INTERMEDIANT APPAREL PRODUCTION

NTQF Level-II

Learning Guide#38

UNIT OF COMPETENCE: Assemble Garment Parts

Module Title: Assembling Garment Parts

LG CODE: IND IAP2 M05 -LO3- LG38

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LO3: Sew and assemble garment parts

Instruction Sheet	Learning Guide #38

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

- ✓ OHS practices
- ✓ Assemble Garment parts
- ✓ sew Garments with sewing standard and procedures
- ✓ Sew Garments with company's time frame
- ✓ Identify sewing Sleeves, collars and pockets
- ✓ Sew based on customer's specification
- ✓ Sew Pocket flaps
- ✓ Sew Zipper
- ✓ Finish seam edges
- ✓ Sew waist band width

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

- ❖ Garment parts are assembled in accordance with garment assembly instructions and pattern specifications
- ❖ Garments are sewn in conformance with sewing standard procedures, company's timeframes and OHS practices
- ❖ Sleeves, collars and pockets are identified and sewn according to customer's specification
- ❖ Pocket flaps are sewn with clean corners and no raw edges
- ❖ Zipper is sewn without puckered
- ❖ Seams edges are finished in accordance with job requirements
- ❖ Waistband width are evenly sewn from end to end according to standard operating procedure (SOPs)

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”. Try to understand what are being discussed. Ask your teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” in each information sheets.
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You may get the key answer only after you finished answering the Self-checks).
6. If you earned a satisfactory evaluation proceed to “Operation sheets and LAP Tests if any”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity.
7. After you accomplish Operation sheets and LAP Tests, ensure you have a formative assessment and get a satisfactory result;
8. Then proceed to the next information sheet

Information Sheet-1	OHS practices

Hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and may relate to:

- Standard operating procedures
- Personal protective equipment
- Safe materials handling
- Ergonomic arrangement of workplaces
- Housekeeping

Sewing garments in conformance with sewing standard procedures, company's timeframes and OHS practices sewing is the dominant process in garment assembly.

Satisfactory garment assembly and performance depend on correct choices of stitches, seams, threads, needle, sewing machine and fabrics to be sewn. Selection of appropriate stitch, seam types and other factors varies with product component, end use, quality level and equipment available.

As it is labour intensive process, proper controlling and training of the operators is most important for assembling of quality garment. Before carrying out the sewing process in the production floor, PPC department has to set proper line balancing and layout and also use of suitable folders and attachments with the help of IE department for timely delivery and achieving the required quality which are very important for the competitiveness of the organization and also to attract new customer.

Method of construction of garment:

Assembly line work the operator is specialized in sewing only one part of the garment only and so to complete the entire garment a number of operators are required in the production line.

Complete Garment construction in this case the whole garment is sewed by one operator but specialized operation, like over locking, hemming, bar tacking, button holes and sewing are done by separate workers.

Occupational health and safety is a discipline with a broad scope involving many specialized fields. In its broadcast sense, it should aim at:

- The promotional and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations.
- The prevention among workers of adverse effects on health caused by their working conditions.

- The protection of workers in their employment from risks resulting from risks resulting
- The placing and maintenance of workers in an occupational environment adapted to physical and mental needs.
- The adaptation of work to humans.

In other words, occupational health and safety encompasses the social, mental and physical well-being of workers that is the “whole person”. Successful occupational health and safety practice requires the collaboration and participation of both employers and workers in health and safety programs, and involves the consideration of issues relating to occupational medicine, industrial hygiene, toxicology, education, engineering safety, ergonomics, psychology, etc.

Occupational health issues are often given less attention than occupational safety issues because the former are generally more difficult to confront. However, when health is addressed, because a healthy workplace is not necessarily also a healthy work place. The important point is that issues of both health and safety must be addressed in every workplace.

