or study under indirect supervision in a structured context 	Basic Skilled Worker
1	<ul style="list-style-type: none"> Elementary understanding of the underpinning knowledge in a specific study area. 	<ul style="list-style-type: none"> Limited range of skills required to carry out simple tasks 	<ul style="list-style-type: none"> Work or study under direct supervision in a structured context 	Basic Worker
Pre-Voc 2	<ul style="list-style-type: none"> Limited general knowledge 	<ul style="list-style-type: none"> Very limited range of skills and use of tools required to carry out simple tasks 	<ul style="list-style-type: none"> Work or study under direct supervision in a well-defined, structured context. 	Pre-Vocation Trainee
Pre-Voc 1	<ul style="list-style-type: none"> Extremely limited general knowledge 	<ul style="list-style-type: none"> Minimal range of skills required to carry out simple tasks 	<ul style="list-style-type: none"> Simple work or study exercises, under direct supervision in a clear, well defined structured context 	Pre-Vocation Trainee

Overview

A **Competency Standard** is a written specification of the knowledge, skills and attitudes required for the performance of a job or occupation or trade corresponding to the standard of performance required in the workplace.

Competency Standard:

- Provides a consistent and reliable set of components for training, recognizing and assessing people's skills, and may also have optional support materials.
- Enables industry recognized qualifications to be awarded through direct assessment of workplace competencies
- Encourages the development and delivery of flexible training which suits individual and industry requirements
- Encourages learning and assessment in a work-related environment which leads to verifiable workplace outcomes.

Competency Standards are developed by a working group who comprised national and international process experts and the participation of experts from the industry to identify the competencies required of an occupation in a particular sector.

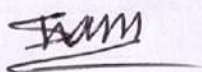
Competency Standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. Competency standards acknowledge that people can achieve vocational and technical competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With Competency Standards, training and assessment may be conducted at the workplace, at training organization, during regular work, or through work experience, work simulation or any combination of these.

Competency standards consist of numbers of unit of competencies. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of Competence are documented in a standard format that comprises:

- Reference to Industry Sector, Occupational Title and Occupational Description
- Unit Title
- Unit Code

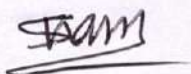


- Unit Descriptor
- Nominal Hours
- Elements and Performance Criteria
- Variables and Range Statement
- Evidence Guides

Together all the parts of a unit of competency:

- Describe a task
- Guide the assessor in determining whether the candidate is competent.

Identification and validation of units of competency and elements for this occupation were made by experts of this sector. A series of meetings were held to accurately capture Industry and Employer needs and develop the competency framework that would help to enhance the employability of the youth trained. The process started on 30 Dec 2017 and concluded with a validation workshop with working group on 01st Feb 2017.

A handwritten signature in black ink, appearing to be 'JAM', with a horizontal line underneath it.

List of Abbreviations

General

NSDA - National Skills Development Authority

CS – Competency Standard

ILO – International Labor Organization

ISC – Industry Skills Council

NPVC – National Pre-Vocation Certificate

NTVQF – National Technical and Vocational Qualifications Framework

SCVC – Standards and Curriculum Validation Committee

TVET – Technical Vocational Education and Training

UoC – Unit of Competency

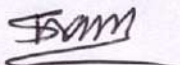
Occupation Specific Abbreviations

MSDS – Material Safety Data Sheet

OSH – Occupational Safety and Health

PPE – Personal Protective Equipment

SOP – Standard Operating Procedures



Approval of Competency Standard

Members of the Approval Committee:

Member	Signature
Md. Faruque Hossain Executive Chairman (Secretary) National Skills Development Authority (NSDA)	
Pijush Kanti Nath Additional Secretary Member (Admin & Finance) National Skills Development Authority (NSDA)	 12.01.20
Mohammad Rezaul Karim Additional Secretary Member (Skills Standard & Certification) National Skills Development Authority (NSDA)	 12.01.2020
Md. Abdur Razzaque Joint Secretary Member (Planning & Research) National Skills Development Authority (NSDA)	 12.01.2020



Md. Faruque Hossain
Executive Chairman (Secretary)
National Skills Development Authority (NSDA)

Date: 12.01.2020



Competency Standards for National Skill Certificate - II in Leather Sewing Machine Operations in Leather and Leather Goods Sector.

Course Structure

SL	Unit Code and Title		UoC Level	Nominal Duration (Hours)
The Generic Competencies				65
1.	GCU01L1V1	Perform Computations Using Basic Mathematical Concepts	1	30
2.	GCU03L1V1	Operate in a Team Environment	1	20
3.	GCU05L3V1	Carryout Workplace Interaction in English	2	15
The Sector Specific Competencies				50
1.	SSU01I03L1V1	Apply Occupational Health and Safety (OSH) in the Workplace	2	20
2.	SSU02I03L1V1	Work in the Leather, Footwear and Leather Goods Industries	2	30
The Occupation Specific Competencies				245
1.	OSU01I03L2V1	Interpret Sewing Operation	2	20
2.	OSU02I03L2V1	Identify Sewing Machine and their Parts	2	20
3.	OSU03I03L2V1	Perform Sewing on Practice Sheets	2	55
4.	OSU04I03L2V1	Perform Sewing on Leather using Flatbed Sewing Machine	2	70
5.	OSU05I03L2V1	Perform Sewing on Leather using Post Bed / Cylinder Bed Sewing Machines	2	80
Total Nominal Learning Hours				360

