



NATIONAL OCCUPATIONAL STANDARD

**WOVEN FABRIC PATTERN PREPARATION WORKER
LEVEL 3**

REFERENCE CODE / 12UMS0193-3

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TERMS, SYMBOLS AND ABBREVIATIONS

SHEDDING OPENING: The process of upper positioning of sub-part of some pre-drafted warp yarns and leaving spaces between them for picking the weft yarn according to the knitting report,

ANALYSIS: Determination of the properties of textile materials or fabrics,

ARMURE: Shedding opening system enabling designing by giving motion to the warp yarns per frame number,

ARMURE PLAN: The plan showing the frame motion sequence required for knitting a fabric,

WEFT (WEFT YARN): The yarns in cross direction in a woven fabric,

WEFT PLAN: The sequence and number of weft yarns repeated in the fabric,

WEFT REPORT: The smallest unit of weft yarn sequence repeated in the fabric,

WEFT DENSITY: The number of weft yarns per unit in the fabric,

WEFT SYSTEM: The number and ratio of wefts superpositioned in the fabric,

UNIFIED KNITTING: Knitting made by using two or more knittings together,

SHRINKAGE IN LENGTH: The ratio of size difference between the warp yarns in the manufactured fabric and machine,

NUMBER OF TWISTS: The yarn's number of spins per meter,

TWIST: The process of spinning fibers or yarns around themselves,

FRAME: The attachment with built-in healds in the dobbies,

WARP (WARP YARN) : The yarns in longitudinal direction in a woven fabric,

WARP PLAN: The sequence and number of warp yarns repeated in the fabric,

WARP REPORT: The smallest unit of warp yarn sequence repeated in the fabric,

WARP DENSITY: The number of warp yarns per unit in the fabric,

WARP SYSTEM: The number and ratio of warps superpositioned in the fabric,

PATTERN: The esthetical element created by weaving or printing on the textile surfaces,

PATTERN: The junction points of horizontal and vertical lines determining the width and length limits of the pattern report,

DESIGN PAPER: The plotting paper used in the textile industry and prepared in different sizes,

PATTERN REPORT: The smallest unit of pattern repeated on the fabric,

TEXTILE: The technique of forming a surface by making connection as the warp and weft yarns making right angle to each other according to some rules,

SHRINKAGE IN WIDTH: The ratio of size difference between the weft yarns in the manufactured fabric and machine,

GRAPHIC TABLET: Interface including electronic pen and tablet in the computerized pattern design,

GRAMMAGE: The fabric's weight in gram in the unit area (like g/m^2 and g/running meter),

WEAVING REED: The steel wires through which each warp yarn is threaded and making connection to the frame or jacquard,

RAW FABRIC: The state of fabric out of the weaving machine,

ISCO: International Standard Classification of Occupations,

YARN NUMBER: The number which is obtained as a ratio between the length and weight of yarn and shows the yarn's thickness and fineness,

OHS: Occupational Health and Safety,

JACQUARD: The shedding opening system enabling patterning by giving motion to the warp yarns equal to the number of lifting wires,

JACQUARD COMPOSITION PLAN: The malyon yarns' connection to the lifting wires and array plan on the composition board,

JACQUARD CAPACITY: The number of lifting wires used for patterning in the jacquard,

JACQUARD CARD: The status of plaited position of edge and pattern and machine function controls stated by filled-empty points,

JACQUARD LIFTING WIRE TASK PLAN: The plan showing the task distribution of lifting wires in the jacquard and pattern-instruction numbering,

PAPER RATIO: The value applied to make the pattern view on the display one-to-one with the warp and weft density,

CARTOON PERFORATOR: The machine perforating the cartoon to which jacquard or armure pattern is transferred to the the weaving machine,

PERSONAL PROTECTIVE EQUIPMENT (PPE): All tools, instruments and devices worn or held by the employee and designed for protecting the employee against one or more risks arising from the work carried out and effecting health and safety,

MALYON YARN: Cable like yarns giving motion to the healds depending on the lifting wires,

MANUFACTURED FABRIC: The status of raw fabric undergone processes after weaving,

SAMPLE FABRIC: The swatch used as a reference for the pattern to be manufactured,

KNITTING: The connection between the warp and weft yarns for making right angle to each other according to some rules,

KNITTING REPORT: The smallest unit of connection between the warp and weft yarns for making right angle to each other according to some rules,

FABRICATION: Placing different knitting to each different colour area on the drawing as to form the pattern on the fabric,

SPECIAL MAGNIFIER (LOOP): The magnifier enabling determination of yarn densities, knitting and colour reports,

PIXEL: Each point creating the pattern's display image,

LIFTING WIRE: The element of jacquard weaving machine giving motion to the machine yarns and giving machine function instructions,

RISK: The possibility of occurrence of loss, injury or other damages to arise from danger,