Poor working conditions affect worker health and safety

Poor working conditions of any type have the potential to affect a worker’s health and safety. Unhealthy of unsafe working conditions are not limited to factories---they can be found anywhere, whether the workplace is indoors or outdoors. For many workers, agricultural workers of miners, the workplace is “outdoors” and can pose many health and safety hazards. Poor working conditions can also affect the environment workers live in, since the working and living environments are the same for many workers, this means that occupational hazards can have harmful effects on workers, their families, and other people in the community, as well on the physical environment around the workplace. A classic example is the use of pesticides in agricultural work. Workers can be exposed to toxic chemicals in a number of ways when spraying pesticides: they can inhale the chemicals during and after spraying pesticides: they can inhale the chemicals during and after spraying, the chemicals can be absorbed through the skim and the workers can ingest the chemicals if they eat, drink of smoke without first washing their hands, of if drinking water has become contaminated with the chemicals. The workers’ families can also be exposed in a number of ways: they can inhale the pesticides which may liner in the air, they can drink contaminated water or they can expose to residues which may be on the worker’s clothes. Other people in the community can all be exposed in the same ways as well. When the chemicals get

absorbed into the soil or leach into groundwater supplies, the adverse effects on the natural environment can be permanent.

Overall, efforts in occupational health and safety must aim to prevent industrial accidents and diseases, and at the same time recognize the connection between worker health and safety, the workplace, and the environment outside the workplace.

Some health hazards for industry workers

- Dusts
- Gases
- Noise
- Vibration
- Extreme temperature

Unfortunately some employers assume little responsibility for the protection of workers' health and safety. In fact, some employers do not even know that they have the moral and often legal responsibility to protect workers.

As a result of the hazards and a lack of attention gives to health and safety, work-related accidents and diseases are common in all parts of the world.

Costs of occupational injury/disease

Work–related accident diseases are very costly and can have many serious direct and indirect effects on the lives of workers and their families. For workers some of the direct costs of an injury or illness:

- The pain and suffering of the injury or illness
- The loss of income
- The possible loss of a job
- Health–care cos

It has been estimated that the indirect costs of an accident or illness can be for to ten times greater than the direct costs, or even more. An occupational illness or accident can have so many indirect costs to workers that it often difficult to measure them. One of the most obvious indirect costs is the human suffering caused to workers' families, which cannot be compensated with money.

The costs to employer's occupational accidents or illnesses are also estimated to be enormous. For small business, the cost of even one accident can be a financial disaster. For employer, some of the direct costs are:

- Payment for work not perform

- Medical and compensation payment
- Repair or replacement of damaged machinery equipment
- Reduction or temporary halt in production
- Increased training expenses and administration costs
- Possible reduction in quality of work
- Negative effect on moral workers.

Some of the indirect costs for employers are:

- The injured/ill workers has to be replaced
- A new worker has to be trained and given time to adjust
- It takes time before the new worker is producing at the rate of the original worker
- Time must be devoted to obligatory investigations, to the writing of reports and filling out of forms;
- Accident often arouse the concern of fellow workers and influence labor relations in a negative way
- Poor health and safety conditions in the work place can also result in poor public relation.

Over all, the costs of most work-related accidents or illnesses to workers and their families and to employers are very high. On a national scale, the estimated costs of occupational accidents and illnesses can be as high as ¾ percent of a country's gross national product. In reality, no one really knows the total costs of work-related accidents or diseases because there are a multitude of indirect costs which are difficult to measure besides the more obvious direct costs.

Health and safety programs

- For all of the reasons given above, it is crucial that employers, workers and unions are committed to health and safety and that:
- Work place hazards are controlled-at the source whenever possible;
- Records of any exposure are maintained for many years;
- Both workers and employers are informed about health and safety risks in the work place;
- There is an active and effective health and safety committee that includes both workers and management;
- Worker health and safety efforts are ongoing.

Effective work place health and safety programs can help to save the lives of workers by reducing hazards and their consequences. Health and safety programs also have positive effect on both workers morale and productivity, which are important benefits at the same time, effective programs can save employers a great deal of money.

Hazards and Risks in the Textiles Sector

The textiles sector contains many hazards and risks to workers, ranging from exposure to noise and dangerous substances, to manual handling and working with dangerous machinery. Each processing stage-from the production of materials to the manufacturing, finishing, and coloring and packaging-poses risks for workers, and some of these are particularly dangerous for women's health.

This short document cannot cover all the hazards and risks in all the parts of the textiles sector, but highlights some of the key issues, particularly to women workers, and how worker safety and health can be managed.

Musculoskeletal Disorders

Musculoskeletal disorders (MSDs) are the most common work-related health problem in Europe, with almost one in four workers reporting backache and one in five complaining of muscular pains. Manual handling, the lifting, holding, putting down, pushing, pulling, carrying of movement of load, is the largest cause of injury in the textiles sector. Manual handling can cause either cumulative disorder from the gradual deterioration of the musculoskeletal system, such as lower back pain, of acute trauma such as cuts of fractures due to accidents.

