Garment Production

Level – III

Based on November, 2023 Curriculum Version II





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Acronym

(TTLM) Teaching, Training and Learning Materials

(SOPs) Standard operating procedures

(POM) point of measure

Introduction to the Module

Applying finishing techniques to garment products is a crucial step in the manufacturing process that enhances the overall quality, appearance, and functionality of the garments. Finishing involves a range of processes and treatments that are applied to completed garments. Here are some common finishing techniques used in garment production: Pressing and Steaming, Hemming, Seam Finishes, Buttonholes and Buttons, Zippers and Other Closures, Appliqué and Embroidery, Trims and Embellishments, and Quality Control

Module covers the units:

- Determine job requirements
- Workstation
- Finish work

Learning Objective of the Module

- Determine job requirements
- Prepare workstation
- Finish work

Module Instruction

For effective use this module trainees are expected to follow the following module instruction:

1. Read the information written in each unit
2. Accomplish the Self-checks at the end of each unit
3. Perform Operation Sheets which were provided at the end of units
4. Do the “LAP test” giver at the end of each unit and
5. Read the identified reference book for Examples and exercise

Unit One: Job Requirements

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

- Over view of Job Requirements
- Standard operating procedures
- Job requirements from specifications

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:

- Follow standard operating procedures
- Identify job requirements from specifications
- Job requirements from specifications

1.1 Over view of Job Requirements

In garment manufacturing vary depending on the specific role and the company. However, some common requirements include:

Education and training: Many entry-level garment manufacturing jobs do not require any formal education or training. However, some employers may prefer to hire workers with a high school diploma or GED. Some jobs, such as garment engineers and pattern makers, may require a college degree or other specialized training.

Experience: Entry-level garment manufacturing jobs may not require any experience. However, for more senior positions, such as supervisor or manager, employers may prefer to hire workers with several years of experience in the garment industry. Skills and abilities: Some common skills and abilities required for garment manufacturing jobs include:

Sewing skills

- Attention to detail
- Ability to follow instructions
- Ability to work independently and as part of a team
- Manual dexterity
- Physical fitness

In addition to these general requirements, some garment manufacturing jobs may have specific requirements, such as knowledge of particular types of machinery or software.

Here are some examples of specific job requirements for garment manufacturing jobs:

- Garment production worker: Sewing skills, attention to detail, ability to follow instructions, manual dexterity
- Garment production supervisor: Ability to manage a team of workers, knowledge of garment production processes, ability to identify and solve problems
- Garment production engineer: Bachelor's degree in engineering, knowledge of garment production processes, ability to design and implement new production methods
- Garment production quality control inspector: Attention to detail, knowledge of garment production processes, ability to identify and record defects

- Garment production pattern maker: Knowledge of garment construction, ability to use CAD software, ability to create patterns for different sizes and styles of garments



1.2 Standard operating procedures of garment finishing

Garment finishing refers to the final steps and processes involved in completing a garment after it has been constructed. These procedures are essential for achieving a polished and professional appearance, enhancing the overall quality and appeal of the garment. Here are some common procedures involved in garment finishing:

1. **Pressing**: Pressing involves the use of an iron or a pressing machine to remove wrinkles, creases, and any fabric distortions from the garment. It helps to shape and flatten the fabric, giving it a crisp and smooth appearance.

2. **Hemming**: Hemming is the process of finishing the raw edges of the garment, typically the bottom edge or sleeves. It can be done by folding and sewing a narrow, folded edge or by using specialized hemming techniques like blind hems or rolled hems.
3. **Buttonholes and Buttons**: If the garment has buttons, buttonholes need to be created. This is often done using a buttonhole machine or by hand, ensuring the buttonholes are the right size and properly positioned. Buttons are then attached securely to the garment.
4. **Trimming and Embellishments**: Trimming and embellishments, such as lace, ribbons, or decorative stitching, can be added to enhance the aesthetic appeal of the garment. These elements are carefully attached to the garment using appropriate sewing techniques.
5. **Fasteners and Closures**: Garments may have various types of fasteners and closures, such as zippers, snaps, hooks and eyes, or Velcro. These components are attached securely to the garment, ensuring smooth and functional operation.
6. **Lining**: If the garment has a lining, it needs to be inserted and attached properly. The lining provides a clean finish on the inside of the garment, hides construction details, and improves comfort and durability.
7. **Final Fittings and Adjustments**: The garment is tried on to check the overall fit and appearance. Any necessary adjustments, such as taking in or letting out seams, shortening or lengthening hems, or modifying the shape, are made to ensure a perfect fit.
8. **Quality Control**: Throughout the finishing process, quality control checks are conducted to identify and rectify any defects or inconsistencies. This includes checking for loose threads, proper stitching, even hems, correct positioning of closures, and overall garment quality.
9. **Final Pressing and Packaging**: Once the finishing procedures are complete, the garment is given a thorough final press to remove any remaining wrinkles or creases. It is then carefully folded, packaged, and prepared for shipment or display.

It's worth noting that the specific procedures and techniques used for garment finishing can vary depending on the garment type, design, and manufacturer's preferences. Professional garment

finishers and factories often have specialized equipment and skilled personnel dedicated to these tasks to ensure high-quality finished products.

- Finishing SOP: This SOP describes how to finish garments, including pressing, folding, and packaging.



- Quality control SOP: This SOP describes how to inspect garments for defects at various stages of the production process.



Work Health and Safety Requirements

Complying with work health and safety (OHS) requirements at all times in garment manufacturing is essential for protecting the health and safety of workers. OHS requirements

vary from country to country, but there are some general principles that apply to all garment manufacturing work places. Here are some tips for complying with OHS requirements in garment manufacturing:

Identify and assess OHS hazards. The first step is to identify and assess all of the OHS hazards in your workplace. This includes hazards such as dangerous machinery, chemicals, and repetitive tasks. Once you have identified the hazards, you need to assess the risks associated with each hazard and implement appropriate control measures. Provide training to workers. Workers need to be trained on how to safely perform their jobs and how to identify and avoid OHS hazards. Training should be provided in a language that workers understand and should be tailored to the specific hazards in the workplace. Maintain a safe and healthy workplace. This includes keeping the workplace clean and tidy, providing proper ventilation and lighting, and maintaining machinery and equipment in good condition.

Monitor and review OHS performance. It is important to regularly monitor and review your OHS performance to identify any areas where improvements can be made. This can be done by conducting OHS audits, reviewing incident reports, and seeking feedback from workers.