WEAVING DRAFT PLAN: The plan showing the minimum number of frames to weave the knitting and the places of warps in the frames,

REED: The attachment recording the picked weft yarn to the grain (fabric strip), threading the warp yarns through backlashes in the weaving machines,

REED WIDTH: The width in which warps are distributed in the reed in weaving,

REED NUMBER: The number of backlashes at 1 or 10 cm in the reed,

REED WEAVING DRAFT PLAN: The order of warp yarns threaded through reed backlashes,

BASIC KNITTING: Fabric, fustian and satin knittings,

DANGER: The potential of causing damage or injury which currently exists in the workplace or may be outsourced and affects the employee and workplace,

TREND: The current prevailing trend, fashion,

DERIVED KNITTING: The knittings produced from basic knittings by using various methods,

VARIANT: Varying by fiddling on the colours and effects without changing the pattern and knitting of fabric.

1. INTRODUCTION

The National Occupational Standard For Woven Fabric Pattern Preparation Worker (Level 3) is prepared by the Bursa Union of Chamber of Merchants and Craftsman (BESOB) assigned by the Professional Competency Board (PCB) in accordance with the provisions of the “Regulation on Preparation of National Occupational Standards” and “Regulation on Procedures and Principles of Establishment, Duty, Operating of Professional Competency Boards” enacted by the Professional Competency Board (PCB) Law No. 5544 and the said law.

The National Occupational Standard For Woven Fabric Preparation Worker (Level 3) is assessed by taking opinions of the relevant institutions and organizations; approved by the PCB Board of Directors after being reviewed by the PCB Textile, Garment (Ready-To-Wear), Leather Sector Committee.

2. INTRODUCTION OF THE OCCUPATION

2.1. Definition of the Occupation

The Woven Fabric Pattern Preparation Worker (Level 3) is the qualified person taking measures related to the occupational health and safety and environment; carrying out fabric analysis at basic level, preparing armure and/or jacquard fabric pattern, making preparation for creating production sample, and participating in the professional development activities.

2.2. Place of the Occupation in International Classification System

ISCO 08: 7318 (Handicraft workers who use textile, leather, and similar materials)

2.3. Regulations on Health, Safety and Environment

Labor Law No. 4857

Social Security and General Health Insurance Law No.5510

Bylaw on Procedures and Principles of Occupational Health and Safety Trainings of Employees

Bylaw on Safety and Health Signs

By Law on Personal Protective Equipment

By Law on the Usage of Personal Protective Equipment in the Business Places

Furthermore, it is essential to obey laws, statutory rules and regulations on occupational health and safety and environment; and to perform risk analysis regarding this issue.

2.4. Other legislation relating to the occupation

Law No. 3308 on Occupational Training

Law No. 5362 on Professional Associations of Tradesmen and Craftsmen

By Law on the Working Times Regarding Labor Law

By Law on the Overtime Works Regarding Labor Law

By Law on Annual Paid Leave

Furthermore, it is essential to obey laws, statutory rules and regulations on occupation.

2.5. Working Environment and Conditions

The Woven Fabric Pattern Preparation Worker (Level 3); performs his/her works in an environment with day light or illuminated by a daylight lamp, on an adequately large table. The people performing this occupation may suffer from diseases related to the eyes and spinal cord.

The Woven Fabric Pattern Preparation Worker (Level 3); may work at independent pattern offices or weaving premises under supervisory of Woven Fabric Stylist.

2.6. Other Requirements Regarding The Occupation

There is no other requirement of the occupation.

