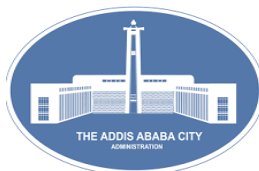


# GARMENT PRODUCTION

## LEVEL - III

**Based March, 2022 Curriculum Version I,**



**Module Title:** Set and produce digital embroidery

**Module Code:** IND GAP3 05 1221

**Nominal duration:** 80 Hrs

**Prepared By:** Addis Ababa TVET Bureau

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## **Module units**

Unit 1. Determine work requirements

Unit 2. Select and use program features

Unit 3. Prepare work pieces and workstation

Unit 4. Produce digital embroidery

Unit 5. Dispatch completed work

At the end of this session, the students will able to:

- Determined work requirements
- Used program features
- Prepared work pieces and workstation
- Produced digital embroidery
- completed work

### **Module Learning Instructions:**

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the information Sheets
4. Accomplish the Self-checks

## **Unit one: - Determine work requirements**

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- Specifications for embroidery are determined.
- Required program features are identified..
- Garment considerations are identified..
- Machine requirements are identified..

This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Specifications for embroidery are determined.
- Required program features are identified..
- Garment considerations are identified..
- Machine requirements are identified..

### **1. Determine work requirements digital embroidery**

To determine the work requirements for digital embroidery, you will need to consider the following factors:

- ✓ Design complexity: The complexity of the design will affect the amount of time and effort required to embroider it. More complex designs will typically require more time and effort to embroider.
- ✓ Fabric type: The type of fabric will also affect the work requirements. Some fabrics, such as stretchy fabrics, are more difficult to embroider than others.
- ✓ Quantity: The number of items to be embroidered will also affect the work requirements. Embroidering a large quantity of items will typically require more time and effort than embroidering a small quantity of items.
- ✓ Once you have considered these factors, you can begin to estimate the work requirements for your digital embroidery project. Here are some additional tips:
- ✓ Break down the project into smaller tasks. This will make it easier to estimate the time and effort required for each task.
- ✓ Use a time tracking tool to track the time you spend on each task. This will help you to get a more accurate estimate of the total work required.

- ✓ If you are new to digital embroidery, it is a good idea to start with a simple project. This will help you to learn the basics of digital embroidery and to get a better understanding of the work requirements.
- ✓ Here are some examples of work requirements for digital embroidery projects:
- ✓ Embroidering a simple logo on a shirt: This is a relatively simple project that can be embroidered in a short amount of time.
- ✓ Embroidering a complex design on a quilt: This is a more complex project that will require more time and effort to embroider.
- ✓ Embroidering a large quantity of T-shirts for a corporate event: This is a large-scale project that will require significant time and effort to complete.
- ✓ By considering the factors listed above and by breaking down your project into smaller tasks, you can accurately estimate the work requirements for your digital embroidery project.
- ✓ In addition to the above, you will also need to consider the following:
- ✓ Digitizing the design: If you do not have a digitized design, you will need to have it digitized by a professional. This is a one-time cost that will vary depending on the complexity of the design.
- ✓ Embroidery machine: You will need to have an embroidery machine to embroider your design. Embroidery machines come in a variety of prices and features. Choose a machine that is appropriate for your needs and budget.
- ✓ Embroidery supplies: You will need a variety of embroidery supplies, such as needles, threads, stabilizers, and backing. The cost of embroidery supplies will vary depending on the type and quantity of supplies you need.

Once you have considered all of these factors, you can develop a budget and timeline for your digital embroidery project.

### **1.1 Specifications for embroidery are determined**

The specifications for embroidery are determined by a number of factors, including:

- ✓ Design: The complexity and size of the design will affect the type of embroidery machine and other equipment needed, as well as the time and skill required to complete the project.
- ✓ Fabric: The type of fabric will also affect the embroidery process. Some fabrics, such as stretchy fabrics, are more difficult to embroider than others.
- ✓ Thread: The type and color of thread will also need to be specified.

- ✓ Stabilizer: A stabilizer is often used to support the fabric during embroidery, especially for stretchy fabrics. The type of stabilizer will need to be specified depending on the fabric and design.
- ✓ Backing: A backing is often used to support the embroidery on the back of the fabric. The type of backing will need to be specified depending on the fabric and design.
- ✓ In addition to these factors, the following specifications may also need to be determined:
- ✓ Stitch type: There are a variety of stitch types that can be used for embroidery. The type of stitch will need to be specified based on the desired effect.
- ✓ Stitch density: The stitch density is the number of stitches per inch. The stitch density will need to be specified based on the desired quality of the embroidery.
- ✓ Stitch direction: The stitch direction is the direction in which the stitches are sewn. The stitch direction will need to be specified based on the desired effect.
- ✓ Once the specifications for the embroidery project have been determined, the project can be completed using the appropriate equipment and supplies.
- ✓ Here are some additional tips for determining the specifications for embroidery:
- ✓ Consult with a professional embroiderer. If you are unsure about any of the specifications for your embroidery project, consult with a professional embroiderer. They can help you to determine the best specifications for your project and ensure that the embroidery is completed to a high standard.
- ✓ Use a digital embroidery software program. Digital embroidery software programs can be used to create and edit embroidery designs, as well as to generate embroidery machine files. These programs can help you to ensure that your embroidery project meets all of the required specifications.
- ✓ Test the embroidery design on a scrap of fabric. Before embroidering your final project, it is a good idea to test the design on a scrap of fabric. This will help you to ensure that the design is sewn correctly and that the embroidery meets your expectations.

## **1.2 Required program features are identified digital embroidery**

The following are some required program features for digital embroidery:

- ✓ Design creation and editing: The program should allow you to create and edit embroidery designs. This includes features such as drawing tools, shape tools, and text tools.
- ✓ Digitizing: The program should be able to digitize embroidery designs. This is the process of converting a design into a machine-readable format.
- ✓ Stitch generation: The program should be able to generate embroidery machine files. These files contain all of the information needed for the embroidery machine to sew the design.



- ✓ **Previewing:** The program should allow you to preview the embroidery design before stitching it. This allows you to check for any errors in the design and to make any necessary adjustments.
- ✓ **Printing:** The program should allow you to print embroidery designs. This can be useful for transferring designs to fabric or for creating templates.
- ✓ In addition to these required features, some digital embroidery programs may also include additional features such as:
  - ✓ **Support for multiple embroidery machines:** The program may support multiple embroidery machines from different manufacturers. This allows you to use the same program to embroider on different machines.
  - ✓ **Stitch libraries:** The program may include a library of pre-made stitches. This can be useful for creating embroidery designs without having to create your own stitches.
  - ✓ **Embroidery fonts:** The program may include a library of embroidery fonts. This allows you to add text to your embroidery designs.
  - ✓ **Image tracing:** The program may be able to trace images and convert them into embroidery designs. This can be useful for creating embroidery designs from existing images.
- ✓ When choosing a digital embroidery program, it is important to consider the features that are important to you. If you are a beginner, you may want to choose a program with a user-friendly interface and a variety of pre-made designs. If you are more experienced, you may want to choose a program with more advanced features such as stitch libraries and embroidery fonts.
- ✓ Here are some additional tips for choosing a digital embroidery program:
  - ✓ **Read reviews of different programs online.** This can help you to get an idea of the pros and cons of different programs and to choose a program that is right for you.
  - ✓ **Try out different programs before you buy one.** Many digital embroidery programs offer free trials. This allows you to try out the program and see if it is right for you before you buy it.
  - ✓ **Consider your budget.** Digital embroidery programs can range in price from a few dollars to several hundred dollars. Choose a program that fits your budget and your needs.
  - ✓ **By following these tips, you can choose a digital embroidery program with the features you need to create beautiful embroideries.**