Examples of OHS requirements that are relevant to garment manufacturing:

Machinery safety: All machinery and equipment must be properly guarded to prevent workers from being injured. Workers must also be trained on how to safely operate machinery and equipment.

Chemical safety: Chemicals must be properly labeled and stored. Workers must also be trained on how to safely handle and use chemicals.

Fire safety: The workplace must have a fire safety plan in place and workers must be trained on how to use fire extinguishers and evacuate the building in the event of a fire.

Ergonomics: Workers should have access to ergonomic workstations and equipment to prevent repetitive strain injuries.

Personal protective equipment (PPE): Workers should be provided with PPE, such as gloves, safety glasses, and respirators, as needed to protect them from hazards.

It is important to note that these are just a few examples of OHS requirements that apply to garment manufacturing. Employers should consult the relevant OHS regulations in their country for more information., By complying with OHS requirements, garment manufacturers can help

to protect the health and safety of their workers and create a more productive and profitable workplace.

Personal protective equipment

- Personal protective equipment (PPE) is equipment worn to protect the user from hazards that cause serious workplace injuries and illnesses. PPE is worn to protect the body from a variety of hazards, including physical, electrical, heat, chemicals, biological agents, and airborne particulates. Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.

Components of Personal Protective Equipment (PPE)

Information on specific components of PPE. Including gloves, gowns, shoe covers, head covers, masks, respirators, eye protection, face shields, and goggles. Help protect you when directly handling potentially infectious materials or contaminated surfaces.

Gloves are an important safety and health tool that can be used to protect the hands from a variety of hazards. They are also used to improve grip, reduce fatigue, and improve comfort. Gloves are used in a wide variety of industries and applications.

Gowns: - help protect you from the contamination of clothing with potentially infectious material.



Shoe and Head Covers:-Shoe and head covers provide a barrier against possible exposure within a contaminated environment.





Masks and Respirators:- Surgical masks help protect your nose and mouth from splattered of body fluids, respirators filter the air before you inhale it.



Other Face and Eye Protection: - Goggles help protect only your eyes from splatters. A face shield provides splatter protection to facial skin, eyes, nose, and mouth.



How do you use appropriate personal protective equipment?

The gown should be donned

- **First.** The mask or respirator should be put on next and properly adjusted to fit; remember to fit check the respirator.
- **Second** the goggles or face shield should be donned next and the gloves are donned last.

Benefits of using PPEs

- prevent unnecessary injury in the workplace;
- protect employees from excessive chemical exposure;
- Prevent the spread of germs and infectious diseases.

1.3 Job Requirements from Specifications

A job requirement is a skill, knowledge, or experience that an employer expects a candidate to have in order to be successful in a particular position. Job requirements are typically listed in job postings and descriptions, and they can be used by both employers and candidates to assess fit for a particular role.

1. Read and understand the documents carefully. Identify the key information, such as the garment style, fabric, size, and quantity.
2. Identify the tasks that need to be performed. This can be done by breaking down the garment into its component parts and identifying the steps involved in creating each part.
3. Determine the skills and knowledge required to perform each task. This will vary depending on the specific task and the garment manufacturing process used.
4. Identify the tools and equipment required to perform each task. This will also vary depending on the specific task and the garment manufacturing process used.

Here are some examples of job requirements that can be identified from specifications, drawings, job sheets, or work instructions in garment manufacturing:

- Skill to sew different types of seams
- Knowledge of garment construction techniques
- Ability to follow patterns and instructions

- Ability to use sewing machines and other equipment safely
- Attention to detail

Once you have identified the job requirements, you can use this information to recruit and train qualified workers, and to develop efficient and effective production processes.

Here are some additional tips for identifying job requirements from specifications, drawings, job sheets, or work instructions in garment manufacturing:

- Consider the garment manufacturing process. The specific job requirements will vary depending on the garment manufacturing process used.
- Consider the garment style. Different garment styles may have different job requirements. For example, a dress may have more complex job requirements than a t-shirt.
- Consider the fabric. Different fabrics may have different job requirements. For example, delicate fabrics may require more care in handling and sewing.
- Consider the size and quantity. The size and quantity of garments being produced may also affect the job requirements. For example, large quantities of garments may require workers to work faster or to use more specialized equipment.

By carefully considering all of these factors, you can accurately identify the job requirements for any garment manufacturing job.

What Is Garment Spec Sheet

A garment spec sheet: - is like a blueprint that helps you communicate your design concept to your manufacturer so they can make it exactly as you envision it (and no, it’s not a tech pack). With a good spec sheet anyone anywhere in the world should be able to make your garment.

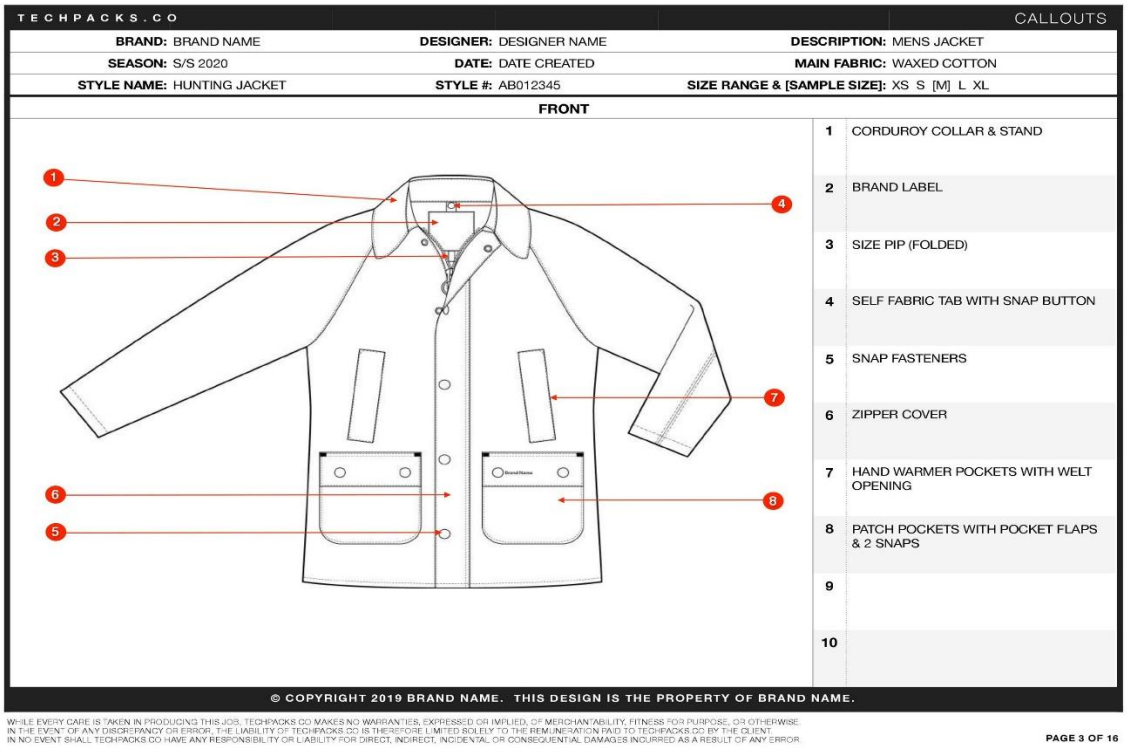
I am sure you have heard horror stories from small brands working with factories and not getting the designs they wanted. But, this little sheet will help limit misunderstandings between you and your manufacturer, make clear quality control standards, and help create patterns quicker. While many brands hire a professional to make their garment spec sheets, I will show you how to DIY it yourself using a t-shirt as an example.