3. OCCUPATIONAL PROFILE

3.1. Duties, Tasks and Performance Criteria

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
A	Applying policies of workplace quality, environment, occupational health and safety	A.1	To apply instructions of emergency, occupational health and safety	A.1.1	Applies and ensures application of legal and unique occupational health and safety rules.
				A.1.2	Determines and prevents risks to occur in the workplace.
				A.1.3	Immediately informs the related personnel and emergency service departments regarding the case of emergency, accident which cannot be eliminated or outside his scope of
				A.1.4	Uses and ensures use of the work clothes and personal protective equipment suitable for the work performed during the processes and preparation stage. .
				A.1.5	Applies and ensures the application of the exit or escape procedures in cases of emergency.
		A.2	To take environmental protection measures	A.2.1	Learns the measures against environmental protection in accordance with the work requirements and applies and ensures application of them in maximum.
				A.2.2	Participates in the required determination and planning studies for saving natural resources.
				A.2.3	Separates and ensures separation of recyclable material.
		A.3	To work in accordance with the requirements of quality assurance system	A.3.1	Works and ensures work in accordance with the quality requirements as per the instructions and plans stated in the task forms.
				A.3.2	Contributes to determination and elimination of reasons for fault.
				A.3.3	Develops, applies and ensures application of methods related to elimination of faults.
				A.3.4	Firstly informs his superior regarding the work-related faults and quality problems he fails to eliminate.
				A.3.5	Carries out and ensures carrying out of technical procedures in providing quality in accordance with the work's quality requirements.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
B	Carrying out work organization	B.1	To prepare materials	B.1.1	Prepares the analysis materials to be used in accordance with the analysis report.
				B.1.2	Prepares the fabric to be analyzed according to the analysis method.
		B.2	To prepare equipment	B.2.1	Selects the programs to be used in the computer by his task steps.
				B.2.2	Prepares the devices to be used for transferring the drawing to the computer as per the user's manual.
				B.2.3	Prepares the devices to be obtained pattern and report forms printout as per the user's manual.
		B.3	To prepare technical documents	B.3.1	Prepares the reference fabric, magazine, archive and patterns.
				B.3.2	Prepares the design paper, report and work forms to be used during analysis and design pattern.
		B.4	To plan workflow	B.4.1	Participates in the weekly and daily work planning studies with the related persons and/or departments.
				B.4.2	Makes time planning of the patterns to be prepared by the delivery date.
				B.4.3	Makes work distribution to persons under his supervision by the patterns to be prepared.
				B.4.4	Prepares and ensures preparation of weekly and/or daily work plans by time planning.
		B.5	To report his works	B.5.1	Reports and informs his superior regarding his works within appropriate period.
				B.5.2	Reports and informs his superior regarding problems occurred during the period.
				B.5.3	Carries out, reports informs his superior regarding performance assessment of his superiors.
		B.6	To archive his works	B.6.1	Archives work forms and related fabric samples accessible by his superior and all related departments.
				B.6.2	Archives the finished patterns accessible by his superior and all related departments.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
C	Making fabric analysis (To be continued)	C.1	To determine type of sample fabric	C.1.1	Examines the sample fabric by observing and touching.
				C.1.2	Determines the type of sample fabric by production type.
				C.1.3	Determines the type of sample fabric by patterning system.
		C.2	To determine sample fabric face	C.2.1	Determines the face of the sample fabric by area of use.
				C.2.2	Determines the face of the sample fabric by its technical specifications.
				C.2.3	Determines the face of the sample fabric by processes after weaving.
		C.3	To determine warp and weft direction of sample fabric	C.3.1	Determines the warp and weft directions of the sample fabric by looking at the fabric's edge.
				C.3.2	Determines the warp and weft directions of the sample fabric by yarns specifications.
				C.3.3	Determines the warp and weft directions of the sample fabric by considering warp-face weft-face knittings.
				C.3.4	Determines the warp and weft directions of the sample fabric by grain.
				C.3.5	Determines the warp and weft directions of the sample fabric by comparing warp-weft density.
				C.3.6	Determines the warp and weft directions of the sample fabric by considering the reed mark.
				C.3.7	Determines the warp and weft directions of the sample fabric by looking at the surface specifications and pattern image.
		C.4	To determine warp and weft density of sample fabric	C.4.1	Determines the warp density of the sample fabric at unit size by counting the warp yarn by using special magnifier (loop).
C.4.2	Determines the weft density of the sample fabric at unit size by counting the weft yarn by using special magnifier (loop).				