### **1.3 Garment considerations are identified digital embroidery**

When identifying garment considerations for digital embroidery, the following factors should be considered:

- ✓ Fabric type: Not all fabrics are suitable for digital embroidery. Some fabrics, such as delicate fabrics such as silk and chiffon, are more difficult to embroider than others. Fabrics that are too stretchy may also be difficult to embroider.
- ✓ Fabric weight: The weight of the fabric will also affect the embroidery process. Heavier fabrics will require a heavier thread and a more powerful embroidery machine.
- ✓ Fabric construction: The construction of the fabric will also need to be considered. For example, fabrics with a lot of seams or darts may be more difficult to embroider than fabrics with a simpler construction.
- ✓ Garment design: The design of the garment will also need to be considered. For example, garments with a lot of detail or embroidery may be more difficult to embroider than garments with a simpler design.
- ✓ Embroidery placement: The placement of the embroidery on the garment will also need to be considered. For example, embroidery on the front of a garment will be more visible than embroidery on the back of a garment.
- ✓ In addition to the above factors, the following garment considerations may also need to be taken into account:
  - ✓ Thread color: The color of the thread should complement the garment and the embroidery design.
  - ✓ Embroidery size: The size of the embroidery should be appropriate for the garment and the embroidery design.
  - ✓ Embroidery finish: The embroidery should be finished in a way that is appropriate for the garment and the embroidery design. For example, embroidery on a delicate fabric may need to be finished with a soft backing.
- ✓ By considering all of these factors, you can ensure that your digital embroidery project is a success.
- ✓ Here are some additional tips for identifying garment considerations for digital embroidery:
  - ✓ Consult with a professional embroiderer. If you are unsure about any of the garment considerations for your digital embroidery project, consult with a professional

embroiderer. They can help you to identify the best considerations for your project and ensure that the embroidery is completed to a high standard.

- ✓ Use a digital embroidery software program. Digital embroidery software programs can be used to create and edit embroidery designs, as well as to generate embroidery machine files. These programs can help you to ensure that your digital embroidery project meets all of the required garment considerations.
- ✓ Test the embroidery design on a scrap of fabric. Before embroidering your final project, it is a good idea to test the design on a scrap of fabric. This will help you to ensure that the embroidery is sewn correctly and that the garment meets your expectations.
- ✓ By following these tips, you can ensure that the garment considerations for your digital embroidery project are identified correctly and that your embroidery is completed to a high standard.

#### **1.4 Machine requirements are identified digital embroidery**

- ✓ To identify the machine requirements for digital embroidery, you should consider the following factors:
- ✓ Embroidery machine type: There are different types of embroidery machines available, such as single-head machines, multi-head machines, and commercial machines. The type of embroidery machine you need will depend on the size and complexity of your projects.
- ✓ Embroidery machine features: Embroidery machines come with a variety of features, such as different stitch types, stitch density adjustments, and automatic thread changing. Consider which features are important to you and choose a machine that has those features.
- ✓ Embroidery machine performance: Consider the performance of the embroidery machine, such as its stitching speed and embroidery area. Choose a machine that can handle the size and complexity of your projects.
- ✓ Embroidery machine price: Embroidery machines can range in price from a few hundred dollars to several thousand dollars. Set a budget before you start shopping and choose a machine that fits your budget and your needs.
- ✓ In addition to the above factors, you may also want to consider the following:

- ✓ Embroidery machine brand: There are a variety of embroidery machine brands available. Choose a brand that has a good reputation and offers good customer service.
- ✓ Embroidery machine reviews: Read reviews of different embroidery machines online to get an idea of the pros and cons of different machines.
- ✓ Once you have considered all of these factors, you can start shopping for an embroidery machine. Here are some additional tips for choosing an embroidery machine:
  - ✓ Try out different embroidery machines before you buy one. Many embroidery machine dealers offer free trials. This allows you to try out the machine and see if it is right for you before you buy it.
  - ✓ Ask for recommendations from other embroiderers. Talk to other embroiderers to get their recommendations on embroidery machines. They can tell you about the machines they use and their experiences with those machines.
- ✓ By following these tips, you can choose an embroidery machine that meets your needs and budget.
- ✓ Once you have chosen an embroidery machine, you will also need to purchase some additional supplies, such as needles, threads, stabilizers, and backing. You can find these supplies at most fabric stores or embroidery machine dealers.
- ✓ With the right embroidery machine and supplies, you can create beautiful and unique embroidered designs.

## Self-check-1

### Multiple Choice:

1. What is the first step in determining work requirements in garment digital embroidery?
  - A. Choose the right design.
  - B. Prepare the work pieces.
  - C. Set up the embroidery machine.
  - D. None of the above.
2. What is the most important factor to consider when choosing a stabilizer for digital embroidery?
  - A. The type of fabric.
  - B. The weight of the fabric.
  - C. The construction of the fabric.
  - D. All of the above.
3. What is the best way to avoid thread breaks in digital embroidery?
  - A. Use high-quality thread.
  - B. Clean and maintain your machine regularly.
  - C. Inspect your needles regularly.
  - D. All of the above

### True or False:

1. You should always use a heavy stabilizer for digital embroidery.
2. You should hoop the fabric tightly in the embroidery hoop.
3. You should test the design on a scrap of fabric before embroidering on your final project.
4. You should never leave the embroidery machine unattended while it is running.
5. You should always wear safety glasses when working with digital embroidery machines.

## **Unit two: - Select and Use Program Features digital embroidery**

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- 1.1 Selecting motifs or lettering
- 1.2 Editing embroidery designs
- 1.3 Setting programs

This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Selecting motifs or lettering
- Editing embroidery designs..
- Setting programs

## **2 Select and Use Program Features digital embroidery**

To select and use program features for digital embroidery, you will need to consult the user manual for your specific software program. However, there are some general tips that can follow:

1. Start by selecting the design creation and editing feature. This will allow you to create or edit your embroidery design.
2. Once you have created or edited your design, select the digitizing feature. This will convert your design into a machine-readable format.
3. Once your design has been digitized, select the stitch generation feature. This will generate the embroidery machine file that your machine will use to sew the design.
4. Once the embroidery machine file has been generated, select the previewing feature. This will allow you to preview the design before stitching it. This is a good opportunity to check for any errors in the design and to make any necessary adjustments.
5. Once you are satisfied with the design, select the stitching feature. This will start the embroidery process.

In addition to these basic steps, you may also want to use some of the other features of your digital embroidery software program, such as:

- ✓ **Stitch libraries:** Stitch libraries contain pre-made stitches that you can use in your designs. This can be a great way to save time and to create professional-looking embroideries.