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Units and elements

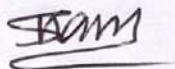
The Generic Competencies

Unit Code	Unit of Competency	Elements of Competency	Duration (Hours)
GCU01L1V1	Perform Computations Using Basic Mathematical Concepts	<ol style="list-style-type: none"> 1. Identify calculation requirements in the workplace 2. Select appropriate mathematical methods / concepts for the calculation 	30
GCU03L1V1	Operate in a Team Environment	<ol style="list-style-type: none"> 1. Use tools and instruments to perform calculations 2. Identify team goals and work processes 3. Identify own roles and responsibilities within team 4. Communicate and cooperate with team members 5. Practice problem solving within the team 	20
GCU05L3V1	Carryout Workplace Interaction in English	<ol style="list-style-type: none"> 1. Interpret workplace communication and etiquette 2. Read and understand workplace documents 3. Participate in workplace meetings and discussions 4. Practice professional ethics at workplace 	15
Total Hours			65

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The Sector Specific Competencies

Code	Unit of competency	Elements of competency	Duration (hours)
SSU01I03L1V1	Apply Occupational Health and Safety (OSH) in the Workplace	<ol style="list-style-type: none"> 1. Identify OSH policies and procedures 2. Apply personal health and safety practices 3. Report hazards and risks 4. Response to emergency situations 	20
SSU02I03L1V1	Work in the Leather, Footwear and Leather Goods Industries	<ol style="list-style-type: none"> 1. Identify positions, job roles and responsibilities 2. Identify materials used in leather, footwear and leather goods industries 3. Explain the workflow of making footwear and leather goods 	30
Total Hours			50



The Occupation Specific Competencies

Code	Unit of Competency	Elements of competency	Duration (hours)
OSU01I03L2V1	Interpret Sewing Operation	<ol style="list-style-type: none"> 1. Interpret basic concepts of sewing operation 2. Identify needle specification and thread number 	20
OSU02I03L2V1	Identify Sewing Machine and their Parts	<ol style="list-style-type: none"> 1. Interpret types of sewing machine 2. Identify basic parts of sewing machine 3. Identify tools and equipment for sewing machine 	20
OSU03I03L2V1	Perform Sewing on Practice Sheets	<ol style="list-style-type: none"> 1. Follow OSH practice 2. Check machine setup 3. Prepare work station for sewing 4. Practice sewing on practice sheets 5. Maintain broken needles 6. Maintain workplace cleanliness 	55
OSU04I03L2V1	Perform Sewing on Leather using Flatbed Sewing Machine	<ol style="list-style-type: none"> 1. Follow OSH practice 2. Carryout sewing on leather using flatbed sewing machine 3. Maintain workplace cleanliness 	70
OSU05I03L2V1	Perform Sewing on Leather Using Post Bed / Cylinder Bed Sewing Machine	<ol style="list-style-type: none"> 1. Follow OSH practice 2. Carryout sewing on leather using post bed / cylinder bed sewing machine 3. Perform basic maintenance of sewing machine 4. Maintain workplace cleanliness 	80
Total Hours			245

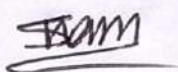
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The Generic Competencies

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**National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency**

Unit code and Title	GCU01L1V1: Perform Computations Using Basic Mathematical Concepts
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform computations using basic mathematical concepts. It specifically includes identifying calculation requirements in the workplace, selecting appropriate mathematical methods / concepts for calculation, and using tools and instruments to perform calculations .
Nominal Hours	30 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Identify calculation requirements in the workplace	1.1 <u>Calculation requirements</u> are identified from <u>workplace information</u> . 1.2 Mathematical problems are constructed from workplace information.
2. Select appropriate mathematical methods / concepts for the calculation	2.1 <u>Appropriate method</u> is selected to carry out calculation requirements. 2.2 Constructed mathematical problems are solved with appropriate method.
3. Use tools and instruments to perform calculations	3.1 <u>Tools and instrument</u> required for computation are identified. 3.2 Calculation is performed using appropriate tools and instruments accurately.
Range of Variables	
Variable	Range (may include but not limited to):
1. Calculation requirements	1.1 Unit / Persons 1.2 Area 1.3 Height / Length / Breadth / Thickness 1.4 Diameter 1.5 Weight / Mass 1.6 Capacity 1.7 Time



	<ul style="list-style-type: none"> 1.8 Temperature 1.9 Material usage 1.10 Speed 1.11 Data usage 1.12 Costing 1.13 Density
2. Workplace information	<ul style="list-style-type: none"> 2.1 Workplace / Floor Plan 2.2 Design 2.3 Working chart / drawing 2.4 Verbal instructions 2.5 Job order
3. Appropriate method	<ul style="list-style-type: none"> 3.1 Addition 3.2 Subtraction 3.3 Division 3.4 Multiplication 3.5 Conversion
4. Tools and instrument	<ul style="list-style-type: none"> 4.1 Calculator 4.2 Cell phone 4.3 Computer

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.

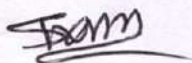
1. Critical aspects of competency	<ul style="list-style-type: none"> 1.1 Identified calculation requirements from workplace information. 1.2 Selected appropriate method to carry out the calculation requirements. 1.3 Completed calculations using appropriate tools and instruments.
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1 Numerical concept. 2.2 Basic mathematical methods such as addition, subtraction, multiplication, division and percentage. 2.3 Mathematical language, symbols and terminology. 2.4 Measuring units. 2.5 Use of computer applications for computing.
3. Underpinning skills	<ul style="list-style-type: none"> 3.1 Constructing simple problems with workplace information. 3.2 Solving problems using appropriate method and instrument.

FORM

4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere & honest to duties 4.4 Tidiness & timeliness 4.5 Eagerness to learn 4.6 Environmental concerns 4.7 Respect to peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implication	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

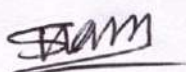
Accreditation Requirements

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.