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
C	Making fabric analysis (To be continued)	C.5	To determine weight of sample fabric	C.5.1	Turns the sample fabric into an even geometrical swatch by cutting the sample fabric with grammage device cutting attachment.
				C.5.2	Weighs the sample swatch with precision balance and determines the weight.
		C.6	To determine grammage of sample fabric	C.6.1	Calculates the area of the sample swatch by its geometrical shape.
				C.6.2	Determines the fabric's grammage in m2 and running meter by using the data he obtains.
		C.7	To determine shrinkage of sample fabric in width and length	C.7.1	Determines the width and length by measuring the sample fabric.
				C.7.2	Measures the length of the sample fabric by stretching certain number of weft and warp yarns.
				C.7.3	Determines the average yarn length for the weft and warp yarns by using the measurement results.
				C.7.4	Determines the ratios of shrinkage of sample fabric in width and length as percentage by using the data he obtains.
		C.8	To determine yarn type and specifications of sample fabric	C.8.1	Determines the type of sample fabric's yarn by singeing, smelling, wetting, observing the yarn.
				C.8.2	Determines the yarn specifications of the sample fabric by observing and touching.
				C.8.3	Sends the sample fabric of which he fails to determine the type and specifications of the yarns to a detailed analysis.
		C.9	To determine weight of yarn	C.9.1	Cuts the yarns which he removes from the fabric in certain length so that they're the same length.
				C.9.2	Determines the weight of the yarns he prepares by weighing them with precision balance.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
C	Making fabric analysis	C.10	To determine yarn numbers of sample fabric	C.10.1	Calculates and determines the yarn number by yarn length and weight.
				C.10.2	Determines the yarn number by estimate by carrying out visual examination.
				C.10.3	Determines the yarn number by estimate by comparing with the same type and specifications of the yarn.
		C.11	To prepare knitting report of sample fabric	C.11.1	Determines the fabric's weft-warp system by carrying out visual examination.
				C.11.2	Distinguishes the weft- and warp-face knittings in the fabric by considering the warp density in the knittings.
				C.11.3	Determines each knitting area in the fabric visually.
				C.11.4	Prepares each basic, derived or unified knitting report by tearing down the jacquard fabric or examining with special magnifier (loop).
				C.11.5	Prepares the pattern knitting report including the basic, derived or unified knittings by tearing down the armure fabric or examining with special magnifier (loop).
		C.12	To prepare weft and warp report of sample fabric	C.12.1	Prepares the warp report by finding the sequence and number of yarns by tearing down the fabric or examination with special magnifier (loop).
				C.12.2	Prepares the weft report by finding the sequence and number of yarns by tearing down the fabric or examination with special magnifier (loop).
		C.13	To calculate reed number	C.13.1	Determines the number of wires threaded through backlash by looking at the fabric with special magnifier (loop).
				C.13.2	Calculates the reed number by warp density and number of wires threaded through backlash.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
D	Designing unique fabric (To be continued)	D.1	To carry out preparatory work	D.1.1	Carries out the preparatory work by determining the fabric's area of use and target market.
				D.1.2	Carries out the preparatory work by deciding the fabric texture by the fabric's area of use and target market.
				D.1.3	Determines the pattern style to be created in the fabric; selects and carries out the preparatory work of the pattern.
		D.2	To determine yarns	D.2.1	Carries out yarn research in the sector by the preparatory works.
				D.2.2	Determines and ensures production of the new yarn's specifications compliant with the unique fabric he will design.
				D.2.3	Determines the yarns by the yarn's specifications to be added to the fabric and its cost. .
		D.3	To design fabric texture	D.3.1	Determines the warp and weft densities by the specifications and costs of fabric and yarn.
				D.3.2	Determines the warp-weft systems by the specifications and costs of fabric and yarn.
				D.3.3	Prepares the warp-weft plans to create different images.
				D.3.4	Creates the weaving draft plans to be used in the armure weaving machine.
				D.3.5	Creates the jacquard composition plans to be used in the jacquard weaving machine.
				D.3.6	Creates the reed weaving draft plans to be used in the weaving machine.
				D.3.7	Creates the knittings to form different textures.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
D	Designing unique fabric	D.4	To determine processes to be applied in the production process	D.4.1	Determines the processes to be applied on the yarns by weaving preparatory technologies.
				D.4.2	Determines the type of weaving machine by the weaving technology.
				D.4.3	Determines different technical equipment to be used in the weaving technology.
				D.4.4	Determines the processes to be applied to the fabric by the post weaving process technologies.
		D.5	To calculate the quantity of material used	D.5.1	Calculates the warp number to be used in the fabric in running meter.
				D.5.2	Calculates the weft number to be used in the fabric in running meter.
				D.5.3	Provides the cost information of weaving preparation, weaving process and post weaving processes.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
E	Preparing armure fabric pattern for production (To be continued)	E.1	To calculate width and number of reed	E.1.1	Determines the type of weaving loom and width of manufactured fabric.
				E.1.2	Calculates the width of reed by percentage of shrinkage of fabric in width.
				E.1.3	Determines the reed number by warp density and number of wires threaded through backlash by considering the fabric and available reeds in the facility.
		E.2	To prepare armure and weaving draft plan	E.2.1	Prepares the weaving draft plan by the pattern's knitting report.
				E.2.2	Prepares the armure plan by the pattern's knitting report and weaving draft plan.
				E.2.3	Creates alternative knitting reports and armure plans by the weaving draft plan in the facility.
				E.2.4	Creates the reed weaving draft plan by the order of warp yarns threaded through reed backlashes.
				E.2.5	Assigns code to the pattern by archive sequence.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
E	Preparing armure fabric pattern for production	E.3	To prepare weft and warp plan	E.3.1	Determines the sequence and number of warp yarns by the pattern report.
				E.3.2	Calculates the number of repetitions of warp report along the width of fabric.
				E.3.3	Determines the number of edge warp wires by the fabric's edge sizes.
				E.3.4	Calculates the total number of warp wires by the fabric's width.
				E.3.5	Prepares the warp plan by the data he determines.
				E.3.6	Creates alternative warp plans.
				E.3.7	Determines the sequence and number of weft yarns in the pattern report.
				E.3.8	Prepares the weft plan by the number of repetitions at the height of pattern report.
				E.3.9	Creates alternative weft plans.
		E.4	To convert the pattern to the format of armure weaving machine	E.4.1	Enters and ensures entry of the armure and weft plans he prepared in the weaving machine manually.
				E.4.2	Converts the armure and weft plans he prepared to the format of the weaving machine or cartoon perforator in the computer environment. .
				E.4.3	Transfers or ensures transfer of the plans in the format of weaving machine to the weaving machine or cartoon perforator by flash memory card or via network connection.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
F	Preparing jacquard fabric pattern for production (To be continued)	F.1	To transfer to the fabric or official computer environment	F.1.1	Scans the fabric or on the official scanner or transfers the image to the computer by using digital camera.
				F.1.2	Converts the pattern image to a useable jacquard pattern by reducing colour.
				F.1.3	Determines the pattern axes on the pattern image by the pattern report.
				F.1.4	Selects the type of pattern report by the type of repetition of the pattern.
				F.1.5	Carries out general cleaning, colouring and retouching to sharpen the pattern.
				F.1.6	Assigns code to the pattern by archive sequence.
		F.2	To size pattern	F.2.1	Determines the pattern's warp-weft system by the basic, derived and unified knittings he will use.
				F.2.2	Determines the maximum and other report sizes to be used by the jacquard capacity in the facility and warp density as the unit value.
				F.2.3	Calculates the paper ratio by the warp-weft density and system and defines such data on the computer.
				F.2.4	Calculates the number of pixels-lifting wires of the pattern width by the warp density and system and type of pattern report.
				F.2.5	Adapts the number of pixels-lifting wires of the pattern width to the jacquard capacity in the facility and defines such data on the computer.
				F.2.6	Adjusts the distribution of pattern report by the start and ending of jacquard composition plan on the computer.
				F.2.7	Calculates the number of pixels of the pattern height by the weft density and system and type of pattern report and defines such data on the computer.
				F.2.8	Calculates the number of warp wires-lifting wires in the jacquard card by the number of pixels in the pattern and warp system.
F.2.9	Calculates the unit size values of the pattern size to be transferred to the fabric by the pattern's working values on the computer.				