- ✓ Embroidery fonts: Embroidery fonts allow you to add text to your designs. This can be a great way to personalize your embroideries or to add labels to your projects.
- ✓ Image tracing: Image tracing allows you to convert images into embroidery designs. This can be a great way to create embroideries of your favorite photos or images.
- ✓ By using the features of your digital embroidery software program, you can create beautiful and unique embroidered designs.
- ✓ Here are some additional tips for selecting and using program features for digital embroidery:
- ✓ Read the user manual for your software program. This will help you to learn about all of the features that your program has to offer and how to use them.
- ✓ Experiment with different features. The best way to learn how to use the features of your software program is to experiment with them. Try out different features and see what they do.
- ✓ Ask for help from other embroiderers. If you are unsure about how to use a particular feature, ask for help from other embroiderers. There are many online forums and groups where you can ask questions and get help.

By following these tips, you can select and use the program features for digital embroidery to create beautiful and unique embroidered designs.

## **2.1. Selecting motifs or lettering digital embroidery**

To select motifs or lettering for digital embroidery, you can consider the following factors:

- ✓ Purpose of the embroidery: What is the embroidery going to be used for? Is it for a garment, a home décor item, or a gift? The purpose of the embroidery will help you to choose the right motif or lettering.
- ✓ Style of the embroidery: What style of embroidery do you want? Do you want a traditional style, a modern style, or a whimsical style? The style of the embroidery will help you to choose the right motif or lettering.
- ✓ Complexity of the embroidery: How complex do you want the embroidery to be? Do you want a simple design or a complex design? The complexity of the embroidery will help you to choose the right motif or lettering.
- ✓ Size of the embroidery: How big do you want the embroidery to be? The size of the embroidery will help you to choose the right motif or lettering.
- ✓ Color of the thread: What color of thread do you want to use? The color of the thread will help you to choose the right motif or lettering.

Once you have considered these factors, you can start to look for motifs or lettering for digital embroidery. There are many resources available online and in libraries. You can also find motifs and lettering in embroidery magazines and books.

- ✓ Look for motifs or lettering that are appropriate for the purpose of the embroidery. For example, if you are embroidering a gift for a child, you may want to choose a whimsical motif. If you are embroidering a garment, you may want to choose a more classic motif.
- ✓ Choose motifs or lettering that are the right size for the embroidery. If the embroidery is going to be small, you will need to choose a small motif or lettering. If the embroidery is going to be large, you can choose a larger motif or lettering.
- ✓ Choose motifs or lettering that are the right color for the embroidery. If the embroidery is going to be on a light-colored fabric, you may want to choose a dark-colored thread. If the embroidery is going to be on a dark-colored fabric, you may want to choose a light-colored thread.
- ✓ Experiment with different motifs and lettering. The best way to find the right motif or lettering for your embroidery is to experiment. Try out different motifs and lettering and see what you like best.



## **2.2 Editing digital embroidery designs**

To edit digital embroidery designs, you can use a digital embroidery software program. These programs allow you to create, edit, and digitize embroidery designs.

- ✓ To edit a digital embroidery design, you will first need to open the design in your software program. Once the design is open, you can use the various tools in the program to make changes to the design. For example, you can:



- ✓ Resize the design: You can use the resize tool to make the design larger or smaller.
- ✓ Move the design: You can use the move tool to move the design around on the screen.
- ✓ Rotate the design: You can use the rotate tool to rotate the design.
- ✓ Change the stitch type: You can use the stitch type tool to change the type of stitch used in the design.
- ✓ Change the stitch density: You can use the stitch density tool to change the number of stitches per inch in the design.
- ✓ Add or remove stitches: You can use the add or remove stitches tools to add or remove stitches from the design.
- ✓ Change the thread color: You can use the thread color tool to change the color of the thread used in the design.



Designs are edited to achieve specifications digital embroidery

To edit digital embroidery designs to achieve specifications, you can use a digital embroidery software program. These programs allow you to create, edit, and digitize embroidery designs.

To edit a digital embroidery design to achieve specifications, you will first need to open the design in your software program. Once the design is open, you can use the various tools in the program to make changes to the design to meet the specifications. For example, you may need to:

- ✓ Resize the design: You can use the resize tool to make the design larger or smaller to meet the specified size.
- ✓ Move the design: You can use the move tool to move the design around on the screen to meet the specified placement.
- ✓ Rotate the design: You can use the rotate tool to rotate the design to meet the specified orientation.
- ✓ Change the stitch type: You can use the stitch type tool to change the type of stitch used in the design to meet the specified stitch type.
- ✓ Change the stitch density: You can use the stitch density tool to change the number of stitches per inch in the design to meet the specified stitch density.
- ✓ Add or remove stitches:

### 2.3 Program is set for operation digital embroidery

To set a program for operation in digital embroidery, you will need to:

1. Choose the right program for your machine. There are many different digital embroidery programs available, so it is important to choose one that is compatible with your embroidery machine.
2. Install the program on your computer. Once you have chosen a program, you will need to install it on your computer. Most digital embroidery programs come with an installation wizard that will guide you through the installation process.
3. Connect your embroidery machine to your computer. Once the program is installed, you will need to connect your embroidery machine to your computer. This can be done using a USB cable or a network connection.
4. Open the program and select the design you want to embroider. Once your embroidery machine is connected to your computer, you can open the digital embroidery program and select the design you want to embroider.
5. Set the program parameters. Once you have selected the design, you will need to set the program parameters. This includes things like the stitch type, stitch density, and thread color.

6. Start the embroidery process. Once you have set the program parameters, you can start the embroidery process. The program will send the design to your embroidery machine and the machine will start embroidering the design.

## **Self-check-2**

### Multiple Choices

1. When selecting a program feature for digital embroidery in garment digital embroidery, you should consider the following:  
  

A .The type of fabric	C. The type of stabilizer
B. The type of thread	D. All of the above
2. Which of the following is NOT a common program feature for digital embroidery in garment digital embroidery?  
  

A. Stitch density	C. Stitch type
B. Stitch length	D. Needle size
3. The best way to learn how to use the program features for digital embroidery in garment digital embroidery is to:  

A. Read the manufacturer's manual for your embroidery machine
B. Watch online tutorials
C. Experiment with different settings
D. All of the above

### True/False

1. It is important to test the program features on a scrap of fabric before embroidering on your final project.
  2. You can use the same program features for all types of fabric and thread.
  3. The stitch density should be adjusted depending on the type of fabric and thread you are using.
- 
1. Select the desired program.
    - Turn on the embroidery machine and press the Select Program button.
    - Use the arrow buttons to scroll through the programs and select the desired one.

- Press the Enter button to confirm your selection.
- 2. Use the program features.
  - The program features will vary depending on the embroidery machine and the program selected.
  - Some common program features include:
    - Hoop size: Select the hoop size that you will be using.
    - Stitch density: Adjust the stitch density to create a more or less dense embroidery.
    - Thread colors: Select the thread colors that you will be using.
    - Embroidery position: Position the embroidery on the fabric.
    - Mirror image: Mirror the embroidery design.
    - Rotate embroidery: Rotate the embroidery design.
    - Resize embroidery: Resize the embroidery design.
- 3. Embroider the design.
  - Once you have selected the desired program and adjusted the program features, press the Start/Stop button to begin embroidering the design.
  - The embroidery machine will automatically embroider the design according to the selected program.
  - Once the embroidery is complete, the machine will stop automatically.