Tech Pack Vs Garment Spec Sheet

A tech pack is a complete set of guidelines a designer makes for the manufacturer to construct the garment. Basically, it's like the car manual inside your glove box - it includes everything from fabric swatches and costing to where labels should be sewn. Tech packs range from 6-12 pages of pure garment information. But, what is a garment specification sheet? A garment spec sheet is a page within your tech pack dedicated only to garment measurements and stitching instructions. A spec sheet will tell your factory every point of measure (POMs) on your garment and give them instructions on how to grade. If you don't know, grading is the process of taking a pattern and making it into a larger or smaller size. Lastly, a fashion spec sheet will let your factory know how far from perfection they can stray (because no one is perfect). More on that later. Simply put, a tech pack is your overall guidelines for the manufacturer, and a spec sheet is the nitty gritty measurement and construction details within it.

Example of Tech Pack



Important of Garment Spec Sheets

A garment specification sheet:- is used in every stage of development and production - from the first fit sample to final approval and the quality assurance inspection before the order ships. It's a vital tool to help you ensure your garment fits how you want it to. It is also an insurance policy for you and the manufacturer in case mistakes or misunderstandings happen. The thing is, no one ever gets a garment perfect on the first try.

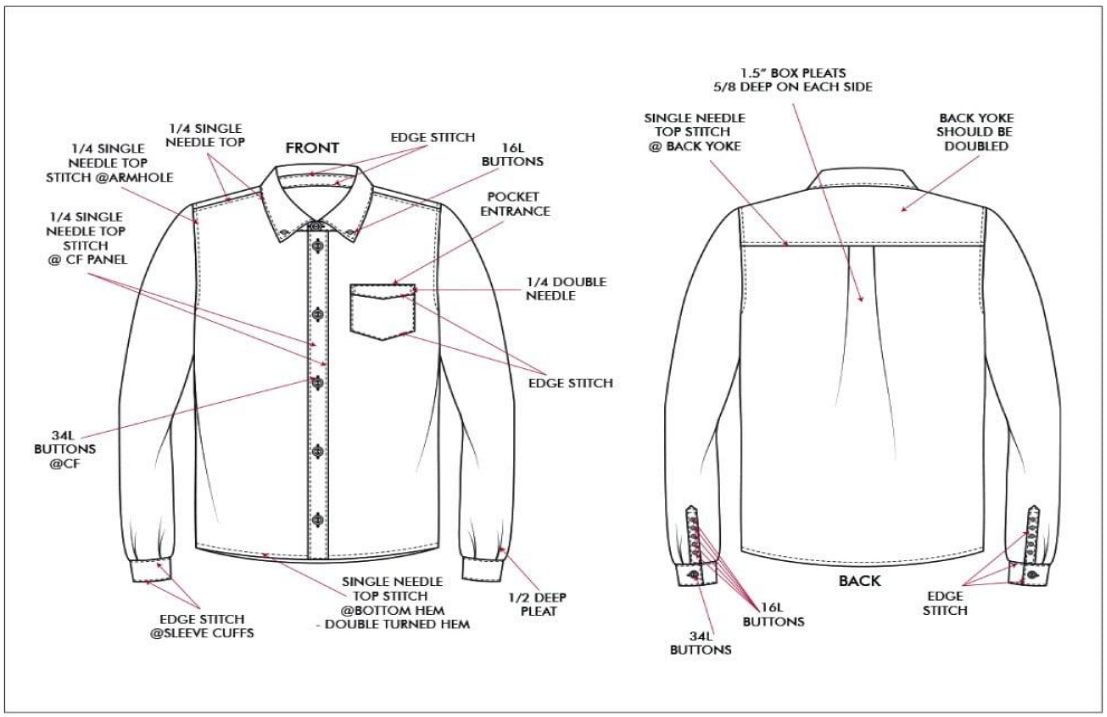
Garment specification sheets include:

A garment spec sheet or a measurement table is part of a tech pack where a designer communicates technical guidelines and requirements to the manufacturer on how to construct the garment. So what does a garment spec sheet contain and how to prepare it right? Let's dive deep into the details.

- Garment sketches. Usually front and back views. For complex garments additional detailed images may be needed
- Measurement sheet for all sizes.
- Construction guidelines/

- Stitching details and seam types

Let’s take a look at the example of a garment spec sheet.



Menswear shirt specification sheet

Added measurements and specifications will help us achieve the desired fit of the manufactured product. The manufacturer then uses the spec sheet to develop the pattern for the garment, grade it for different sizes, and finally construct a sample.

Importance of pictures in a garment spec sheet

Pictures make everyone's life easier. The truth is many people working in factories do not have the best reading and writing skills, so an image can prevent a mistake before it happens. The other thing is, as crazy as it sounds; everyone measures garments a little differently. A physical drawing that shows how each point should measure cuts down on errors.

Self-check-1

Directions: Answer all the questions listed below.

PART I: TRUE/ FALSE QUESTIONS

1. Reallocating garment sewing machines can help to increase production capacity, improve efficiency, and reduce costs.
2. When reallocating garment sewing machines, it is important to consider the skill level of the operators.
3. Reallocating garment sewing machines to meet the requirements can help to improve production efficiency.

PART II: SHORT ANSWER QUESTIONS

1. How can the garment factory reallocate its sewing machines to meet the increased demand for shirts while also continuing to produce pants and dresses?

2. How would you reallocate your sewing machines to meet the requirements?

3. Your garment factory produces a variety of garments, including shirts, pants, and dresses. You have a total of 100 sewing machines, which are currently allocated as follows:

   - Shirts: 40 machines
   - Dresses: 30 machines
   - Pants: 30 machines

   Due to a recent increase in demand for shirts, you need to reallocate 10 sewing machines from the pants and dresses production lines to the shirts production line. How would you reallocate the sewing machines to meet the requirements?