**National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency**

Unit code and Title	GCU03L1V1: Operate in a Team Environment
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to operate in a team environment. It specifically includes identifying team goals and work processes, identifying own role and responsibilities within team, communicate and co-operating with team members and practicing problem solving within the team.
Nominal Hours	20 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Identify team goals and work processes	1.1 Roles and objectives of the team are identified and interpreted. 1.2 Roles and responsibilities of team members are identified and interpreted.
2. Identify own role and responsibilities within team	2.1 Individual role and responsibilities of <u>team members</u> are identified within the team environment. 2.2 Reporting relationships are interpreted within team and external to team.
3. Communicate and co-operate with team members	3.1 Communication channels are followed. 3.2 Effective forms of communication are used to interact with team members. 3.3 Other teammates' tasks are identified and support provided when requested. 3.4 The team is encouraged through <u>sharing information</u> or expertise, working together to solve problems, and putting team success first. 3.5 Views and opinions of other team members are interpreted and respected.



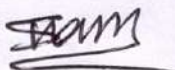
4. Practice problem solving within the team	<p>4.1 Problems faced at the individual and team level are identified and showed insight into the root-causes of problems.</p> <p>4.2 Range of solutions and courses of action are identified together with benefits, costs, and risks associated with each.</p> <p>4.3 Good ideas of others to help develop solutions are recognised and advice sought from those who have solved similar problems.</p> <p>4.4 Recommendations for improving team work are put forward.</p>
Range of Variables	
Variable	Range (may include but not limited to):
1. Team members	<p>1.1 Coach / members</p> <p>1.2 Supervisor / manager</p> <p>1.3 Peers / colleagues</p> <p>1.4 Employee representative</p>
2. Sharing information	<p>2.1 Agenda</p> <p>2.2 Minutes</p> <p>2.3 Progress and incident reports</p> <p>2.4 Operational manuals</p> <p>2.5 Visual and graphic materials</p> <p>2.6 Emails and SMS</p> <p>2.7 Phone directory</p> <p>2.8 Policy, procedure and standards</p> <p>2.9 Occupational Health and Safety (OSH) information</p>
<p>Evidence Guide</p> <p>The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.</p>	
1. Critical aspects of competency	<p>1.1 Identified own role and responsibility within team.</p> <p>1.2 Communicated and cooperated with team members.</p> <p>1.3 Demonstrated problem solving within the team.</p>
2. Underpinning knowledge	<p>2.1 Team goals and work process.</p> <p>2.2 Roles and responsibilities.</p> <p>2.3 Finding problems and solving them.</p>

TEAM

3. Underpinning skills	3.1 Identifying own role and responsibility within team. 3.2 Communicating and cooperating with team members. 3.3 Demonstrating problem solving within the team.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors at workplace 4.8 Communication with peers and seniors at workplace
5. Resource implication	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Relevant materials and equipment 5.3 Relevant specifications or work instructions
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after Completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

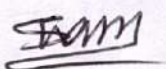
Accreditation Requirements

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**National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency**

Unit code and Title	GCU05L3V1: Carryout Workplace Interaction in English
Unit Descriptor	This unit covers the knowledge, skills and attitude required to carry out workplace interaction. It specifically includes interpreting workplace communication and etiquette, reading and understanding workplace documents, participating in workplace meetings and discussions and practicing professional ethics at workplace.
Nominal Hours	15 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Interpret workplace communication and etiquette	<p>1.1 Workplace code of conducts are interpreted as per organizational guidelines.</p> <p>1.2 Appropriate lines of communication are maintained with supervisors and colleagues.</p> <p>1.3 Workplace interactions are conducted in a <u>courteous manner</u> to gather and convey information.</p> <p>1.4 Questions about routine <u>workplace procedures and matters</u> are asked and responded as required.</p>
2. Read and understand workplace documents	<p>2.1 Workplace documents are interpreted as per standard.</p> <p>2.2 Assistance is taken to aid comprehension when required from peers / supervisors.</p> <p>2.3 Visual information / symbols / signage's are understood and followed.</p> <p>2.4 Specific and relevant information are accessed from <u>appropriate sources.</u></p> <p>2.5 Appropriate medium is used to transfer information and ideas.</p>
3. Participate in workplace meetings and discussions	<p>3.1 Team meetings are attended on time and meeting procedures and etiquette are followed.</p> <p>3.2 Own opinions are expressed and others opinions are listened without interruption.</p> <p>3.3 Inputs are provided consistent with meeting purpose</p>



	and meeting outcomes are implemented.
4. Practice professional ethics at workplace	<p>4.1 Responsibilities as a team member are demonstrated and kept promises and commitments made to others.</p> <p>4.2 Tasks are performed in accordance with workplace procedures.</p> <p>4.3 Confidentiality is respected and maintained.</p> <p>4.4 Situations and actions considered inappropriate or which present a conflict of interest are avoided.</p>

Range of Variables

Variable	Range (may include but not limited to):
1. Courteous manner	<p>1.1 Effective questioning</p> <p>1.2 Active listening</p> <p>1.3 Speaking skills</p>
2. Workplace procedures and matters	<p>2.1 Notes</p> <p>2.2 Agenda</p> <p>2.3 Simple reports</p> <p style="padding-left: 20px;">2.3.1 Progress report</p> <p style="padding-left: 20px;">2.3.2 Incident report</p> <p>2.4 Job sheets</p> <p>2.5 Operational manuals</p> <p>2.6 Brochures and promotional material</p> <p>2.7 Visual and graphic materials</p> <p>2.8 Standards</p> <p>2.9 OSH information</p> <p>2.10 Signs</p>
3. Appropriate sources	<p>3.1 HR Department</p> <p>3.2 Managers</p> <p>3.3 Supervisors</p>

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.