### Safety Guidelines

- Always wear safety glasses when operating an embroidery machine.
- Keep your hands and fingers away from the needle while the machine is in operation.
- Do not turn off the machine until the embroidery is complete.
- Be careful not to over tighten the fabric in the hoop, as this can damage the machine.
- Use the correct needle and thread for the fabric that you are embroidering.

### Tips for Selecting and Using Program Features

- When selecting a program, consider the type of fabric and the complexity of the embroidery design.
- For more delicate fabrics, use a lower stitch density.
- For more complex designs, use a program with more features, such as the ability to mirror or rotate the design.
- Be sure to preview the embroidery design before you start embroidering to make sure that it is positioned correctly.
- Use a stabilizer to prevent the fabric from puckering while it is being embroidered.
- Test the embroidery machine on a scrap piece of fabric before embroidering on your project.

#### Creative Ideas for Using Program Features

- Use the mirror image feature to create a symmetrical embroidery design.
- Use the rotate feature to create a unique and interesting embroidery design.
- Use the resize feature to create an embroidery design that is the perfect size for your project.
- Use the thread color feature to create a colorful and eye-catching embroidery design.
- Use the embroidery position feature to place the embroidery design in a specific location on the fabric.

### **Unit three: - Prepare Work Pieces and Workstation digital embroidery**

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- 3.1 Laying out work pieces
- 3.2 Selecting backing pieces
- 3.3 Setting workbench
- 3.4 Setting up equipment and materials
- 3.5 Performing minor maintenance
- 3.6 Reporting and recording problems

This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Laying out work pieces
- Selecting backing pieces
- Setting workbench
- Setting up equipment and materials
- Performing minor maintenance
- Reporting and recording problems

### **3 Prepare Work Pieces And Workstation digital embroidery**

To prepare work pieces and workstation for digital embroidery, you will need to:

Work pieces:

- Cut the fabric to size. The fabric should be slightly larger than the embroidery design. This will give you enough fabric to hoop the fabric and to leave a seam allowance around the design.
- Iron the fabric. The fabric should be smooth and wrinkle-free before you hoop it.
- Hoop the fabric. Hoop the fabric tightly in an embroidery hoop. The fabric should be taut but not too tight.
- Trim the excess fabric. Trim the excess fabric around the hoop, leaving a seam allowance of about 1/4 inch.

- Workstation:
- Set up your embroidery machine in a well-lit area.
- Make sure that the embroidery machine is level.
- Have all of your embroidery supplies on hand. This includes things like needles, threads, stabilizers, and backing.
- Here are some additional tips for preparing work pieces and workstation for digital embroidery:
- Use the right stabilizer. The type of stabilizer you use will depend on the type of fabric you are embroidering. For example, stretchy fabrics will require a stretchy stabilizer.
- Use the right backing. The backing will support the fabric during the embroidery process and will help to prevent the fabric from puckering.
- Test the design on a scrap of fabric. Before stitching the design on your final project, it is a good idea to test the design on a scrap of fabric. This will help you to ensure that the design is sewn correctly and that the stabilizer and backing are working properly.
- By following these tips, you can prepare your work pieces and workstation for digital embroidery and create beautiful and unique embroideries.

### **3.1 Work pieces are laid out digital embroidery**

To lay out work pieces for digital embroidery, you will need to:

1. Choose the right layout. The layout of your work pieces will depend on the size and shape of the design, as well as the size of the embroidery machine hoop.
2. Center the design on the fabric. The design should be centered on the fabric so that it is evenly embroidered.
3. Hoop the fabric. Hoop the fabric tightly in an embroidery hoop. The fabric should be taut but not too tight.
4. Trim the excess fabric. Trim the excess fabric around the hoop, leaving a seam allowance of about 1/4 inch.

Here are some additional tips for laying out work pieces for digital embroidery:

- Use a layout grid. A layout grid can help you to center the design on the fabric and to position the work pieces accurately.
- Use pins or basting stitches to secure the work pieces. This will help to prevent the work pieces from shifting during the embroidery process.

- Leave enough space between the work pieces. This will allow the embroidery needle to move freely around the design.
- Test the layout on a scrap of fabric. Before stitching the design on your final project, it is a good idea to test the layout on a scrap of fabric. This will help you to ensure that the design is positioned correctly and that the work pieces are secured properly.
- By following these tips, you can lay out your work pieces for digital embroidery and create beautiful and unique embroideries.

Here are some additional considerations for laying out work pieces for digital embroidery:

- If you are embroidering a large design, you may need to break the design up into smaller pieces. This will make it easier to hoop the fabric and to embroider the design.
- If you are embroidering a design that has multiple colors, you may want to hoop the fabric for each color separately. This will help to prevent the colors from bleeding into each other.
- If you are embroidering a design that has a lot of detail, you may want to use a smaller embroidery machine hoop. This will give you more control over the stitching and will help to ensure that the design is embroidered accurately.
- With a little planning and preparation, you can lay out your work pieces for digital embroidery and create beautiful and unique embroideries.
- Backing pieces are selected to suit fabric digital embroidery
- select backing pieces to suit fabric for digital embroidery, you will need to consider the following factors:
  - Type of fabric: The type of fabric will determine the type of backing you need to use. For example, stretchy fabrics will require a stretchy backing.
  - Weight of fabric: The weight of the fabric will also determine the type of backing you need to use. For example, heavy fabrics will require a heavier backing.
  - Construction of fabric: The construction of the fabric will also need to be considered. For example, fabrics with a lot of seams or darts may require a backing with extra support.
  - Type of embroidery: The type of embroidery will also determine the type of backing you need to use. For example, dense embroidery will require a heavier backing than light embroidery.
- Here are some general guidelines for selecting backing pieces to suit fabric for digital embroidery:



- For light fabrics, such as cotton and linen, use a lightweight backing, such as tear-away stabilizer.
- For medium-weight fabrics, such as denim and canvas, use a medium-weight backing, such as cut-away stabilizer.
- For heavy fabrics, such as upholstery fabric and leather, use a heavy-weight backing, such as water-soluble stabilizer.
- For stretchy fabrics, such as knit fabric and spandex, use a stretchy backing, such as wash-away stabilizer.
- It is also important to consider the color of the backing. If you are embroidering on a light-colored fabric, you may want to use a white backing. If you are embroidering on a dark-colored fabric, you may want to use a black backing. This will help to prevent the color of the backing from showing through the embroidery.
- Secure the backing to the fabric with pins or basting stitches. This will help to prevent the backing from shifting during the embroidery process.

By following these tips, you can select the right backing pieces to suit fabric for digital embroidery and create beautiful and unique embroideries.