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
F	Preparing jacquard fabric pattern for production (To be continued)	F.3	To make the pattern ready for knitting on the computer	F.3.1	Makes the pattern ready for knitting by colouring per number of knittings and fine retouching.
				F.3.2	Makes the pattern ready for knitting by making colour additions according to the esthetic and technical requirements.
				F.3.3	Makes the pattern ready for knitting by arranging the report distribution according to the esthetic and technical requirements.
		F.4	To assign warp and weft to the pattern on the computer	F.4.1	Determines and defines the warp and weft system by pattern.
				F.4.2	Creates and defines alternative warp plans.
				F.4.3	Determines and defines the weft plan by the type, number and colour of the weft.
				F.4.4	Creates and defines alternative weft plans.
				F.4.5	Determines and defines the machine functions by the pattern. .
		F.5	To assign knitting to the pattern on the computer	F.5.1	Determines the knittings by the fabric quality and/or creates new knittings.
				F.5.2	Picks knitting at each colour in the pattern to create the pattern on the fabric.
				F.5.3	Removes the edge knittings by the fabric quality.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
F	Preparing jacquard fabric pattern for production	F.6	To create jacquard card	F.6.1	Prepares the jacquard composition plan by the fabric and submits such data to the relevant persons.
				F.6.2	Prepares the warp plan by the type, number and colour of the warp; submits or ensures submission of such data to the relevant persons.
				F.6.3	Defines the lifting wire task plan by the jacquard of which the fabric will be woven on the computer.
				F.6.4	Creates the jacquard card by the lifting wire task plan on the computer.
				F.6.5	Controls the jacquard card he created according to the technical requirements.
		F.7	To convert the pattern to the format of the jacquard weaving machine	F.7.1	Converts the jacquard card he created to the format of the jacquard of which the fabric will be woven or cartoon perforator.
				F.7.2	Transfers or ensures the transfer of the jacquard card to the jacquard of which the fabric will be woven or cartoon perforator by disc, flash memory or via network connection.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
G	Creating production sample	G.1	To compile technical data for the sample	G.1.1	Fill or ensure filling of the form related to the technical data required for accessibility to the production sample.
				G.1.2	Fill or ensure filling of the form related to the technical data required for making cost and grammage calculations.
				G.1.3	States or ensures statement of the processes of the production sample to be carried out after weaving on the related form.
				G.1.4	Submits or ensures submission of the forms with the pattern to be transferred to the weaving machine to the relevant persons or departments.
				G.1.5	Submits or ensures submission of this sample to the relevant persons or departments in case of original fabric sample.
		G.2	To control production sample	G.2.1	Follows up or ensures follow up the production sample in the weaving and post weaving stages.
				G.2.2	Controls the production sample; detects its defects, if any.
				G.2.3	Solves the problems arising from the pattern design; informs or ensures information of the problems by other reasons to the relevant person.
				G.2.4	Revises, submits or ensures submission of the related form by the changes in the technical data to the relevant persons or departments.
				G.2.5	Prepares variant according to the fabric specifications.
				G.2.6	Submits or ensures submission of the production sample he approves and the related form to the relevant persons or departments.