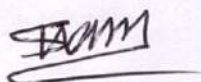
1. Critical aspects of competency	<p>1.1 Maintained workplace communication and etiquette.</p> <p>1.2 Followed workplace instructions and symbols.</p> <p>1.3 Followed team meetings procedures.</p>
2. Underpinning knowledge	<p>2.1 Workplace communication and etiquette.</p> <p>2.2 Workplace documents, signs and symbols.</p> <p>2.3 Meeting procedure and etiquette.</p>

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3. Underpinning skills	3.1 Interpreting workplace communication and etiquette. 3.2 Following workplace instructions and symbols. 3.3 Following workplace meeting procedures.
4. Underpinning attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors at workplace 4.8 Communication with peers and seniors at workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Materials relevant to the proposed activity 5.3 All tools, equipment, material and documentation required. 5.4 Relevant specifications or work instructions
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after Completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

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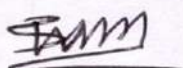


The Sector Specific Competencies

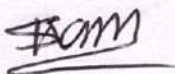
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**National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency**

Unit code and Title	SSU01I03L1V1: Apply Occupational Health and Safety (OSH) in the Workplace
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to apply occupational health and safety (OSH) in the workplace. Its specifically includes identifying OSH policies and procedures, applying personal health and safety practices, reporting hazards and risks and responding to emergencies.
Nominal Hours	20 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Identify OSH policies and procedures	<p>1.1 <u>Occupational Health and Safety (OSH) policies</u> and safe operating procedures are interpreted.</p> <p>1.2 Safety signs and symbols are identified and followed.</p> <p>1.3 Response, evacuation procedures and other contingency measures are interpreted as per standards.</p>
2. Apply personal health and safety practices	<p>2.1 Occupational Health and Safety (OSH) policies and procedures are applied in the workplace.</p> <p>2.2 Common health issues are recognised.</p> <p>2.3 Common safety issues are identified.</p>
3. Report hazards and risks	<p>3.1 Hazards and risks are identified.</p> <p>3.2 Hazards and risks assessment and controls are interpreted.</p> <p>3.3 Hazards and incidents in the workplace are reported to appropriate personnel according to workplace procedures.</p>



4. Respond to emergency situations	<p>4.1 Alarms and warning devices are identified.</p> <p>4.2 <u>Emergency response plans and procedures</u> are comprehended.</p> <p>4.3 <u>First aid procedures</u> during emergency situations are recalled.</p> <p>4.4 Appropriate responses in an emergency situation are followed.</p>
Range of Variables	
Variable	Range (may include but not limited to):
1. Occupational Health and Safety (OSH) policies	<p>1.1 Organisational OSH policies</p> <p>1.2 International OSH requirements</p> <p>1.3 Fire safety rules and regulations</p>
2. Emergency response plans and procedures	<p>2.1 Firefighting procedures</p> <p>2.2 Earthquake response procedures</p> <p>2.3 Emergency response plans and procedures</p> <p>2.4 Medical and first aid</p>
3. First aid procedure	<p>3.1 Washing of open wound</p> <p>3.2 Washing chemically infected area</p> <p>3.3 Applying bandage</p> <p>3.4 Taking appropriate medicine</p>
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.	
1. Critical aspects of competency	<p>1.1 Identified OSH policies and procedures.</p> <p>1.2 Applied personal health and safety practices (including PPE).</p> <p>1.3 Reported hazards and risks.</p> <p>1.4 Responded to emergencies.</p>
2. Underpinning knowledge	<p>2.1 Workplace OSH policies and procedures.</p> <p>2.2 Work safety procedures.</p> <p>2.3 Emergency response procedures:</p> <p style="padding-left: 20px;">2.3.1 Firefighting</p> <p style="padding-left: 20px;">2.3.2 Earthquake response</p> <p style="padding-left: 20px;">2.3.3 Accident response</p> <p>2.4 Types of hazards (biological, chemical and physical) and their effects.</p>



	<p>2.5 OSH awareness.</p> <p>2.6 Personal Protective Equipment (PPE).</p>
3. Underpinning skills	<p>3.1 Identifying OSH policies and procedures.</p> <p>3.2 Applying personal health and safety practices.</p> <p>3.3 Reporting hazards and risks.</p> <p>3.4 Responding to emergencies.</p>
4. Underpinning attitude	<p>4.1 Commitment to occupational health and safety</p> <p>4.2 Promptness in carrying out activities</p> <p>4.3 Sincere and honest to duties</p> <p>4.4 Eagerness to learn</p> <p>4.5 Tidiness and timeliness</p> <p>4.6 Environmental concerns</p> <p>4.7 Respect for rights of peers and seniors in workplace</p> <p>4.8 Communication with peers and seniors in workplace</p>
5. Resource implications	<p>The following resources must be provided:</p> <p>5.1 Workplace (actual or simulated).</p> <p>5.2 Firefighting equipment.</p> <p>5.3 Emergency response manual.</p> <p>5.4 First aid kits.</p> <p>5.5 Stationary & Learning manual.</p>
6. Methods of assessment	<p>Methods of assessment may include but not limited to:</p> <p>6.1 Written test</p> <p>6.2 Demonstration</p> <p>6.3 Oral questioning</p> <p>6.4 Portfolio</p>
7. Context of assessment	<p>7.1 Competency assessment must be done in a training centre or in an actual or simulated work place after Completion of the training module.</p> <p>7.2 Assessment should be done by NSDA certified assessor.</p>

Accreditation Requirements

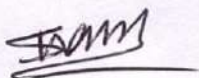
Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