PART III: MULTIPLE CHOSE QUESTIONS

1. Which of the following is NOT a common job requirement for garment production workers?

   A. Sewing experience
   B. Attention to detail
   C. Ability to work independently
   D. Knowledge of garment production processes
   E. College degree

2. Which of the following is a common job requirement for garment production supervisors?

A. Ability to manage a team of workers
B. Knowledge of garment production processes
C. Ability to identify and solve problems
D. All of the above

3. Which of the following is a common job requirement for garment production engineers?

A. Bachelor's degree in engineering
B. Knowledge of garment production processes
C. Ability to design and implement new production methods
D. All of the above

4. Which of the following is a common job requirement for garment production quality control inspectors?

A. Attention to detail
B. Knowledge of garment production processes
C. Ability to identify and record defects
D. All of the above

5. Which of the following is a common job requirement for garment production pattern makers?

A. Knowledge of garment construction
B. Ability to use CAD software
C. Ability to create patterns for different sizes and styles of garments
D. All of the above

Unit Two: Workstation

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

- Over view of workstation
- Setting up workbench and workplace procedures
- Laying out components in proximity

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:

- Set up workbench and workplace procedures
- Lay out components in proximity

2.1 Over view of workstation

Preparing a workstation in garment is the process of setting up the workspace and tools necessary to produce garments. This includes ensuring that the workbench is clean and organized, that all of the necessary tools and equipment are present and in good working order, and that the work area is well-lit and ventilated.

Workstation in garment:

A. Clean and organize the workbench. This includes removing any clutter or debris, and wiping down the surface of the workbench.
B. Place all of the necessary tools and equipment within easy reach. This includes sewing machines, scissors, needles, thread, pins, and other sewing supplies.
C. Check to make sure that all of the tools and equipment are in good working order. This includes testing the sewing machines to make sure that they are stitching properly, and sharpening the scissors if necessary.
D. Adjust the workbench to the correct height. The workbench should be at a height that is comfortable for the operator to work at.
E. Position the workbench in a well-lit area. The operator should have good visibility of the work area.
F. Ensure that the work area is well-ventilated. This will help to reduce dust and fumes in the air.

Once the workstation is prepared, the operator can begin producing garments.

- Use ergonomic tools and equipment. This will help to reduce the risk of repetitive strain injuries.
- Label all of your tools and equipment. This will help to ensure that the operator is using the correct tools for the job.
- Create a system for storing and disposing of waste materials. This will help to keep the workstation and work area clean and organized.
- Have a first-aid kit nearby. This is important in case of any accidents.

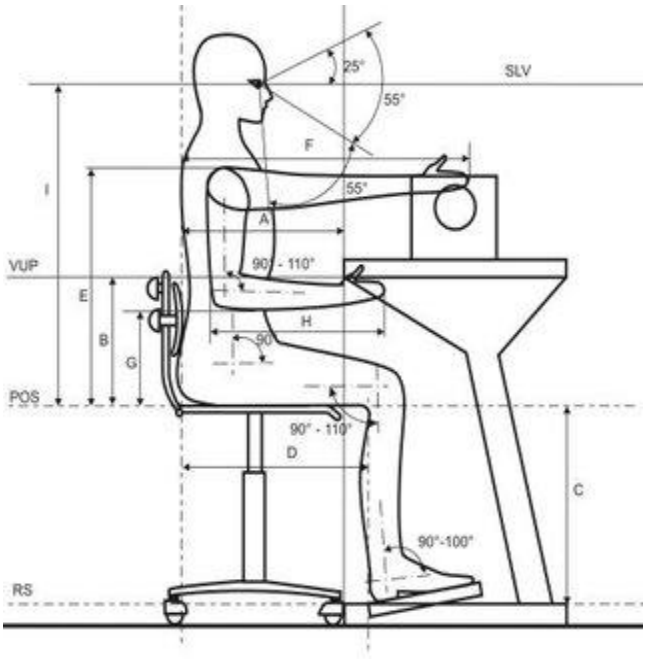
2.2 Setting up workbench and workplace procedures

1. **Workbench: -** is the right height and size for your needs. It should be comfortable to work at and be able to accommodate all of the tools and equipment you need.

- Place the workbench in a well-lit area with plenty of workspace.
- Organize your tools and equipment so that they are easy to reach and use.
- Keep your workbench clean and free of clutter.

2. **Workplace procedures**

- Establish clear and concise workplace procedures for all tasks. These procedures should be documented and communicated to all employees.
- Train all employees on the workplace procedures.
- Make sure that all employees have the necessary tools and equipment to perform their jobs safely and efficiently.
- Conduct regular safety inspections to ensure that the workplace procedures are being followed.
- Monitor the workplace procedures and make changes as needed.



Requirements prescribed by legislation, awards, agreements and conditions of employment

These requirements may vary depending on the jurisdiction in which the employment relationship takes place, but they typically cover a broad range of topics.

Legislation is the law of the land, and it is the highest level of authority in the employment relationship. Legislation is typically passed by Parliament and sets out the minimum standards that must be met in all workplaces.

Awards are legally binding documents that set out the minimum terms and conditions of employment for workers in a particular industry or occupation. Awards are typically negotiated between unions and employer associations.

Agreements are contracts between employers and employees that set out their individual employment terms and conditions. Agreements can be either individual or collective (i.e., enterprise agreements).

Conditions of employment are any terms and conditions of employment that are not covered by legislation, awards or agreements. Conditions of employment may be set out in an employee's contract of employment, or they may be simply agreed upon between the employer and employee.

Employers are required to comply with all of the requirements prescribed by legislation, awards, agreements and conditions of employment. Failure to comply with these requirements may result in the employer being fined or prosecuted. It is important for employers to be aware of their obligations under the law and to take steps to ensure that they are complying with all of the relevant requirements.

Examples of specific requirements that may be prescribed by legislation, awards, agreements and conditions of employment:

Minimum wage: Garment workers must be paid at least the minimum wage as prescribed by law.

Overtime pay: Garment workers who work more than 40 hours per week must be paid overtime pay.

Safe working conditions: Garment factories must provide safe working conditions for their employees. This includes providing adequate ventilation and lighting, and ensuring that all machinery is properly guarded.

Paid time off: Garment workers are entitled to paid time off for holidays and vacations.

Sick leave: Garment workers are entitled to sick leave when they are ill.