Duties		Tasks		Performance Criteria	
Code	Title	Code	Title	Code	Description
H	Carrying out professional development activities	H.1	To follow up trend and technological innovations, occupational legislation and regulations	H.1.1	Participates in the sector fairs as guest; reviews the sector pages in the internet environment and print media; participates in the parades as observer and follows up trend-technology.
				H.1.2	Follows up trends and technological innovations by field of market.
				H.1.3	Interpretes the trends and technological innovations he observed in accordance with the company's conditions and submits such data to his superior.
				H.1.4	Performs his works according to the trends and technological innovations; directs his inferiors.
				H.1.5	Follows up changes in the legislation and regulations.
		H.2	To carry out training planning and organization activities	H.2.1	Fulfills his training requirements from the relevant department and assesses the said training.
				H.2.2	Assesses periodic or once trainings in terms of time planning. .
		H.3	To carry out activities on personal professional development	H.3.1	Carries out the research activities required for professional and personal development.
				H.3.2	Participates in the trainings assigned by the Management and keeps his certificates.
		H.4	To give tranining on his occupation to his inferiors and other employees	H.4.1	Determines deficiencies in the professional training of his inferiors and submits such deficiencies to his superior.
				H.4.2	Trains his inferiors by their deficiencies in the professional training.

3.2. Tools, Appliances and Equipment Used

1. Wooden and plastic plate
2. Lighting device
3. Computer and Woven pattern software
4. Crayon
5. Rulers
6. Pattern transfer tools (CD, DVD, USB, etc.)
7. Design paper
8. Digital camera
9. Company and pantone color catalogues
10. Graphic tablet
11. Precision scale (fabric weighting device)
12. Illuminated table
13. Needle
14. Uninterruptible Power Supply
15. Personal protective equipment
16. Fabric weighting device cutting apparatus
17. Scissors
18. Special magnifier (loop)
19. Scanner
20. Knitting needle
21. Printer

3.3. Knowledge & Skills

1. Knowledge on emergency case
2. Ability to use tools, apparatus and equipment
3. Knowledge on operating principles of armure and jacquard
4. Ability to prepare armure and weaving draft plan
5. Knowledge on environmental protection methods
6. Ability to prepare warp and woof draft plan
7. Ability to calculate pattern sizes
8. Knowledge on and ability to use pattern report
9. Knowledge on and ability to make verification and comparison
10. Knowledge and skills of using Woven pattern software
11. Knowledge and skills of identifying and reporting the knitting on the Woven fabrics
12. Knowledge on separating recyclable materials and recycling activities
13. Ability of working in a team or an organization
14. Manual skill
15. Hand-eye coordination skills
16. Visual memory skill
17. Ability to proportionate visual materials
18. Knowledge on occupational health & safety
19. Knowledge on the work site operation procedures

20. Ability to distinguish the fabric by production and patterning system
21. Knowledge on and ability to distinguish occupational terms, objects, and signs
22. Knowledge on and ability to carry out reporing
23. Knowledge on colors
24. Ability to combine colors
25. Skills of oral and written communication
26. Knowledge on and ability to make calculation of comber size
27. Knowledge on basic labour legislation
28. Knowledge on Woven technology at basic level
29. Knowledge on basic and derived knitting structures
30. Ability of three-dimensional perception
31. Knowledge on quality requirements of product and process quality assurance
32. Skill of using the time well.

3.4. Attitudes and Behaviours

1. To decide within the scope of his knowledge and experience
2. To use her/his time effectively and efficiently in accordance with work orders
3. To be planned and organized in her/his work
4. To be open to innovations and developments in her/his work.
5. To be sensitive to protection of environment
6. Adopting regulations set forth in environmental, quality, and OHS legislation
7. Sharing experience with associates
8. To be in harmony with the team
9. To know his/her task definition, instructions, and to fulfill the same
10. To follow-up and apply new trends and technological developments regarding with her/his task
11. To comply with safe work requirements
12. To inform relevant people and authorities properly and on time
13. To obey the working principles of the workplace
14. To pay attention to the usage of tools, appliances and equipments belonging to workplace
15. To take care of effective use of resources
16. To conduct in accordance with occupational ethical rules
17. To inform superiors accurately about the problems
18. To take care of process and product quality
19. To detect and assess the cases of danger and inform relevant people and authorities
20. Taking care of cleanness, tidiness, and order of workplace

4. TESTING, ASSESSMENT AND CERTIFICATION

Testing and assessment for certification with respect to national qualifications based on Woven Fabric Pattern Preparation Worker (Level 3) Occupational Standard shall be held in written and/or oral forms, theoretically and practically, in testing and assessment centers where required conditions are met.

Testing and assessment method and practice principles shall be detailed with national qualifications to be drawn up pursuant to this occupational standard. Activities regarding testing, assessment and certification shall be conducted within the framework of Vocational Qualification Authority, Testing and Certification Regulation.