**National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency**

Unit code and Title	SSU02I03L1V1: Work in the Leather, Footwear and Leather Goods Industries
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to work in the leather, footwear and leather goods industries. It specifically includes identifying positions, job roles and responsibilities, identifying materials used in leather and leather goods industries and explaining workflow of making footwear and leather goods.
Nominal Hours	30 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Identify positions, job roles and responsibilities	1.1 Positions, job roles and responsibilities in the leather, footwear and leather goods industries are identified. 1.2 Positions and job roles are differentiated clearly with key responsibilities.
2. Identify materials used in leather, footwear and leather goods industries	2.1 <u>Raw materials used in the leather industries</u> are identified. 2.2 <u>Materials used in the footwear industries</u> are identified. 2.3 <u>Materials used in the leather goods industries</u> are identified.
3. Explain workflow of making footwear and leather goods	3.1 <u>Workflow of footwear making</u> is identified and recognized. 3.2 <u>Workflow of leather goods making</u> is identified and recognized.
Range of Variables	
Variables	Range (may include but not limited to):

BAM

1. Raw materials used in leather industries	<ul style="list-style-type: none"> 1.1 Cow hides 1.2 Buffalo hides 1.3 Goat skins 1.4 Sheep skins
2. Materials used in footwear industries	<ul style="list-style-type: none"> 2.1 Upper materials 2.2 Lining materials 2.3 Interlining materials 2.4 Reinforcement materials 2.5 Threads 2.6 Accessories 2.7 Adhesives 2.8 Insole materials 2.9 Soling materials
3. Materials used in leather goods industries	<ul style="list-style-type: none"> 3.1 Upper materials 3.2 Lining materials 3.3 Interlining materials 3.4 Reinforcement materials 3.5 Accessories 3.6 Adhesives 3.7 Threads
4. Workflow of footwear making	<ul style="list-style-type: none"> 4.1 Designing 4.2 Pattern making 4.3 Cutting 4.4 Preparation and setting 4.5 Sewing / upper closing 4.6 Lasting and making 4.7 Shoe finishing 4.8 Quality control 4.9 Packaging
5. Workflow of leather goods making	<ul style="list-style-type: none"> 5.1 Designing 5.2 Pattern making 5.3 Cutting 5.4 Setting and assembling 5.5 Finishing 5.6 Quality control 5.7 Packaging

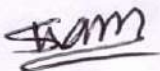


Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Identified raw materials used in leather industries. 1.2 Identified materials used in leather goods industries. 1.3 Identified materials used in footwear industries.
2. Underpinning knowledge	2.1 Job roles and responsibilities. 2.2 Raw materials used in leather industries. 2.3 Materials used in footwear industries. 2.4 Materials used in leather goods industries.
3. Underpinning skills	3.1 Interpreting job roles and responsibilities. 3.2 Identifying raw materials used in leather industries. 3.3 Identifying materials used in footwear industries. 3.4 Identifying materials used in leather goods industries. 3.5 Recognizing workflow of footwear and leather goods making.
4. Underpinning attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials and consumables to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio

7. Context of assessment	7.1 Competency assessment must be done in a training Centre or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.
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Accreditation Requirements

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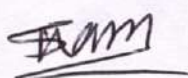


The Occupation Specific Competencies

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National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency

Unit code and Title	OSU01I03L2V1 Interpret Sewing Operation
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to interpret sewing operation. It specifically includes interpreting basic concepts of sewing operation, and identifying needle specification and thread number.
Nominal Hours	20 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Interpret basic concepts of sewing operation	1.1 <u>Basic sewing operations</u> are interpreted. 1.2 <u>Purpose of sewing is interpreted.</u> 1.3 Sewing and <u>type of stitch</u> formation are stated.
2. Identify needle specification and thread number	2.1 <u>Needle specification</u> is interpreted. 2.2 Needle is selected and changed as per specification. 2.3 <u>Thread number</u> is selected. 2.4 Threading is performed according to machine requirement.
Range of Variables	
Variables	Range (may include but not limited to):
1. Basic sewing operations	1.1 Stitch marking 1.2 Machine setting 1.3 Threading 1.4 Sewing 1.5 Quality checking
2. Purpose of sewing	2.1 Joining 2.2 Reinforcing 2.3 Decorating
3. Type of stitch	3.1 Lock stitch 3.2 Chain stitch



4. Needle specification	4.1 Needle system 4.2 Needle size / number 4.3 Needle point
5. Thread number	5.1 Higher the number, finer the thread 5.2 Lower the number, thicker the thread
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Performed selection and changing of needle. 1.2 Performed threading of sewing machine.
2. Underpinning knowledge	2.1 Basic sewing machine operation 2.2 Purpose of sewing 2.3 Type of stitch 2.4 Needle specification 2.5 Thread number
3. Underpinning skills	3.1 Interpreting basic sewing operation. 3.2 Interpreting needle specification and thread numbering. 3.3 Performing selection and changing of needle. 3.4 Performing threading of sewing machine.
4. Underpinning attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.

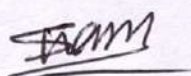
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6. Methods of assessment	<p>Methods of assessment may include but not limited to:</p> <p>6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio</p>
7. Context of assessment	<p>7.1 Competency assessment must be done in a training centre or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.</p>
<p>Accreditation Requirements Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