Material and workshop safety

- Get instruction from your supervisor, if you are unfamiliar with a tool
- Keep tools clean, in good condition, and ensure they receive regular maintenance
- Always use the right tool for the job
- Inspect each tool for damage before use. Tag tools "out of service" and return them to the shop if they are damaged or otherwise unsafe.
- Only operate tools and equipment according to manufacturer's instructions
- Wear appropriate personal protective equipment such as goggles, gloves, and eye Protection when working with tools and equipment. Check with your supervisor for guidance
- Return tools to their proper storage location.
- Remove loose clothing and jewelry around tools with rotating parts.
- Store all tools in a dry, secure location.

- Tag unsafe tools “out of service” and do not use them. Remove tool from workplace and report to supervisor for replacement.

Personal Protective Equipment

Hazards exit in every workplace in many different forms; sharp edges, falling objects, flying sparks, chemicals, noise and other dangerous situation. The occupational safety and health administration (OSHA) requires that employers protect their employees from workplace hazards that can cause injury. Employers must provide personal protective equipment (PPE) to their employees and ensure its use. Personal protective equipment, commonly referred to as PPE is worn to minimize exposure to a variety of hazards. Example of PPE includes such items as gloves, foot and eye protection, protective hearing devices (earplugs, muffs) hard hats, and full body suits. The PPEs are made to protect

- The eyes
- Hearing
- The face
- The respiratory system
- The head
- The legs and feet
- The arms and hands
- The whole body

There are many PPEs to mention for instance like, goggle, respirators, helmets, safety shoes, safety gloves, working clothes. The PPEs should fit the special characteristics of the user. The majority of those PPEs are capable at many sizes so the employee can choose the right for him. Moreover, it is important to take into consideration the compatibility of the different PPEs. In a Textile Industry, there are many dangers that oblige employer to buy some PPEs for the employees.

- To ensure the greatest possible protection for employees in the workplace, the cooperative efforts of both employers and employees will help in establishing and maintaining a safe and healthful work environment. In general, employers are responsible for:
- Performing a “hazard assessment” of the workplace to identify and control physical and health hazards
- Identifying and providing appropriate PPE for employees
- Training employees in the use and care of the PPE
- Maintaining PPE, including replacing worn or damaged PPE
- Periodically reviewing, updating and evaluating the effectiveness of the PPE program

In general, employees should:

- wear PPE Properly
- Attend training sessions on PPE
- Care for, clean and maintain PPE
- Inform a supervisor of the need to repair or replace PPE

Eye and Face Protection Employees can be exposed to a large number of hazards that pose danger to their eyes and face. NCDOL requires employers to ensure that employees have appropriate eye or face protection if they are exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, potentially infected material or potentially harmful light radiation.

Many occupational eye injuries occur because workers are not wearing any eye protection, while others result from wearing improper or poorly fitting eye protection. Employers must be sure that their employees wear appropriate eye and face protection and that the selected form of protection is appropriate to the work being performed and properly fits each worker exposed to the hazard.

Examples of potential eye or face injuries include:

- Dust, dirt, metal or wood chips entering the eye from activities such as chipping, grinding, sawing, hammering, the use of power tools or even strong wind forces.
- Chemical splashes from corrosive substances, hot liquids, solvents or other hazardous solutions.
- Objects swinging into the eye or face, such as tree limbs, chains, tools or ropes.
- Radiant energy from welding, harmful rays from the use of lasers or other radiant light (as well as heat, glare, sparks, splash and flying particles).

Types of Eye Protection Selecting the most suitable eye and face protection for employees should take into consideration the following elements:

- Ability to protect against specific workplace hazards.
- Should fit properly and be reasonably comfortable to wear.
- Should provide unrestricted vision and movement.
- Should be durable and cleanable.
- Should allow unrestricted functioning of any other required PPE

Some of the most common types of eye and face protection include the following:

Safety spectacles: These protective eyeglasses have safety frames constructed of metal or plastic and impact-resistant lenses. Side shields are available on some models.

Goggles: These are tight-fitting eye protections that completely cover the eyes, eye sockets and the facial area immediately surrounding the eyes and provide protection from impact, dust and splashes. Some goggles will fit over corrective lenses.