### **3.3 Workbench and seating are set up according to OHS practices digital embroidery**

To set up a workbench and seating according to OHS practices for digital embroidery, you will need to consider the following factors:

- Workbench height: The workbench should be at a height that is comfortable for you to work at. Your elbows should be bent at a 90-degree angle when you are standing at the workbench.
- Workbench surface: The workbench surface should be smooth and level. It should also be large enough to accommodate your embroidery machine and all of your supplies.
- Workbench lighting: The workbench should be well-lit. The lighting should be positioned so that it does not cast shadows on your work area.
- Seating: The seating should be comfortable and supportive. It should also be at a height that allows you to reach the workbench comfortably.
- Here are some additional tips for setting up a workbench and seating according to OHS practices for digital embroidery:

- Use an anti-fatigue mat. An anti-fatigue mat can help to reduce fatigue and discomfort in your feet and legs.
- Position your monitor at eye level. This will help to reduce neck and shoulder strain.
- Take breaks throughout the day. Get up and move around every 20-30 minutes to prevent muscle fatigue.
- Stretch regularly. Stretching can help to reduce muscle tension and improve flexibility.
- By following these tips, you can set up a workbench and seating according to OHS practices for digital embroidery and reduce your risk of injury.
- Here are some additional OHS considerations for digital embroidery:
- Use a dust mask. Embroidery can create a lot of dust, so it is important to wear a dust mask to protect your lungs.
- Wear safety glasses. Embroidery needles can break, so it is important to wear safety glasses to protect your eyes.
- Be aware of your surroundings. Embroidery machines can be dangerous, so it is important to be aware of your surroundings and to take precautions to avoid accidents.
- By following these tips, you can safely enjoy your digital embroidery hobby.

### **3.4 Set up Equipment and materials to specifications for work digital embroidery**

To set up and adjust equipment and materials to specifications for work digital embroidery, you will need to:

- Read the user manual for your embroidery machine. This will help you to learn how to set up and adjust your machine correctly.
- Choose the right needle. The type of needle you use will depend on the type of fabric you are embroidering. For example, delicate fabrics will require a finer needle than sturdy fabrics.
- Choose the right thread. The type of thread you use will also depend on the type of fabric you are embroidering. For example, stretchy fabrics will require a stretchy thread.

- Choose the right stabilizer. The type of stabilizer you use will depend on the type of fabric you are embroidering and the type of embroidery you are doing. For example, dense embroidery will require a heavier stabilizer than light embroidery.
- Choose the right backing. The type of backing you use will depend on the type of fabric you are embroidering and the type of embroidery you are doing. For example, stretchy fabrics will require a stretchy backing.

Once you have chosen the right needle, thread, stabilizer, and backing, you can start to set up your embroidery machine:

1. Thread the needle. Follow the instructions in your user manual to thread the needle.
2. Wind the bobbin. Follow the instructions in your user manual to wind the bobbin.
3. Insert the bobbin into the machine. Follow the instructions in your user manual to insert the bobbin into the machine.
4. Hoop the fabric. Hoop the fabric tightly in an embroidery hoop. The fabric should be taut but not too tight.
5. Load the design. Load the embroidery design onto your machine.
6. Set the machine parameters. Set the machine parameters, such as the stitch type, stitch density, and thread color.

Once you have set up your embroidery machine, you can start to adjust the equipment and materials to specifications for your work:

- Adjust the needle tension. The needle tension should be adjusted so that the top thread and the bottom thread meet evenly in the middle of the fabric.
- Adjust the stitch length. The stitch length should be adjusted so that the stitches are the desired length.
- Adjust the stitch density. The stitch density should be adjusted so that the embroidery is the desired density.
- Adjust the stabilizer. The stabilizer should be adjusted so that it is the correct size and shape for the embroidery design.
- Adjust the backing. The backing should be adjusted so that it is the correct size and shape for the embroidery design.
- Once you have adjusted the equipment and materials to specifications, you can start embroidering!
- Here are some additional tips for setting up and adjusting equipment and materials to specifications for work digital embroidery:

- Test the settings on a scrap of fabric before embroidering on your final project. This will help you to ensure that the settings are correct and that the embroidery will be of good quality.
- Use a magnifying glass to inspect the embroidery. This will help you to identify any errors in the stitching and to make necessary adjustments.
- Clean your embroidery machine regularly. This will help to prevent problems with the machine and will help to ensure that the embroidery is of good quality.
- By following these tips, you can set up and adjust equipment and materials to specifications for work digital embroidery and create beautiful and professional-looking embroideries.

### **3.5 Maintenance digital embroidery**

To perform routine minor maintenance on a digital embroidery machine according to manufacturer specifications, you will need to:

- Read the user manual for your embroidery machine. This will help you to learn how to perform routine maintenance tasks correctly.
- Clean the machine regularly. This includes cleaning the needle plate, bobbin case, and feed dogs. You can use a soft brush or a vacuum cleaner to clean the machine.
- Oil the machine regularly. This includes oiling the moving parts of the machine, such as the needle bar and the shuttle hook. You can use a sewing machine oil or a silicone lubricant to oil the machine.
- Sharpen the needle regularly. A dull needle can cause the thread to break and can also damage the fabric. You can use a needle sharpener or a needle file to sharpen the needle.
- Check the tension of the top thread and the bottom thread regularly. The tension of the top thread and the bottom thread should be balanced so that the stitches meet evenly in the middle of the fabric. You can adjust the tension of the top thread and the bottom thread using the tension dials on the machine.
- Check the timing of the machine regularly. The timing of the machine ensures that the needle and the bobbin hook are working together properly. If the timing is off, the machine may not sew correctly. You can check the timing of the machine using a timing tester or by having the machine serviced by a professional.
- In addition to the above tasks, you may also need to perform other maintenance tasks, such as cleaning the dust filter and replacing the bobbin case spring. Consult the user manual for your embroidery machine for specific instructions on how to perform these tasks.
- Here are some additional tips for performing routine minor maintenance on a digital embroidery machine according to manufacturer specifications:

- Use the correct tools and lubricants. Using the incorrect tools or lubricants can damage the machine.
- Be careful not to overtighten any screws or nuts. Overtightening can damage the machine.
- If you are unsure about how to perform a maintenance task, consult the user manual or have the machine serviced by a professional.
- By following these tips, you can perform routine minor maintenance on your digital embroidery machine according to manufacturer specifications and help to extend the life of your machine.

Any problems are reported and recorded digital embroidery

Yes, any problems with digital embroidery should be reported and recorded. This can help you to identify any patterns or trends in the problems, and to take steps to prevent them from happening again. It can also help you to troubleshoot problems if they do occur.

There are a number of different ways to report and record problems with digital embroidery. You can keep a notebook or journal, or you can use a digital tool such as a spreadsheet or database. You should include the following information in your report:

- Date and time of the problem
- Description of the problem
- Steps you have taken to try to resolve the problem
- Any other relevant information, such as the type of fabric you are using, the type of thread you are using, and the type of stabilizer you are using
- If you are unable to resolve the problem yourself, you can report it to the manufacturer of your embroidery machine or to a qualified technician.
- Here are some additional tips for reporting and recording problems with digital embroidery:
- Be as specific as possible when describing the problem. This will help the manufacturer or technician to diagnose the problem and to provide you with a solution.
- Include any error messages that you receive from your embroidery machine.
- If possible, take photos or videos of the problem. This can help the manufacturer or technician to understand the problem and to provide you with a solution.

By reporting and recording problems with digital embroidery, you can help to improve the quality of digital embroidery and to reduce the number of problems that other embroiderers experience.

### Self-check-3

#### Multiple Choices

1. Which of the following is NOT a step in preparing work pieces for digital embroidery?
    - A. Cut the fabric to size.
    - B. Iron the fabric.
    - C. Hoop the fabric.
    - D. Trim the excess fabric.
  2. Which of the following is NOT a consideration when setting up your workstation for digital embroidery?
    - A. The height of the workbench.
    - B. The lighting of the workbench.
    - C. The type of chair you use.
    - D. The type of needles you use
- 
1. You should use a stabilizer when embroidering on stretchy fabrics
  2. You should use a backing when embroidering on delicate fabrics
  3. You should test the embroidery design on a scrap of fabric before embroidering on your final project)
  4. You should wear safety glasses when embroidering.)
  5. You should clean your embroidery machine regularly.