WAM

**National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency**

Unit code and Title	OSU02I03L2V1: Identify Sewing Machine and their Parts
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to identify sewing machines and their parts. It specifically includes interpreting types of sewing machines, identifying basic parts of sewing machine and identifying tools and equipment for sewing machine.
Nominal Hours	20 Hours
Elements of Competency	Performance Criteria <u>Bold & underlined</u> terms are elaborated in the Range of Variables
1. Interpret types of sewing machine	1.1 <u>Types of sewing machine</u> are stated. 1.2 Functions and uses of sewing machine are interpreted.
2. Identify basic parts of sewing machine	2.1 <u>Machine parts</u> are identified. 2.2 Functions of machine parts are interpreted. 2.3 Machine parts are checked for operation. 2.4 <u>Parts of needle</u> and their functions are interpreted.
3. Identify tools and equipment for sewing machine	3.1 <u>Tools and equipment</u> in sewing machine operations are listed. 3.2 Unsafe or faulty tools and equipment are identified and marked for repair according to designated procedures before, during and after use.
Range of Variables	
Variables	Range (may include but not limited to):
1. Types of sewing machines	1.1 Flatbed sewing machine (Single/Double needle) 1.2 Post bed sewing machine (Single/Double needle) 1.3 Cylinder bed sewing machine 1.4 Zigzag sewing machine 1.5 Strobel sewing machine 1.6 Computerized sewing machine



2. Machine parts	<ul style="list-style-type: none"> 2.1 On/Off switch 2.2 Spool pin 2.3 Thread guide 2.4 Tension disc 2.5 Take up lever 2.6 Needle bar 2.7 Bobbin case 2.8 Hook shutter 2.9 Back stitch / lock stitch 2.10 Presser foot and/or pressure wheel 2.11 Presser foot lifter 2.12 Stitch regulator 2.13 Bobbin winder 2.14 Fly wheel / Balance wheel 2.15 Clutch 2.16 Slide plate 2.17 Needle plate or Throat plate 2.18 Feed dog 2.19 Face plate 2.20 Spool pin for bobbin winding 2.21 Motor 2.22 Pulley guard
3. Parts of needle	<ul style="list-style-type: none"> 3.1 Butt 3.2 Shank 3.3 Shoulder 3.4 Blade 3.5 Long groove 3.6 Short groove 3.7 Needle eye 3.8 Scarf / clearance cut 3.9 Point 3.10 Tip
4. Tools and equipment	<ul style="list-style-type: none"> 4.1 Trimmers 4.2 Cutters 4.3 Screw drivers 4.4 Allen key 4.5 Scissors 4.6 Ruler 4.7 Hammer

Sum

Evidence Guide

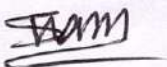
The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.

1. Critical aspects of competency	1.1 Checked and identified machine parts for operation. 1.2 Identified parts of needle. 1.3 Identified unsafe or faulty tools and equipment.
2. Underpinning knowledge	2.1 Sewing machines and their uses. 2.2 Functions of sewing machine parts. 2.3 Parts of needle and their functions. 2.4 Tools and equipment.
3. Underpinning skills	3.1 Identifying sewing machine parts. 3.2 Checking machine parts. 3.3 Identifying parts of needle. 3.4 Identifying unsafe or faulty tools and equipment.
4. Underpinning attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training centre or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NADA certified assessor.

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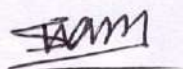
Accreditation Requirements

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**National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency**

Unit code and Title	OSU03I03L2V1 Perform Sewing on Practice Sheets
Unit Descriptor	This unit covers knowledge, skills and attitudes required to perform sewing on practice sheets. It specifically includes following OSH practice, checking machine setup preparing work for sewing, practicing sewing on practice sheets, maintaining broken needles and maintaining workplace cleanliness.
Nominal Hours	55 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Follow OSH practice	1.1 <u>Personal Protective Equipment (PPE)</u> is used. 1.2 Occupational Health and Safety (OSH) is followed.
2. Check machine setup	2.1 Machine is lubricated and cleaned. 2.2 <u>Safety guards</u> and machine parts are checked. 2.3 <u>Needle point</u> are selected according to requirements of materials and seam appearance. 2.4 <u>Threads</u> are selected as per job requirement. 2.5 Thread tension, stitch length and stitch density are checked and set as per job specification.
3. Prepare workstation for sewing	3.1 Machine table and seating posture is set. 3.2 Optimum lighting on the work table is ensured. 3.3 Work bundles are received and checked.
4. Practice sewing on practice sheets	4.1 Machine operations are controlled as per standard. 4.2 <u>Sewing on practice sheets</u> without thread is practiced. 4.3 Sewing on practice sheets with thread is carried out. 4.4 Accuracy of perforation on stitching line is maintained.

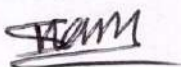


5. Maintain broken needles	<p>5.1 Broken parts of needle are collected.</p> <p>5.2 Broken parts are put together to match and returned to store as per job requirements.</p> <p>5.3 New needle is collected from store.</p>
6. Maintain workplace cleanliness	<p>6.1 Workplace cleanliness is carried out and maintained as per workplace standards.</p> <p>6.2 Waste is disposed of according to company regulations.</p> <p>6.3 Tools and materials are restored in the safe place.</p>
Range of Variables	
Variables	Range (may include but not limited to):
1. Personal Protective Equipment (PPE)	<p>1.1 Apron</p> <p>1.2 Needle guard</p> <p>1.3 Goggles / Eye protector</p> <p>1.4 Hair band</p> <p>1.5 Ear guard</p> <p>1.6 Mask</p>
2. Safety guards	<p>2.1 Motor guard</p> <p>2.2 Eye guard</p> <p>2.3 Belt / pulley guard</p> <p>2.4 Needle guard</p>
3. Needle point	<p>3.1 Round point</p> <p>3.2 Cutting point</p> <p>3.3 SD1 point</p>
4. Threads	<p>4.1 Nylon</p> <p>4.2 Cotton</p> <p>4.3 Polyester</p>
5. Sewing on practice sheets	<p>5.1 Straight lines on paper sheet</p> <p>5.2 Circular lines on paper sheet</p> <p>5.3 Curved lines on paper sheet</p> <p>5.4 Angular lines on paper sheet</p> <p>5.5 Complex lines on paper sheet</p>
6. Workplace cleanliness	<p>6.1 Physical cleanliness</p> <p>6.2 Mechanical cleanliness</p> <p>6.3 Environmental cleanliness</p>

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.