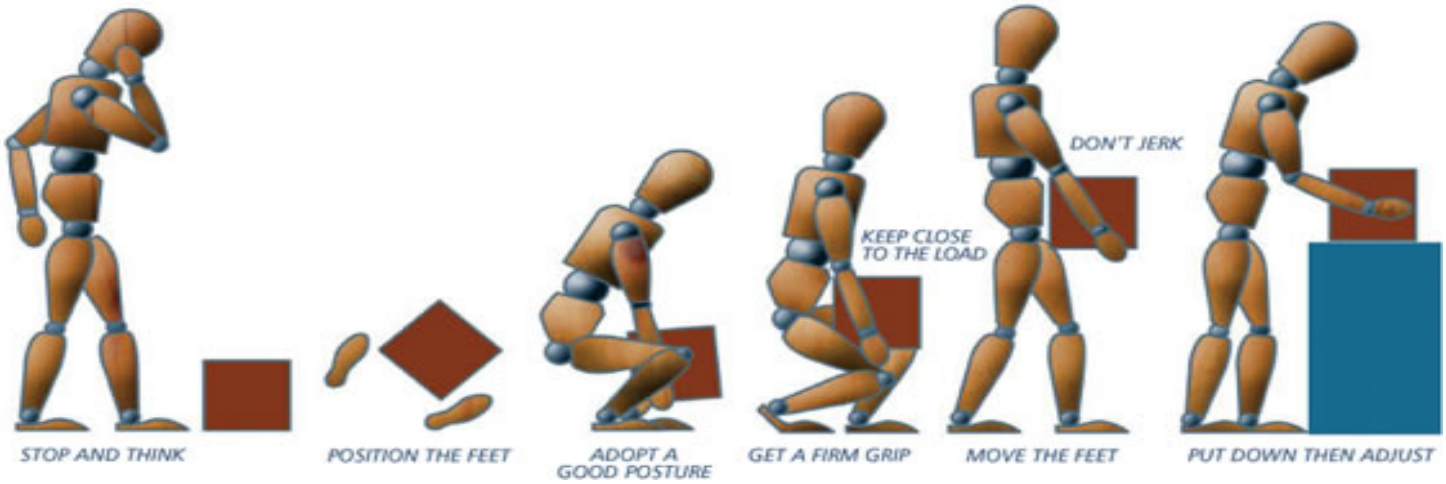
Face shields: These transparent sheets of plastic extend from the eyebrows to below the chin and across the entire width of the employee's head. Some are polarized for glare protection. Face shields protect against nuisance dusts and potential splashes or sprays of hazardous liquids but will not provide adequate protection against impact hazards

Face shields used in combination with goggles or safety spectacles will provide additional protection against impact hazards.

Manual handling

Manual handling covers a wide range of activities including lifting, pushing, pulling, holding, throwing and carrying. It includes repetitive tasks such as packing, typing, assembling, cleaning and sorting, using hand-tools, and operating machinery and equipment. Because most jobs involve some form of manual handling, most workers are at risk of manual handling injury. Of course, not all manual handling tasks are hazardous. But it is significant that around a quarter of all workplace injuries are caused by manual handling

- Stop and Think
- Position the Feet
- Adopt a Good Posture
- Get a Firm Grip (Keep Close to the Load)
- Move the Feet (Don't Je
- Put Down then Adjust



Many of the techniques used in the textile workshops require the use of repetitive actions. Performing repetitive tasks for long periods can lead to injury therefore it is important to

- Make sure all the equipment or materials you are using are within easy reach
- Ensure you maintain a comfortable working posture while working. Avoid bending and stooping for any period of time. Change your posture regularly
- Ensure you have frequent working breaks when performing repetitive tasks or vary you're working routine through the day
- Try to swap hands if you are continuously using one hand
- Try to take your time when completing a large project
- Do some stretching exercise when u take a break

Housekeeping

Good housekeeping is very important for keeping the area safe. Observe the following guidelines to make the working environment as safe as possible

- Clean any spills immediately
- Always wipe down surfaces after working
- Keep access to emergency equipment such as fire extinguishers clear
- Do not block emergency exits or pathways
- Ensure you have enough room to work safely
- Keep electrical cords out of the way

Standard Operating Procedures

A standard operating procedures or SOP is a set of step-by-step instruction created by a business to help workers carry out routine operations. Their purpose is to achieve efficiency, quality output and uniformity of performance, while reducing miscommunication and failure to comply with industry regulations