## Unit four: - Produce Digital Embroidery

- This learning u

nit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- 4.1 Following OHS practice Required for digital embroidery
- 4.2 Required *program features* are ident Producing embroidery
- 4.3 Assessing works and adjusting machines
- 4.4 Managing production problems

.This unit will also assist you to attain the learning outcomes stated in the cover page.

Specifically, upon completion of this learning guide, you will be able to:

- Required Following OHS practice
- Required *program features* are ident Producing embroidery
- Assessing works and adjusting machines
- Managing production problems

### 1. Produce Digital Embroidery

To produce digital embroidery, you will need:

- ❖ A digital embroidery machine
- ❖ Stabilizer
- ❖ Embroidery software
- ❖ Backing
- ❖ Embroidery needles
- ❖ Fabric
- ❖ Embroidery thread



1. Choose a design. You can either purchase a pre-made design or create your own design using embroidery software.
2. Prepare your fabric. Hoop your fabric with a stabilizer and backing.

3. Load the design into your embroidery machine. Follow the instructions in your machine's manual.
4. Thread your machine. Follow the instructions in your machine's manual.
5. Embroider the design. Follow the instructions in your machine's manual.

Tips:

- ❖ Use the right needle for the fabric you are embroidering.
- ❖ Use the right thread for the fabric you are embroidering.
- ❖ Use the right stabilizer for the fabric you are embroidering.
- ❖ Hoop your fabric tightly, but not too tightly.
- ❖ Adjust the tension of your machine correctly.
- ❖ Test the design on a scrap of fabric before embroidering on your final project.
- ❖ Clean your machine regularly.
- ❖ Here are some additional tips for producing digital embroidery:
- ❖ If you are embroidering a large design, you may need to break the design up into smaller pieces.
- ❖ If you are embroidering a design that has multiple colors, you may want to hoop the fabric for each color separately. This will help to prevent the colors from bleeding into each other.
- ❖ If you are embroidering a design that has a lot of detail, you may want to use a smaller embroidery machine hoop. This will give you more control over the stitching and will help to ensure that the design is embroidered accurately.
- ❖ Be patient and take your time. Digital embroidery can be a time-consuming process, but it is worth it for the beautiful results.

#### **4.1 Digital Embroidery is produced**

Digital embroidery is produced using digital embroidery machine and embroidery software. The embroidery machine is programmed to stitch the desired design onto the fabric using a needle and thread. The embroidery software is used to create and edit the embroidery designs.

The process of producing digital embroidery can be broken down into the following steps:

1. Choose a design. The design can be purchased from a pre-made design library or created using embroidery software.



2. Prepare the fabric. The fabric is hooped with a stabilizer and backing. The stabilizer supports the fabric during the embroidery process and the backing helps to prevent the fabric from puckering.
3. Load the design into the embroidery machine. The design is loaded onto the embroidery machine using a USB drive or a network connection.
4. Thread the machine. The machine is threaded with the desired thread color.
5. Embroider the design. The embroidery machine stitches the design onto the fabric.

Once the embroidery is complete, the fabric is removed from the hoop and the excess fabric and backing is trimmed away. The embroidery can then be finished with a zigzag stitch or a satin stitch to prevent fraying.

Digital embroidery can be used to create a wide variety of items, such as clothing, home décor, and gifts. It is a popular choice for crafters and hobbyists, as well as for businesses that produce embroidered products.

Here are some of the benefits of digital embroidery:

- ❖ Accuracy: Digital embroidery machines are very accurate, which allows for precise stitching and complex designs.
- ❖ Versatility: Digital embroidery machines can be used to embroider a wide variety of fabrics, including cotton, linen, denim, and leather.
- ❖ Creativity: Digital embroidery software allows for the creation of endless designs, from simple text to complex images.
- ❖ Efficiency: Digital embroidery machines can stitch designs quickly and efficiently, which is ideal for large production runs.
- ❖ If you are interested in learning more about digital embroidery, there are many resources available online and in libraries. You can also find many digital embroidery tutorials on YouTube.
- ❖ OHS practices are followed digital embroidery
- ❖ Yes, it is important to follow OHS practices when doing digital embroidery. Here are some tips:
  - ❖ Set up your workstation ergonomically. Make sure that your chair is at a comfortable height and that your computer monitor is at eye level. This will help to prevent neck and shoulder pain.
  - ❖ Take breaks throughout the day. Get up and move around every 20-30 minutes to prevent muscle fatigue.

- ❖ Use the right tools. Use sharp needles and quality thread to prevent problems with the machine.
- ❖ Be careful when handling needles. Always wear safety glasses and be mindful of where you are placing your needles.
- ❖ Keep your work area clean and tidy. This will help to prevent accidents and injuries.
- ❖ In addition to the above tips, here are some other OHS practices that you can follow when doing digital embroidery:
- ❖ Wear a dust mask. Embroidery can create a lot of dust, so it is important to wear a dust mask to protect your lungs.
- ❖ Be aware of your surroundings. Embroidery machines can be dangerous, so it is important to be aware of your surroundings and to take precautions to avoid accidents.
- ❖ Report any problems to your supervisor. If you notice any problems with the machine or with the embroidery process, report them to your supervisor immediately.
- ❖ By following these OHS practices, you can help to protect yourself from injuries and accidents when doing digital embroidery.
- ❖ Here are some additional tips for following OHS practices when doing digital embroidery:
- ❖ Keep your embroidery machine clean and well-maintained. This will help to prevent problems with the machine and will help to ensure that the embroidery is of good quality.
- ❖ Follow the manufacturer's instructions for using your embroidery machine. This will help to ensure that you are using the machine safely and correctly.
- ❖ Be aware of the risks associated with digital embroidery and take steps to mitigate those risks. For example, you should be aware of the risk of needle breakage and take steps to prevent it, such as using sharp needles and quality thread.

## **4.2 Quality standards and production specification of digital embroider**

To assess work for compliance with quality standards and production specifications in digital embroidery, you will need to consider the following factors:

- ❖ **Stitch quality:** The stitches should be even and consistent, with no loose threads or breaks. The stitch density should be appropriate for the fabric and design.
- ❖ **Design accuracy:** The design should be embroidered accurately, with no errors in the stitching or color placement.
- ❖ **Fabric quality:** The fabric should be smooth and free of wrinkles or puckering. The fabric should also be compatible with the embroidery design.

- ❖ Overall appearance: The embroidery should have a professional and finished appearance.
- ❖ In addition to the above factors, you may also need to consider specific quality standards and production specifications depending on your industry or customer requirements. For example, you may need to meet certain standards for color accuracy, stitch density, or fabric quality.