ANNEX: Institutions participated in the Occupational Standard Preparation Process

1. Professional Standards Team of Institution Preparing Professional Standard

Betül ÖZYAŞAR,	BESOB - Project Coordinator
Gülbin OKUR,	BESOB - Training Manager
Müge GÜRSOY,	BESOB - Project Technical Expert
Bige ÖZMUTLU,	BESOB - Project Test and Questionnaire Expert (Textile Engineer)

2. Technical Work Group Members

Kasım UZUNÖZ,	Tophane Vocational High School Teacher (Department of Textile Technology)
Bülent GÜRSU,	Tophane Vocational High School - Department Chief (Department of Textile Technology)
Fatma FIDAN,	Nirmal Textile Co. Ltd. Textile Engineer
Muharrem SERT,	Arjak Design - Woven Fabric Stylist (Company's Owner)
Ayşe DEDEOĞLU,	Elvin Textile - Vice President, Product Development Group
Nilgün BİLGİN,	Multiteks - Coordinator (Textile Engineer)
Turgut SOLAKLAR,	Udeso - Woven Fabric Stylist (Company's Owner)
Taner GETİZMEN,	Turkish Employment Agency (İŞKUR) Bursa Provincial Directorate, Specialist
Tülay IŞIK,	Papatya Design-Employer - Woven Fabric Stylist (Textile Engineer)

3. People, Institutions, and Organizations Asked for Opinion:

Adana Chamber of Industry
Adessa Pattern Design Office
Akman Textile Industry and Trade Co. Inc.
Ankara Chamber of Industry
Ankara Chamber of Commerce
Aratan Design Office
Aydın Örme Sanayi ve Ticaret A.Ş.
Bahariye Mensucat Sanayi ve Ticaret A.Ş.
Federation of Associations of Western Anatolian Employers and Businessmen
Baydemirler Tekstil Sanayi ve Ticaret A.Ş.
Berteks Tekstil Sanayi ve Ticaret A.Ş.
Beteks Tekstil ve Otomotiv Sanayi ve Ticaret A.Ş.
Boyteks Tekstil Sanayi ve Ticaret A.Ş.
Buldan Chamber of Commerce
Burer Tekstil Sanayi ve Ticaret Ltd. Şti.
Bursa Huseyin Ozdilek Vocational High School
Bursa Necatibey Vocational High School for Girls
Bursa Advanced Technical High School for Girls
Bursa Trade and Industry Chamber
C.Y. Simetri Tekstil Tasarım-Yazılım Sanayi Ticaret Ltd. Şti.
Çanakkale March Eighteen University School of Fine Arts Department of Textile
Çerkezköy Turkish Textile Foundation Vocational and Technical Education Center and Technical Vocational High School for Girls
Union of Denizli Tradesmen and Craftsmen (BESOB)
Denizli Chamber of Industry
Denizli Textile Exporters Union
Confederation of Revolutionary Trade Unions of Turkey (DISK)
Düzce University Düzce Vocational School
EAT Design, Turkey
EFO Textile Industry and Trade Co. Ltd. Şti.
Aegean Region Chamber of Industry (EBSO)
Association of Aegean Garment Industrialists