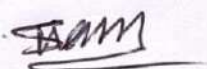
1. Critical aspects of competency	<ul style="list-style-type: none">1.1 Lubricated and cleaned machine.1.2 Controlled machine during operated.1.3 Performed sewing operation on practice sheet with sewing machines.
2. Underpinning knowledge	<ul style="list-style-type: none">2.1 Machine lubrication and cleaning.2.2 Needle and thread selection.2.3 Thread tension, stitch length and stitch density.2.4 Machine operating controls.
3. Underpinning skills	<ul style="list-style-type: none">3.1 Lubricating and cleaning of machine.3.2 Controlling machine operation.3.3 Carrying out sewing on practice sheets without or with threads.
4. Underpinning attitude	<ul style="list-style-type: none">4.1 Commitment to occupational health and safety4.2 Promptness in carrying out activities4.3 Sincere and honest to duties4.4 Eagerness to learn4.5 Tidiness and timeliness4.6 Environmental concerns4.7 Respect for rights of peers and seniors in workplace4.8 Communication with peers and seniors in workplace
5. Resource implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none">5.1 Workplace (simulated or actual).5.2 Tools, equipment and physical facilities appropriate to perform activities.5.3 Materials consumable to perform activities.
6. Methods of assessment	<p>Methods of assessment may include but not limited to:</p> <ul style="list-style-type: none">6.1 Written test6.2 Demonstration6.3 Oral Questioning6.4 Portfolio



7. Context of assessment	7.1 Competency assessment must be done in a training centre or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.
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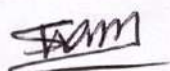
Accreditation Requirements

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**National Technical and Vocational Qualifications Framework for Bangladesh
Unit of Competency**

Unit code and Title	OSU04I03L2V1 Perform Sewing on Leather using Flatbed Sewing Machine
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform sewing on leather using flatbed sewing machine. It specifically includes following OSH practice, carryout sewing on leather using flatbed sewing machine and maintaining workplace cleanliness.
Nominal Hours	70 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Follow OSH practice	1.1 <u>Personal Protective Equipment (PPE)</u> is used. 1.2 Occupational Health and Safety (OSH) is followed.
2. Carryout sewing on leather using flatbed sewing machine	2.1 Leather components are collected. 2.2 Thread tension, stitch length and stitch density are adjusted as per specifications using dummy piece of leather. 2.3 Leather components are sewed following <u>sewing procedures.</u> 2.4 <u>Faults</u> are identified and rectified.
3. Maintain workplace cleanliness	3.1 <u>Workplace cleanliness</u> is carried out and maintained as per workplace standards. 3.2 Waste is disposed of according to company regulations. 3.3 Tools and materials restored in the safe place.
Range of Variables	
Variables	Range (may include but not limited to):
1. Personal Protective Equipment (PPE)	1.1 Apron 1.2 Needle guard 1.3 Goggles / Eye protector 1.4 Hair band 1.5 Ear guard



	1.6 Mask
2. Sewing procedures	<ul style="list-style-type: none"> 2.1 Choosing right thread for both needle and bobbin 2.2 Selecting the appropriate needle bar in right position 2.3 Refilling bobbin with selected thread 2.4 Placing bobbin in bobbin case and taking out thread from the slots 2.5 Threading the needle as per machine requirement 2.6 Setting stitch length and stitch density 2.7 Setting pressure of the roller and pressure foot 2.8 Pressing the knee press to lift the pressure foot 2.9 Adjusting sewing guide 2.10 Sewing a waste piece to check before actual sewing 2.11 Placing the piece to be stitched in proper position on the machine 2.12 Matching and checking the stitched piece with the sample
3. Faults	<ul style="list-style-type: none"> 3.1 Puckered seam 3.2 Uneven stitch 3.3 Floating stitch 3.4 Broken stitch 3.5 Skipped stitch 3.6 Broken needle
4. Workplace cleanliness	<ul style="list-style-type: none"> 4.1 Physical cleanliness 4.2 Mechanical cleanliness 4.3 Environmental cleanliness
<p>Evidence Guide</p> <p>The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.</p>	
1. Critical aspects of competency	<ul style="list-style-type: none"> 1.1 Adjusted thread tension stitch length and stitch density. 1.2 Performed sewing of leather components using flatbed sewing machine. 1.3 Identified and explained faults.
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1 Thread tension, stitch length and stitch density. 2.2 Sewing instruction. 2.3 Faults identification. 2.4 Workplace cleanliness.

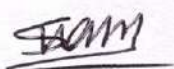
TEAM

3. Underpinning skills	<p>3.1 Adjusting thread tension, stitch length and stitch density</p> <p>3.2 Performing sewing of leather components using flatbed sewing machine</p> <p>3.3 Identifying and explaining faults</p> <p>3.4 Maintaining workplace cleanliness</p>
4. Underpinning attitude	<p>4.1 Commitment to occupational health and safety</p> <p>4.2 Promptness in carrying out activities</p> <p>4.3 Sincere and honest to duties</p> <p>4.4 Eagerness to learn</p> <p>4.5 Tidiness and timeliness</p> <p>4.6 Environmental concerns</p> <p>4.7 Respect for rights of peers and seniors in workplace</p> <p>4.8 Communication with peers and seniors in workplace</p>
5. Resource implications	<p>The following resources must be provided:</p> <p>5.1 Workplace (actual or simulated)</p> <p>5.2 Physical facilities appropriate to perform activities</p> <p>5.3 Materials consumable to perform activities</p>
6. Methods of assessment	<p>Methods of assessment may include but not limited to:</p> <p>6.1 Demonstration</p> <p>6.2 Oral questioning</p> <p>6.3 Written test</p> <p>6.4 Portfolio</p>
7. Context of assessment	<p>7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.</p> <p>7.2 Assessment should be done by NSDA certified assessor.</p>