Here are some specific tips for assessing work for compliance with quality standards and production specifications in digital embroidery:

- ❖ Develop a quality control checklist. This will help you to systematically assess the quality of the embroidery against the relevant standards and specifications.
- ❖ Use a magnifying glass to inspect the embroidery. This will help you to identify any small errors that you may not be able to see with the naked eye.
- ❖ Compare the embroidery to the original design. Make sure that the design is embroidered accurately and that all of the details are included.
- ❖ Feel the embroidery. The embroidery should be smooth and free of any bumps or ridges.
- ❖ Ask a second person to inspect the embroidery. This can help you to get a fresh perspective and to identify any errors that you may have missed.
- ❖ If you are unsure about whether or not a piece of embroidery meets quality standards and production specifications, you can consult with a professional embroiderer.
- ❖ Here are some additional tips for assessing work for compliance with quality standards and production specifications in digital embroidery:
- ❖ Document the results of your quality control checks. This will help you to identify trends and to make improvements to your production process over time.
- ❖ Train your employees on quality standards and production procedures. This will help to ensure that everyone is working on the same page and that the embroidery meets quality standards and production specifications.
- ❖ By following these tips, you can assess work for compliance with quality standards and production specifications in digital embroidery and ensure that your customers are receiving high-quality products.

Machine is checked and adjusted to ensure optimum performance digital embroidery

To check and adjust a digital embroidery machine to ensure optimum performance, you should:

1. Read the manufacturer's manual. This will provide you with specific instructions on how to check and adjust your machine.
2. Clean the machine. Remove any dust or debris from the machine. This will help to prevent problems with the machine and will help to ensure that the embroidery is of good quality.
3. Oil the machine. Oil the moving parts of the machine, such as the needle bar and the shuttle hook. This will help to reduce friction and wear and tear.
4. Check the tension of the top thread and the bottom thread. The tension of the top thread and the bottom thread should be balanced so that the stitches meet evenly in the middle of the fabric. You can adjust the tension of the top thread and the bottom thread using the tension dials on the machine.
5. Check the timing of the machine. The timing of the machine ensures that the needle and the bobbin hook are working together properly. If the timing is off, the machine may not sew correctly. You can check the timing of the machine using a timing tester or by having the machine serviced by a professional.

In addition to the above tasks, you may also need to perform other maintenance tasks, such as cleaning the dust filter and replacing the bobbin case spring. Consult the user manual for your embroidery machine for specific instructions on how to perform these tasks.

Here are some additional tips for checking and adjusting a digital embroidery machine to ensure optimum performance:

- ❖ Use the correct tools and lubricants. Using the incorrect tools or lubricants can damage the machine.
- ❖ Be careful not to over tighten any screws or nuts. Over tightening can damage the machine.
- ❖ If you are unsure about how to check or adjust a particular part of the machine, consult the manufacturer's manual or have the machine serviced by a professional.
- ❖ By following these tips, you can check and adjust your digital embroidery machine to ensure optimum performance and produce high-quality embroideries.

Production problems such as thread breaks are managed digital embroidery

Production problems such as thread breaks can be managed in digital embroidery by taking the following steps:

1. Identify the cause of the problem. There are many possible causes of thread breaks in digital embroidery, such as:

- ❖ Incorrect needle size: The needle size should be appropriate for the thread weight and fabric type.
  - ❖ Incorrect needle type: The needle type should be appropriate for the fabric type.
  - ❖ Dull needle: A dull needle can cause the thread to break.
  - ❖ Incorrect thread tension: The tension of the top thread and the bottom thread should be balanced.
  - ❖ Poor quality thread: Cheap or low-quality thread is more likely to break.
  - ❖ Dirty or clogged machine: Dust and debris can build up in the machine and cause thread breaks.
  - ❖ Worn or damaged machine parts: Worn or damaged machine parts can cause the machine to malfunction and cause thread breaks.
2. Once you have identified the cause of the problem, you can take steps to correct it. For example, if the thread is breaking because the needle is dull, you can replace the needle with a sharp one. If the thread is breaking because the tension is too tight, you can loosen the tension.
  3. If you are unable to correct the problem yourself, you may need to have the machine serviced by a professional.

Here are some additional tips for managing production problems such as thread breaks in digital embroidery:

- ❖ Use high-quality thread. High-quality thread is less likely to break than cheap or low-quality thread.
- ❖ Clean and maintain your machine regularly. This will help to prevent the machine from getting dirty or clogged, which can cause thread breaks.
- ❖ Inspect your needles regularly. Replace dull or damaged needles immediately.
- ❖ Use the correct needle size and type for the fabric and thread you are using.
- ❖ Adjust the thread tension carefully. The tension should be balanced for the top thread and bottom thread.
- ❖ If you are experiencing frequent thread breaks, consult with a professional embroiderer for assistance.

## Self-check-4

Multiple Choices:

1. Which of the following is NOT a type of digital embroidery machine?
  - A. Flatbed
  - B. Tubular
  - C. Chain stitch
  - D. Multi-needle
2. What is the most important factor to consider when choosing a stabilizer for digital embroidery?
  - A. The weight of the fabric
  - B. The type of fabric
  - C. The design complexity
  - D. All of the above
3. What is the best way to prevent thread breaks in digital embroidery?
  - A. Use high-quality thread
  - B. Clean and maintain your machine regularly
  - C. Inspect your needles regularly
  - D. All of the above

True/False:

1. Digital embroidery is a type of machine embroidery that uses a computer to control the stitching process
2. Digital embroidery can be used to embroider a wide variety of fabrics, including cotton, linen, denim, and leather.
3. Digital embroidery machines are very expensive and difficult to operate
4. It is important to follow OHS practices when doing digital embroidery to avoid injuries
5. Digital embroidery is a relatively new technology and is still under development

## **Unit five: - Dispatch completed work digital embroidery**

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- 5.1 Checking completed work
- 5.2 Reporting and correcting identified faults
- 5.3 Completing and documenting work.

.This unit will also assist you to attain the learning outcomes stated in the cover page.

Specifically, upon completion of this learning guide, you will be able to:

- Checking completed work
- Reporting and correcting identified faults
- Completing and documenting work.

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## **2. Dispatch completed work digital embroidery**

Dispatching completed digital embroidery work involves the following steps:

1. Inspect the work. Before dispatching any completed work, it is important to inspect it carefully to ensure that it meets the customer's requirements and is of high quality. This includes checking for any defects, such as loose threads, puckering, or color bleeding.
2. Package the work. Once the work has been inspected, it needs to be packaged carefully to protect it during shipping. This may involve wrapping the work in tissue paper, placing it in a bubble-wrap envelope, and packing it in a sturdy box.
3. Address and label the package. The package needs to be addressed and labeled correctly with the customer's name and address, as well as your own company information. It is also important to include a return address in case the package cannot be delivered.
4. Choose a shipping method. There are a variety of shipping methods available, so you can choose the one that best meets your needs and budget. Some popular shipping methods include USPS Priority Mail, FedEx Ground, and UPS Ground.
5. Ship the package. Once you have chosen a shipping method, you need to ship the package. Be sure to keep the tracking number so that you can track the package and ensure that it is delivered to the customer on time.

Here are some additional tips for dispatching completed digital embroidery work:

- Communicate with your customer. Let your customer know when you expect the work to be completed and when it will be shipped. This will help to set expectations and avoid any surprises.
- Offer tracking information. Once the work has been shipped, provide your customer with the tracking information so that they can track the package. This will help to give them peace of mind and ensure that they know when to expect delivery.
- Insure the package. It is a good idea to insure the package in case it is lost or damaged during shipping. This will protect you from financial loss.
- Follow up with your customer. After the package has been delivered, follow up with your customer to make sure that they received the work and are satisfied with it. This shows that you care about your customers and that you are committed to providing them with a positive experience.
- By following these tips, you can ensure that your completed digital embroidery work is dispatched safely and efficiently.