Maternity leave: Pregnant garment workers are entitled to maternity leave.

In addition to these general requirements, there may be other specific requirements that apply to the garment industry in a particular country or region. For example, some countries have laws that require garment factories to provide their employees with transportation to and from work, or to provide free meals and housing.

It is important to note that the requirements prescribed by legislation, awards, agreements, and conditions of employment in garment may change over time. Therefore, it is important for garment manufacturers and workers to stay up-to-date on the latest requirements.

Additional requirements that may apply to the garment industry in certain countries or regions:

- Child labor: Garment manufacturers are prohibited from employing children.
- Forced labor: Garment manufacturers are prohibited from using forced labor.
- Environmental regulations: Garment manufacturers must comply with environmental regulations, such as those governing the disposal of wastewater and hazardous materials.
- Unionization: Garment workers may have the right to unionize and bargain collectively for better wages and working conditions.
- Fire safety: Garment factories must have adequate fire safety measures in place, such as fire extinguishers and sprinkler systems.
- Building safety: Garment factories must be structurally sound and meet safety standards.
- Electrical safety: Garment factories must have adequate electrical safety measures in place, such as grounded outlets and surge protectors.
- Chemical safety: Garment factories must safely handle and store chemicals.
- Noise pollution: Garment factories must reduce noise pollution to a safe level.

Garment manufacturers should consult with the relevant authorities to learn more about the specific requirements that apply to the garment industry in their country or region.

2.3 Laying out components in proximity

This can be done by grouping together the components that are used most frequently, or by arranging them in a sequence that is logical for the assembly process.

Benefits of Laying Out Components in Proximity:

- Improved efficiency and productivity: By grouping together the components that are used most frequently, and arranging them in a logical sequence, workers can spend less time looking for components and more time assembling the garment.
- Reduced risk of errors: When components are laid out in proximity, workers are less likely to forget to sew on a component.
- Improved quality: By minimizing the amount of handling of components, the risk of damage is reduced.
- Better ergonomics: When components are laid out in proximity, workers can maintain a more comfortable posture and reduce the risk of repetitive strain injuries.



Self-check- 2

Directions: Answer all the questions listed below.

Part I: true/ false questions

1. The first step in preparing your workstation is to clean and organize your workspace. (True)
2. It is important to have all of the necessary tools and materials within reach before you begin working. (True)
3. It is important to follow safety procedures when preparing your workstation. (True)

Part, II Short Answer:

1. What are some important things to consider when preparing your workstation?

Some important things to consider when preparing your workstation include:

i. Cleaning and organizing your workspace.
ii. Putting away tools and materials that you are not using.
iii. Having all of the necessary tools and materials within reach.
iv. Following safety procedures.

2. What are some common safety hazards that can occur in a workstation?
3. How can you reduce the risk of accidents and injuries in your workstation?

a. There are a number of things you can do to reduce the risk of accidents and injuries in your workstation, such as:

i. Wearing appropriate safety gear, such as safety glasses, gloves, and steel-toed boots.
ii. Being aware of your surroundings and avoiding tripping hazards and other obstacles.
iii. Following safety procedures, such as turning off machines and equipment before servicing them.

Choose the following question

1. Which of the following is NOT a good practice when preparing your workstation?

A. Cleaning and organizing your workspace.
B. Putting away tools and materials that you are not using.
C. Leaving tools and materials on the floor.
D. All of the above are good practices.

2. Which of the following safety hazards can be found in a workstation?

A. Electrical hazards.
B. Trip hazards.
C. Slips and falls.
D. All of the above.

3. Which of the following is a good way to reduce the risk of accidents and injuries in your workstation?

A. Wearing appropriate safety gear.
B. Being aware of your surroundings.
C. Following safety procedures.
D. All of the above.

Unit Three: Finishing work

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

- Over view of Finish work
- Finishing processes for productivity and quality
- Finishing operations
- Garment specifications
- Report faults
- Complete production and records

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:

- Apply finishing processes for productivity and quality
- Perform finishing operations
- Check garment or article against specifications
- report faults
- Complete production and records

3.1 Over view of Finish work

Finishing is very important section in the garment industry. In this sector we take the finished goods from sewing section and keep records, then after suckering it we send to iron section. Then the ironman irons these as per buyer instructions. The thread is sucking, fusing machine, metal Detector, vacuum table, Steam Iron, Table grading machine, Stan drill machine etc. are used in the finishing process. Let's see the steps of garments finishing with brief descriptions

Finishing processes:- in garment are the final steps in the manufacturing process, and they are essential for ensuring that the garments are of high quality and meet the customer's specifications. Finishing processes can vary depending on the type of garment being produced, but some common finishing processes include:

Washing and drying: Garments are typically washed and dried after they have been sewn together. This helps to remove any dirt or debris from the manufacturing process, and it also helps to set the shape of the garment.

Pressing: Garments are pressed to remove wrinkles and give them a polished appearance.

Trimming: Any excess fabric or threads are trimmed away from the garments.

Quality control: Garments are inspected for defects before they are packaged and shipped to the customer.

Stitching quality: Stitching quality is another crucial element of garment quality control. The stitching should be straight, even, and consistent throughout the garment. The thread used should be strong enough to withstand wear and tear, and there should be no loose threads or broken stitches. If the stitching is not up to standard, the garment may not only look unsightly, but it may also fall apart quickly.

Finishing quality: The finishing quality is the final step in the garment production process, where the garment is pressed, ironed, and trimmed to give it a polished and professional look. The finishing quality can greatly impact the overall appearance and durability of the garment. Manufacturers must ensure that the seams are pressed flat, buttons and zippers are properly

attached, and any loose threads or excess fabric are trimmed off. A well-finished garment will not only look more aesthetically pleasing but will also hold up better during regular wear.

Finishing processes can have a significant impact on the productivity and quality of garments. By streamlining finishing processes and using efficient equipment, garment manufacturers can increase productivity and reduce costs. By investing in quality control measures, garment manufacturers can ensure that their products meet the high standards of their customers.

Here are some specific tips for defining finishing processes for productivity and quality in garment:

Identify the critical finishing processes. Not all finishing processes are equally important for productivity and quality. Identify the processes that have the biggest impact on these factors, and focus on improving those processes.

Map out the workflow. Once you have identified the critical finishing processes, map out the workflow for each process. This will help you to identify any bottlenecks or areas where improvements can be made.

Use efficient equipment. Invest in efficient finishing equipment that can help to speed up the process and improve quality.

Implement quality control measures. Put quality control measures in place to ensure that garments meet your standards before they are shipped to the customer.