Accreditation Requirements

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

National Technical and Vocational Qualifications Framework for Bangladesh Unit of Competency



Unit code and Title	OSU05I03L2V1: Perform Sewing on Leather using Post Bed / Cylinder Bed Sewing Machine
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform sewing on leather using post bed / cylinder bed sewing machine operations. It specifically includes following OSH practice, carryout sewing on leather using post bed / cylinder bed sewing machine, performing basic maintenance of sewing machine and maintaining workplace cleanliness.
Nominal Hours	80 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Follow OSH practice	1.1 <u>Personal Protective Equipment (PPE)</u> is used. 1.2 Occupational Health and Safety (OSH) is followed.
2. Carryout sewing on leather using post bed / cylinder bed sewing machine	2.1 Leather components are collected. 2.2 Thread tension, stitch length and stitch density are adjusted as per specifications using dummy piece of leather. 2.3 Leather components are sewed following <u>sewing procedure.</u> 2.4 <u>Faults</u> are identified and rectified.
3. Perform basic maintenance of sewing machine	3.1 <u>Routine maintenance</u> of sewing machines is carried out as per guidelines. 3.2 Lubrication of machines are performed and cleaned according to manufacturer's recommendations. 3.3 Broken needles are identified and replaced. 3.4 Workplace is cleaned.
4. Maintain workplace cleanliness	4.1 <u>Workplace cleanliness</u> is carried out and maintained as per workplace standards. 4.2 Waste is disposed of according to company regulations. 4.3 Tools and materials are restored in the safe place.
Range of Variables	
Variable	Range (may include but not limited to):

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1. Personal Protective Equipment (PPE)	<ul style="list-style-type: none"> 1.1 Apron 1.2 Needle guard 1.3 Goggles / Eye protector 1.4 Hair band 1.5 Ear guard 1.6 Mask
2. OSH instructions	<ul style="list-style-type: none"> 2.1 Work area is clean and free of clutter 2.2 Emergency procedures are demonstrated according to approved safety instructions 2.3 Safety sign and symbols are identified and understood 2.4 Equipment is used safely according to specifications and standard operating procedures (SOP)
3. Sewing procedures	<ul style="list-style-type: none"> 3.1 Choosing right thread for both needle and bobbin 3.2 Selecting the appropriate needle bar in right position 3.3 Refilling bobbin with selected thread 3.4 Placing bobbin in bobbin case and taking out thread from the slots 3.5 Threading the needle as per machine requirement 3.6 Setting stitch length and stitch density 3.7 Setting pressure of the roller and pressure foot 3.8 Pressing the knee press to lift the pressure foot 3.9 Adjusting sewing guide 3.10 Sewing a waste piece to check before actual sewing 3.11 Placing the piece to be stitched in proper position on the machine 3.12 Matching and checking the stitched piece with the sample
4. Faults	<ul style="list-style-type: none"> 4.1 Puckered seam 4.2 Uneven stitch 4.3 Floating stitch 4.4 Broken stitch 4.5 Skipped stitch 4.6 Broken needle
5. Routine maintenance	<ul style="list-style-type: none"> 5.1 Needle change 5.2 Fixing thread tension 5.3 Setting of guides 5.4 Oiling machine

TEAM

6. Workplace cleanliness	6.1 Physical cleanliness 6.2 Mechanical cleanliness 6.3 Environmental cleanliness
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Demonstrated sewing on leather with post bed / cylinder bed machine. 1.2 Checked the quality of work pieces. 1.3 Carried out minor maintenance of sewing machine.
2 Underpinning knowledge	2.1 Sewing with post bed / cylinder bed sewing machine 2.2 Quality of work pieces 2.3 Workplace cleaning 2.4 Routine maintenance
3 Underpinning skills	3.1 Demonstrating sewing on leather with post bed / cylinder bed machine 3.2 Checking the quality of work pieces 3.3 Maintaining workplace cleanliness 3.4 Carrying out minor maintenance of sewing machine
4 Underpinning attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5 Resource implications	The following resources must be provided: 5.1 Workplace (simulated or actual) 5.2 Physical facilities appropriate to perform activities 5.3 Materials consumable to perform activities
6 Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral test 6.4 Portfolio

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7 Context of assessment	7.1 Competency assessment must be done in a training centre or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.
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Accreditation Requirements

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

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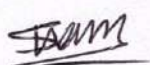
FROM

Validation of Competency Standard by Standard and Curriculum Validation Committee (SCVC)

The Competency Standards for National Skills Certificate in **Leather Sewing Machine Operations, NTVQF L-II** Qualification is validated by SCVC on 09 November 2019 and approved by NSDA.

Respectable members of the SCVC:

Cutting Machine Operations, NTVQF L-II		
01	Mohammad Rezaul Karim, Additional Secretary, Member (Skills Standard & Certification), NSDA	Chief Guest
02	Mr. Md. Mominul Ahsan, CEO & Secretary General, COEL; and Executive Director, Landmark Footwear Ltd.	Chairperson
03	Sobur Ahmed, Associate Professor, Department of Leather Engineering, ILET, University of Dhaka. Cell: 01714241847. Email: soburahmed2001@yahoo.com	Member
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09	Mahbub Ul Huda, Curriculum Coordinator (Consultant), NSDA	Facilitator



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This Competency Standard for **Cutting Machine Operations** is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order for individuals who graduated through the established standard via competency-based assessment to be suitably qualified for a relevant job.

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SAOM