## **5.1 Completed work of digital embroidery**

To check completed digital embroidery work, you should look for the following:

- Stitch quality: The stitches should be even and consistent, with no loose threads or puckering.
- Color matching: The thread colors should match the design and should not bleed or fade.
- Design accuracy: The design should be accurately transferred to the fabric and the stitches should follow the design lines.
- Overall appearance: The embroidery should look neat and finished, with no loose threads or stray stitches.
- Here are some specific things to look for when checking completed digital embroidery work:
  - Make sure that all of the stitches are complete and that there are no loose threads.
  - Check for any puckering or distortion in the fabric.
  - Make sure that all of the colors are correct and that there is no bleeding or fading.
  - Check for any errors in the design, such as missing stitches or incorrect stitching order.
  - Make sure that the embroidery is centered and evenly spaced on the fabric.
- If you find any defects in the embroidery, you can try to repair them yourself or you can return the work to the embroiderer for repair.



Here are some additional tips for checking completed digital embroidery work:

- Use a magnifying glass to inspect the embroidery closely for any defects.
- Compare the embroidery works to the original design to ensure that it is accurate.
- Check the back of the embroidery to make sure that there are no loose threads or stray stitches.
- If you are unsure whether or not a defect is significant, it is always best to err on the side of caution and return the work to the embroiderer for repair.
- By following these tips, you can ensure that your completed digital embroidery work is of the highest quality.

## **5.2 Reporting and correcting faults in digital embroidery**

To report and correct identified faults in digital embroidery, you can follow these steps:

1. Identify the fault. The first step is to identify the fault and its root cause. This may involve inspecting the embroidered product, talking to your employees, and reviewing your production process. Once you know what the fault is and why it is happening, you can develop a plan to resolve it.
2. Report the fault. Once you have identified the fault, you need to report it to the appropriate person. This may be your supervisor, a quality control inspector, or the customer. When reporting the fault, be sure to provide as much detail as possible, including the type of fault, the affected product, and the date and time that the fault was discovered.
3. Correct the fault. Once the fault has been reported, it needs to be corrected. This may involve repairing the embroidered product, replacing the product, or making changes to your production process.
4. Follow up. After the fault has been corrected, be sure to follow up with the customer to ensure that they are satisfied with the resolution.

Here are some additional tips for reporting and correcting identified faults in digital embroidery:

- Be proactive. The best way to avoid faults is to be proactive. This means regularly inspecting your embroidered products and monitoring your production process.
- Communicate with your team. It is important to communicate with your team about faults and the steps that are being taken to resolve them. This will help to keep everyone informed and engaged in the process.
- Be transparent with your customers. If a customer discovers a fault in your embroidered product, be transparent with them about the issue and the steps that you are taking to resolve it.

- Learn from your mistakes. When a fault occurs, take some time to learn from it. What caused the fault? What could you have done differently to prevent it? This information can help you to avoid similar faults in the future.
- By following these tips, you can ensure that identified faults in digital embroidery are reported and corrected efficiently and effectively. This will help to minimize the impact of faults on our business and your customers.

### **5.3 Completing and documenting of digital embroidery**

To complete and document work in digital embroidery, you can follow these steps:

1. Complete the work. This involves embroidering the design on the fabric according to the digitizing file. Once the embroidery is complete, you should inspect it carefully for any defects. If you find any defects, you need to repair them before completing the work.
2. Document the work. Once the work is complete, you should document it. This may involve taking pictures of the embroidery, filling out a checklist, or writing a report. The documentation should include the following information:
  - ✓ The date and time that the work was completed
  - ✓ The name of the customer
  - ✓ The design that was embroidered
  - ✓ The type of fabric that was used
  - ✓ The type of thread that was used
  - ✓ Any notes about the work, such as any defects that were found or repaired

The documentation can be used to track your work, ensure that it meets the customer's requirements, and troubleshoot any problems that may occur.

Here are some additional tips for completing and documenting work in digital embroidery:

- ✓ Use a work order system. A work order system can help you to keep track of your work and ensure that all of the necessary steps are completed.
- ✓ Use a checklist. A checklist can help you to ensure that all of the necessary tasks are completed for each job.
- ✓ Take pictures of your work. Taking pictures of your work is a good way to document the work and to provide proof to the customer that the work was completed as specified.
- ✓ Write a report. If you are completing a complex job, it may be helpful to write a report that documents the work. This report can be used to communicate with the customer and to

## Operation sheet-

Operation Sheet Procedures: Prepare Work Pieces and Workstation for Digital Embroidery

Date

Purpose:

Time

To standardize the procedures for preparing work pieces and workstations for digital embroidery, ensuring a consistent and high-quality product

Scope:

This operation sheet applies to all digital embroidery operators.

Responsibilities:

- Digital embroidery operators are responsible for following the procedures outlined in this operation sheet to prepare work pieces and workstations.
- Quality control personnel are responsible for inspecting work pieces and workstations to ensure that they meet the required standards.

### 3. Prepare the workstation.

- Clean and organize the workstation. This includes removing any debris, cleaning the embroidery machine, and organizing all supplies and materials.
- Make sure that the embroidery machine is properly threaded and calibrated.
- Load the embroidery design into the machine.

### 4. Prepare the work piece.

- Choose the appropriate stabilizer for the work piece. The stabilizer should be the same size or slightly larger than the work piece and should be compatible with the fabric and embroidery design.
- Attach the stabilizer to the work piece. This can be done using spray adhesive, double-sided tape, or basting stitches.
- Hoop the work piece. The hoop should be large enough to accommodate the work piece and stabilizer, and it should be centered in the hoop.
- Trim any excess stabilizer.

### 5. Inspect the work piece and workstation.

- Make sure that the work piece is properly hooped and that the stabilizer is securely attached.

- Check the embroidery machine to ensure that it is properly threaded and calibrated.
- Once the work piece and workstation have been inspected, the operator can begin embroidering.

#### Safety Precautions:

- Always wear safety glasses when operating the embroidery machine.
- Keep your hands away from the needle while the machine is running.
- Be careful not to overload the hoop, as this can damage the machine.
- Be sure to unplug the embroidery machine before cleaning or threading it.

#### Quality Control Standards

- The work piece should be properly hooped and the stabilizer should be securely attached.
- The embroidery machine should be properly threaded and calibrated.
- The embroidery design should be centered on the work piece.
- The embroidery should be free of defects, such as puckering, skipped stitches, and thread breaks.

<b>LAP Test</b>	<b>Practical Demonstration</b>
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Name: \_\_\_\_\_

Date: \_\_\_\_\_

Time started: \_\_\_\_\_

Time finished: \_\_\_\_\_

**Instruction I:** Given necessary templates, tools and materials you are required to perform the following tasks within 10 hours.

**Task1.** Prepare the embroidery machine:

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**Task2.** Load the embroidery design.

**Task3.** Embroider the design:

**Task4.** Inspect the finished embroidery:

**Task5.** Package the finished embroidery

## **REFERENCE**

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Digital Embroidery Secrets by Vicki Lynn Nash (2016)

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**Participants of this Module (Participants of this Module (training material) preparation**

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