Train your employees. Train your employees on the finishing processes and quality control procedures. This will help to ensure that everyone is on the same page and that the processes are carried out consistently, garment manufacturers can define finishing processes that are efficient, effective, and produce high-quality garments.

Defining finishing processes for productivity and quality in garment, finished work is the process of identifying and implementing the most efficient and effective methods for completing the final steps in the garment manufacturing process. This includes processes such as washing, drying, pressing, trimming, and quality control.

Productivity refers to the amount of work that can be completed in a given period of time. Quality refers to the level of excellence of the finished product. There are a number of factors that can affect the productivity and quality of finishing processes in garment manufacturing. These include: The type of garment being produced, the equipment and materials used, The skill and experience of the workers, The workflow and layout of the workplace

In addition to this it is also important to stay up-to-date on the latest technologies and trends in the garment manufacturing industry. This will help you to identify new ways to improve the productivity and quality of your finishing processes.

Here are some examples of how garment manufacturers can use technology to improve the productivity and quality of their finishing processes:

Automated washing and drying machines can help to reduce the time and effort required to wash and dry garments., Computerized pressing machines can help to ensure that garments are pressed consistently and to a high standard., Automated trimming machines can help to reduce the risk of human error and ensure that garments are trimmed accurately., Quality control software can help to identify defects in garments quickly and accurately.

By using technology to improve their finishing processes, garment manufacturers can increase productivity, reduce costs, and deliver high-quality products to their customers.

3.2 Finishing Processes for Product Quality

Finishing operations are the final steps in the manufacturing process of a product. These operations are performed to improve the appearance, durability, and functionality of the product. Finishing operations can be performed on a wide variety of products, including metal parts, plastic parts, electronic components, and garments.

Common finishing operations

A. **Cleaning:** Cleaning operations remove dirt, debris, and other contaminants from the surface of the product.
B. **Coating:** Coating operations apply a thin layer of material to the surface of the product. This can be done to improve the appearance, durability, or corrosion resistance of the product.

C. **Deburring:** Deburring operations remove sharp edges and burrs from the surface of the product. This is important for safety and aesthetic reasons.
D. **Grinding:** Grinding operations remove material from the surface of the product to achieve a desired finish.
E. **Polishing:** Polishing operations create a smooth and reflective surface on the product.

Finishing operations can be performed manually or using automated equipment. The specific finishing operations that are required will vary depending on the type of product being manufactured.

3.3 Finishing Operations

finishing operations refer to the final steps carried out on garments to prepare them for sale or distribution. These operations add the finishing touches, enhance the appearance, improve the quality, and ensure the functionality of the garments. Here are some common finishing operations in garment production:

1. **Washing and drying:** Garments are typically washed and dried after they have been sewn together. This helps to remove any dirt or debris from the manufacturing process, and it also helps to set the shape of the garment.
2. **Pressing:** Garments are pressed to remove wrinkles and give them a polished appearance.
3. **Trimming:** Any excess fabric or threads are trimmed away from the garments.
4. **Quality control:** Garments are inspected for defects before they are packaged and shipped to the customer.

The specific steps involved in performing finishing operations will vary depending on the type of garment being produced. For example, some garments may require special washing or drying procedures, or they may need to be pressed in a specific way.

Here are some tips for performing finishing operations in garment finished work efficiently and effectively:

- Use efficient equipment. Invest in efficient finishing equipment that can help to speed up the process and improve quality.

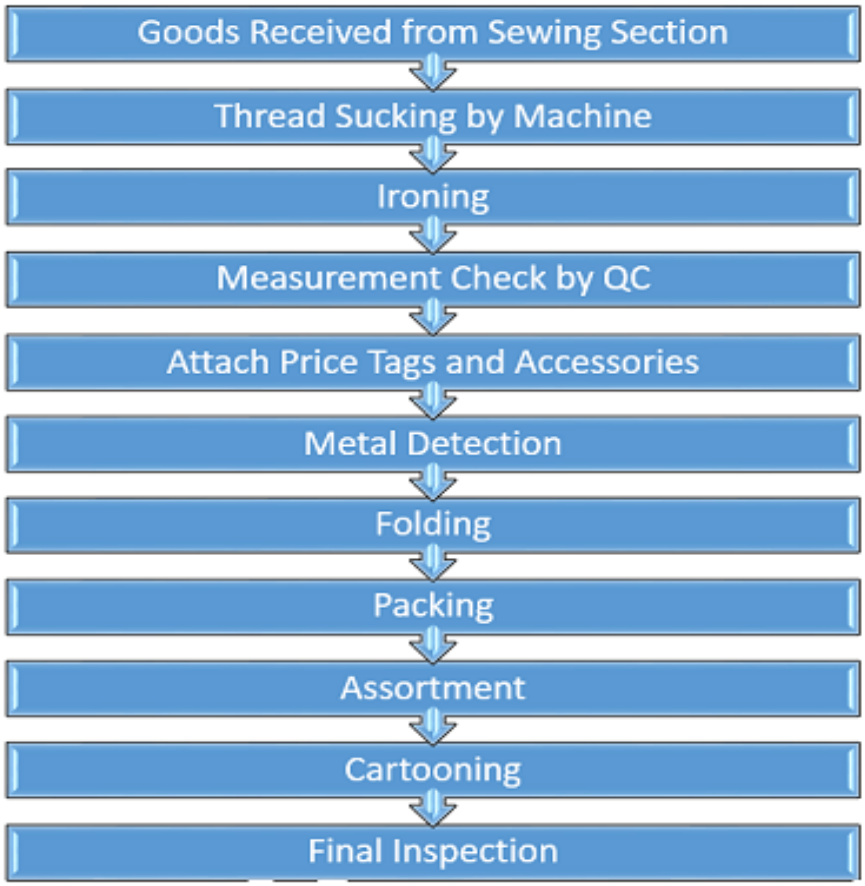
- Implement quality control measures. Put quality control measures in place to ensure that garments meet your standards before they are shipped to the customer.
- Train your employees. Train your employees on the finishing operations and quality control procedures. This will help to ensure that everyone is on the same page and that the processes are carried out consistently.

Here are some examples of specific finishing operations that may be performed on garments:

- Steam pressing: Steam pressing is used to remove wrinkles and give garments a polished appearance.
- Hand pressing: Hand pressing is used to press delicate garments or garments with intricate details.
- Fusing: Fusing is used to bond two layers of fabric together without stitching. This is often used to create hems and facings.
- Top stitching: Top stitching is a decorative stitching technique that is often used on jeans and other workwear.
- Embroidery: Embroidery is a decorative stitching technique that is used to create designs on garments.