Aegean Union of Exporters
Aegean University Emel Akin Vocational School
Elvin Tekstil Sanayi ve Ticaret A.Ş.
Evim Tekstil Sanayi ve Ticaret A.Ş.
Gazi University School of Vocational Education
Gaziantep Chamber of Industry
Gaziantep University School of Textile Engineering
Gıdaş Tekstil Sanayi A.Ş.
Göktepe Tekstil Ürünleri Sanayi ve Ticaret A.Ş.
Gülcemal Tekstil Sanayi ve Ticaret A.Ş.
HAK-IS Trade Union Confederation
Istanbul Chamber of Industry
İstanbul Technical University, school of Textile Technologies and Design, Department of Textile Engineering
Istanbul Textile Exporters Union
İstanbul Chamber of Commerce (İTO)
İzmir Chamber of Tailors and Outfitters
Izmir Chamber of Commerce
Kayseri Chamber of Industry
Kismet Tekstil Ürünleri Sanayi ve Ticaret Ltd. Şti.
Kocaeli Chamber of Industry
Konya Chamber of Industry
Köseoğlu Tekstil Sanayi ve Ticaret A.Ş.
Presidency of Small and Medium Scale Enterprises Developing and Supporting Administration
Küçükçalık Tekstil Sanayi ve Ticaret A.Ş.
Küçükerler Tekstil Sanayi ve Ticaret Ltd. Şti.
LaTeks- Lale Mefruşat Sanayi Ticaret ve Pazarlama A.Ş.
Marmara University, School of Technical Education, Department of Textile
Marsteks Döşemelik Kumaş Tekstil Konfeksiyon Sanayi ve Ticaret Ltd. Şti.
Meyteks Tekstil Sanayi ve Ticaret A.Ş.
Mimar Sinan Fine Arts University school of Fine Arts, Department of Textile and Fashion Design
Moral Tekstil Sanayi ve Ticaret A.Ş.
Multiteks Tekstil Sanayi ve Ticaret A.Ş.
Nedgraphics Turkey Office
Nergis Tekstil Sanayi ve Ticaret A.Ş.
Özdilek Alışveriş Merkezleri ve Tekstil Sanayi A.Ş.
Öz İplik-İş Trade Union
Pakipek Tekstil Sanayi ve Ticaret A.Ş.
Parlamış Tekstil Sanayi ve Ticaret Ltd. Şti.
Pektaş Tekstil Sanayi ve Ticaret A.Ş.
Rekor Dokumacılık Sanayi ve Ticaret A.Ş.
Safaş Tekstil Turizm İnşaat Sanayi ve Ticaret Ltd. Şti.
Santeks İplik ve Brode A.Ş.
Sarıçam Turkish Textile Foundation
Vocational and Technical Training Center
Technical and Vocational High School for Girls
Sunteks Dokuma Boya Apre Sanayi ve Ticaret A.Ş.
Süleyman Demirel University Department of Textile Engineering
SYK Tekstil Sanayi ve Ticaret A.Ş.
Republic of Turkey Ministry of Science Industry and Technology Directorate General of Industry
Republic of Turkey Ministry of Labor and Social Security
Republic of Turkey Ministry of Labour and Social Security, State Personnel Administration
Republic of Turkey Ministry of Economy
Republic of Turkey Ministry of National Education
Republic of Turkey Ministry of Education, General Directorate of Apprenticeship and Non-Formal Education
Republic of Turkey Ministry of Education, General Directorate of Technical Education For Boys
Republic of Turkey Ministry of Education, General Directorate of Technical Education For Girls

Republic of Turkey Ministry of Education Presidency of Project Coordination Center
Republic of Turkey Board of Higher Education (YOK)
Association of Turkish Industrialists and Business People
Confederation of Turkish Tradesmen and Craftsmen (TESK)
Association of Aegean Garment Industrialists
Turkish Exporters Assembly (TIM)
Turkish Statistical Institute (TUIK) - Turkish Labor Institution
Confederation of Turkish Trade Unions (TURK-IS)
Turkish Confederation of Employer Associations
Turkish Union of Chambers and Exchange Commodities (TOBB)
Turkish Union of Textile Industrialists and Employers
Turkish Union of Textile Industrialists and Employers
Vocational and Technical Education Center and Technical Vocational High School for Girls
Textile, Ready-made Garment, Technology, and Design Research & Development Foundation of Turkey
Türkiz Tekstil Sanayi ve Ticaret A.Ş.
Türkün Tekstil Sanayi ve Ticaret A.Ş.
Uludağ University Department of Textile Engineering
Uşak Chamber of Commerce

4. VQA Sector Committee Members and Experts

Ass. Prof. Dr. Saliha AĞAÇ,	President	Board of Higher Education
Nilgün ÖZDEMİR,	Vice President	Turkish Exporters Assembly
Ahmet SARICA,	Member	Ministry of Labor and Social Security
Nesrin AKGÜN,	Member	Ministry of National Education
Zehra BAYRAK,	Member	Ministry of Science Industry and Technology
Deniz MEGUS,	Member	Confederation of Turkish Tradesmen and Craftsmen
Atilla BAĞCUVAN,	Member	Turkish Union of Chambers and Exchange Commodities (TOBB)
Pınar ÖZCAN,	Member	HAK-IS Trade Union Confederation
Halil Ergün İŞERİ,	Member	Confederation of Revolutionary Trade Unions of Turkey
Adnan ATEŞ,	Member	Confederation of Turkish Trade Unions
Orhan HARMANCI,	Member	Turkish Confederation of Employer Associations
Firuzan SİLAHŞÖR,	Member	Occupational Qualification Authority
Hilal DOĞRUÖZ ÖZER,	Sector Official	Occupational Qualification Authority
Sinan GERGİN,	Sector Committee Representative	(Prime Ministry Department of the Administration of the Disabled and Elder Services)

5. Executive Board

Bayram AKBAŞ,	President	Representative of Ministry of Labour and Social Security
Prof. Dr. Oğuz BORAT,	Vice President	Representative of Ministry of Education
Ass. Prof.. Dr. Ömer AÇIKGÖZ,	Member	Representative Board of Higher Education
Prof. Dr. Yücel ALTUNBAŞAK,	Member	Representative of Professional Organizations
Dr. Osman YILDIZ,	Member	Representative of Confederation of Turkish Trade Unions
Celal KOLOĞLU,	Member	Representative of Turkish Confederation of Employer Associations