By following these tips and using the appropriate finishing techniques, garment manufacturers can ensure that their products are of high quality and meet the expectations of their customers.

Flow Chart of Garments Finishing:



The steps of garments finishing are as follows-

1. **Goods Received from Sewing Section: -** At first, finished garments are received from **sewing section** as per order quantity. Good received from sewing section is the first step to finishing section.
2. **Thread Sucking by Machine: -** In this step extra lose **sewing thread** are sucking by sucking machine in garments. Threads are suckered by two systems. One by done by hand which is manual system and the other is done by sucking machine.
3. **Ironing:-** is a finishing process done by a cloth to heat and pressure with or without steam to remove creases and to impart a flat appearance to garments. Ironing process is also called as pressing process. After completing ironing, garments have to be folded.



4. When ironing process running that time also check measurement of garments. During the ironing process measurement is also check out by the QC.
5. **Attach Price Tags and Accessories: -** After above process, different types of tags and accessories are attached with the garments as per **buyer comment**. For an export order, must attach price tags with the garments.
6. **Metal Detection: -** Garments are passed through into the metal detection m/c for metal check. Now most of the buyer recommended using metal detector for garments more safety. To use **metal detector** for kid's item is must.
7. **Folding: -** Garments are folded according to buyer directions in a standard area.

Types of folding in garments

A. Stand up
B. Semi stand up
C. Flat back
D. Hanger pack.

8. **Packing:-** After folding garments are ready for packing. The size of polythene is vary according to the size, garments ratio. Before **packing** it is needed to ensure the placement of sticker in proper place.



Garments Packing Process

9. **Assortment: -** After completing the packing, it must be placed the garments in a predetermined packed by sorting according to the size and color is called assortment.
10. **Cartooning: -** At last cartooning is done according to buyer comment into the inner boxes and is properly warped by the scotch tape. Some information like carton box no, size, **shipping mark**, destination are printed on the cartoon.
11. **Final Inspection: -** Final inspection is an important part and last step of garments finishing. Normally final inspection is made by buyer. Buyer checks the garments according some rules like

3.4 Check Garment or Article Against Specifications

Checking a garment means inspecting it for any defects in the workmanship or materials. This includes checking the stitching, seams, fabric, and any other finishing details. Checking garments is an important part of the manufacturing process, as it helps to ensure that customers receive high-quality products.

Specific things that are checked when checking a garment:

A. **Stitching:** The stitching should be even and secure, and there should be no loose threads.
B. **Seams:** The seams should be flat and smooth, and there should be no puckering or gaping.
C. **Fabric**: The fabric should be free of any holes, tears, or stains.

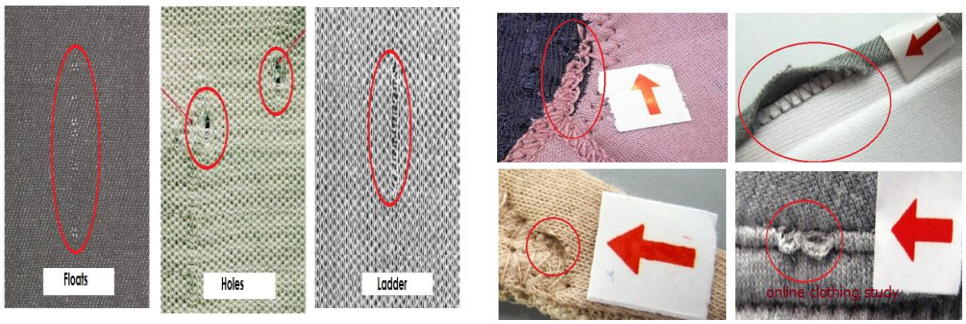
D. **Finish work**: The finish work should be neat and tidy, and all of the edges should be finished properly.
E. **Fit**: The garment should fit the wearer well and be comfortable to wear.

3.5 Reporting Faults

Fault in garment is any defect in the garment that makes it unfit for sale or use. Faults can occur at any stage in the garment manufacturing process, from the design and selection of materials to the cutting, sewing, and finishing of the garment.

Some common faults in garments include:

A. **Holes and tears**: These can be caused by a variety of factors, such as faulty needles, sharp objects, or excessive wear and tear.
B. **Stains**: These can be caused by food, drinks, chemicals, or other substances.
C. **Incorrect stitching**: This can include skipped stitches, loose stitches, and uneven stitching.
D. **Incorrect sizing**: This can occur if the garment is not cut or sewn to the correct specifications.
E. **Color defects**: This can include fading, uneven coloring, and incorrect color matching.
F. **Fabric defects**: This can include holes, tears, stains, and irregularities in the fabric.



Specific examples of faults that can occur with finish work:

- Stitching: Loose threads, uneven stitching, and broken stitches.
- Seams: Puckered seams, gapping seams, and unsewn seams.
- Fabric: Holes, tears, stains, and discoloration.
- Finish work: Unfinished edges, frayed edges, and crooked hems.

Finishing garment faults

Because of the complex manufacturing system in the apparel industry, defects are generated. Though Trims & accessories, and fabrics supplied by the third party, its responsibility of

garments maker to check and ensure the quality of all raw materials they are using. The quality inspection system is available for all incoming raw materials which are provided by the third-party supplier. Garments Defects Inspection applies through Quality control in the **Apparel Industry**:

a. Trims and Accessories Quality Inspection
b. Fabrics Inspection
c. Cutting and Spreading Quality checking
d. Sewing Quality Inspection
e. Washing defects
f. Finishing Quality inspection

A. Trims and Accessories Defects

- Print Problem
- Color Problem
- Code Mistake
- Fitness Problem
- Print Spot
- Measurement Problem
- Size Mistake
- Print Mistake
- Color Verify
- Gum nil
- Running Color
- PO Mistake
- Style Mistake
- Latter Mistake
- Cutting Problem
- Spot
- Broken
- Logo Mistake

B. Fabrics Defect

- Hole
- Slab
- Knot
- Others
- Spot
- Line mark
- Big Thread
- Miss Yarn
- Color Yarn
- Stop Mark
- Color Out
- Thick Yarn
- Running Shade
- Fabric Skew
- Stain
- Fabric Hand feel
- Fabric Way
- Uneven Dye
- Uneven Print
- Running shade
- Selvage shade

C. Cutting and Spreading Defects

- Miss cut
- Running shade
- Matching plies
- Number &bundling
- Bowing
- Notch mark

- Narrow goods
- Rugged cut
- Fabric way
- Measurement
- Leaning
- Tension Loose
- Bias
- Alignment
- Skew

D. Sewing Defects

- Uncut thread
- Raw edge out
- Uneven lob
- Uneven topstitch
- Down stitch
- Puckering
- Overstitch
- Broken stitch
- Loop slanted
- Short stitch
- Skip stitch
- Open stitch
- Up-Down position
- Rejected
- Visible joint
- label displace
- Wrong embroidery
- Checkup down
- Mouth Close Up Dow
- Untrimmed Thread

E. Washing Defects

Garment washing is the process to improve hand feel, appearance, and better outlook of garments.

F. Garments Washing Defects

- Garments Discoloration
- Poor Hand Sanding
- Care Label Fading/ Damage
- Off Shade
- Shade Variation
- Over Washing
- Washing Damage
- Washing Spot
- High pH Level
- Poor Grinding
- Lycra Out
- Poor Sand Blasting
- High Abrasion Effect
- Color Bleeding at Pocket Bag and Label
- Washing Mark
- Poor Hand Feel

G. Finishing Defects

1. Uncut thread
2. Iron problem
3. Broken stitch
4. Button alter
5. Skip stitch
6. Bar tack Defect
7. Oil / Dirty
8. shading
9. Runoff stitch
10. Process mistake
11. Raw edge out
12. Fabric faults
13. Sewing reject
14. Size mistake
15. Checkup down
16. Oil Strain/Dirty Stain
17. Damage
18. Needle Mark/Cut
19. Overstitch
20. Stone in garments
21. Shading

Finishing components

- Tags
- Trims
- Ribbons
- Buttons
- Fasteners
- Labels
- Belt and button loops
- Hooks
- Embellishment like embroidery, stickers

Finishing operations

- Trimming loose threads
- Checking
- Spotting
- Sorting
- Hand or machine sewing buttons or fasteners
- Hand or machine sewing
- Ironing
- Securing lining
- Sewing and cutting button holes
- Attaching accessories or trims
- Attaching tickets and labels
- Closing closures / zips, buttons etc.
- Bundling
- OHS practices
- Manual handling techniques
- Ergonomic working tables
- Standard operating procedures
- Safe materials handling
- Implement in work flow rest breaks
- Ergonomic arrangement of workplaces
- Following marked walkways
- Cleaning of work space
- Safe storage of equipment
- Reporting accidents and incidents
- Environmental practices

3.6 Complete Production and Records

Completing production and records with finish work in garment involves completing all of the necessary steps to ensure that the garments are of high quality and meet the customer's specifications, and then recording the relevant data.

Complete garment production and records involve managing and maintaining comprehensive documentation throughout the entire garment manufacturing process. This documentation ensures traceability, quality control, and regulatory compliance. Here are the key aspects of garment production and records:

1. **Production Planning**: Develop a production plan that includes details such as the quantity of garments to be produced, production timeline, production line layout, and resource allocation. This plan serves as a guide for the entire production process.
2. **Material Sourcing and Inventory**: Maintain records of material sourcing, including suppliers, quantities, and specifications. Keep track of material inventory to ensure an adequate supply for production and avoid delays or shortages.
3. **Cutting and Sewing Records**: Document the cutting process, including the number of fabric layers cut, cutting dimensions, and any pattern adjustments. Keep sewing records that track the quantity of garments produced, sewing operators involved, and any specific sewing instructions or techniques used.
4. **Quality Control Records**: Implement a quality control system and maintain records of inspections and tests conducted at various stages of production. This includes records of fabric inspections, cutting quality checks, sewing line inspections, and final garment inspections. Document any deviations from quality standards and corrective actions taken.
5. **Work in Progress (WIP) Tracking**: Keep track of the progress of each garment order as it moves through the production process. This includes recording the start and completion dates for each production stage, tracking the location of garments within the production facility, and monitoring any bottlenecks or delays.
6. **Garment Specifications and Measurement Charts:** Document detailed specifications for each garment style, including measurements, construction details, and any specific design requirements. Maintain measurement charts to ensure consistency and accuracy during production.
7. **Compliance and Regulatory Records**: Ensure compliance with relevant regulations and standards, such as labeling requirements, safety regulations, and environmental standards. Maintain records related to compliance testing, certifications, and audits.
8. **Production Reports:** Generate regular production reports that provide an overview of production activities, including production quantities, efficiency metrics, and any issues or challenges encountered. These reports help to identify areas for improvement and monitor production performance.
9. **Order Tracking and Customer Records**: Keep records of customer orders, including order details, delivery dates, and any specific customer requirements. Track order progress

and maintain communication records with customers to ensure timely delivery and customer satisfaction.

10. **Maintenance and Repair Records**: Document equipment maintenance schedules and records of any repairs or maintenance performed on production machinery or tools. This helps ensure the proper functioning of equipment and reduces downtime.
11. **Training and Skill Development Records**: Maintain records of training programs and skill development initiatives for production staff. Document training sessions, certifications, and skill assessments to ensure a skilled workforce and continuous improvement.

Having comprehensive production and records management systems in place helps facilitate efficient production processes, quality control, and customer satisfaction. It enables manufacturers to track and trace garments, identify areas for improvement, and ensure compliance with industry standards and regulations.

Self-check-3

Directions: Answer all the questions listed below.

PART I: TRUE/ FALSE

1. Completing production and records with finish work in garment involves ensuring that the garments are of high quality and meet the customer's specifications, and then recording the relevant data. (True)
2. It is important to inspect the finished garments for defects before they are shipped to the customer. (True)
3. It is important to record the production data so that bottlenecks or inefficiencies in the process can be identified and addressed. (True)

PART II Choose

1. Which of the following is NOT a step in completing production and records with finish work in garment?

A. Inspecting the finished garments for defects.

B. Counting the finished garments.

C. Recording the production data.

D. Shipping the finished garments to the customer.

E. Sewing the garments together

2. Which of the following is a benefit of using a computer system to record the production data?

A. Improved efficiency and reduced errors.

B. Easier to track the progress of the production process.

C. Easier to identify and correct defects in the garments.

D. All of the above.

3. Which of the following is a good tip for completing production and records with finish work in garment?

A. Train your employees on the finishing work and record-keeping procedures.

B. Use a production schedule to track the progress of the production process.

C. Implement a quality control system to identify and correct defects in the garments.

D. All of the above.

PART III Short Answer:

4. What are the steps involved in completing production and records with finish work in garment?
5. Why is it important to inspect the finished garments for defects before they are shipped to the customer?
6. What are some of the benefits of using a computer system to record the production data?

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