Ergonomic Arrangement of Workplaces

Ergonomic arrangement of workplaces gives the following different advantages this are:-

- Improving ergonomics conditions can improve productivity and safety- enhance competiveness
- Reduce worker compensation costs
- Provide more reliable work force
- May include allocating high risk jobs to machines where possible (they will be going overseas anyway)

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define safety?
2. Write the goal of OHS?
3. What is ergonomics?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-2	Assemble Garment parts

Introduction

The process of making a garment is an orderly profession. It starts from the choice of design, pattern, and fabric up to the construction of the garment. Professional dressmakers divide the process into logical step-cutting-basting, constructing and finishing so they know exactly how long it will take to make a given garment for assembling garment parts.

Sewing is the dominant process in garment assembly. Satisfactory garment assembly and performance depend on correct choices of stitches, seams, threads, needle, sewing machine and fabrics to be sewn. Selection of appropriate stitch, seam types and other factors varies with product component, end use, quality level and equipment available.

As it is labour intensive process, proper controlling and training of the operators is most important for assembling of quality garment.

Before carrying out the sewing process in the production floor, PPC department has to set proper line balancing and layout and also use of suitable folders and attachments with the help of IE department for timely delivery and achieving the required quality which are very important for the competitiveness of the organization and also to attract new customer.

Method of construction of garment:

Assembly line work

The operator is specialized in sewing only one part of the garment only and so to complete the entire garment a number of operators are required in the production line.

Complete Garment construction

In this case the whole garment is sewed by one operator but specialized operation, like over locking, hemming, bar tacking, button holes and sewing are done by separate workers.

The purpose of pressing

To smooth away unwanted creases and crush marks:

In garment manufacturing, creases and crushing occur in garments as a result of operator handling and there are particularly bad where garments are handled between operations in bundles, whether tied-up tightly or piled on trolleys or in boxes. However, the increasing use of materials with a high standard of crease recovery, along with the reduction in work in process that results from the installation of hanging transport has reduced the problem for many types of garment.

To make creases where the design of the garment requires them:

Creases are obvious design features in trousers, skirts (where a series of creases is often referred to as pleating) and some collar styles. Creases are obvious but still require pressing

when they are hems and cuff edges, front edges, top edges of waist bands, pocket flaps and patch pocket edges as well as pressed open seams which from a pressing point of view are two creases sewn together.

To prepare garments for further sewing:

The term ‘under pressing’ is reserved for pressing operations on partly constructed garments, while final pressing is used for completed garments. The stages at which a garment is under pressed will depend on many factors. It normally takes place when several sewing stages have be completed but are still accessible by the press equipment. An obvious example would be a jacket and it’s lining before assembly, after which pressing of the separate sections would no longer be possible. Under-pressing also makes further sewing easier to do, or easier to do to a high quality standard. It may be possible to topstitch a collar which has not been pressed, but it is likely to be more quickly and accurately sewn if it is under-pressed.

To refinish the fabric after manufacturing the garment:

Especially during under-pressing, the surface of the fabric may be temporarily changed. A common symptom is gloss or glazing, introduced by extreme pressure of press or iron in order to achieve a firm edge or seam. The surface fibres are heavily flattened in such a way as to form a partial mirror.

In summary, pressing makes the final presentation of the garment, ready for sale.

Categories of Pressings

The process of pressing serves to highlight the variety and extremes which exist within the clothing industry across the different garment types. It is useful to divide garment into categories according to the amount and type of pressing they require.

Garments which require no pressing:

This category includes stretch swimwear and dancewear, bras, briefs and other items of underwear. Manufacturer achieves a satisfactory finished appearance through topstitching of seams and use of fabrics. Sometimes synthetic and usually knitted, which do not require shaping, refinishing or creasing. The factories making such type of garments there may be no pressing equipment.

Garments requiring minimal pressing or finishing:

The term finishing is used here since this category includes garments no more than a light steaming. Since pressing in the sense of applying pressure is not necessary. Such products are single ply garments such as slips and nightgowns, T-shirts and other knitted leisurewear.

Garments requiring the use of an iron in under-pressing and final pressing:

For the opening of seams and the creasing of edges and for pressing garments with gathers and fullness, and in situations where style change is frequent, pressing with an iron is common because it is simple and flexible.

Garments requiring extensive under-pressing and final pressing:

This category includes garments which require the pressing open of seams and setting of edges during manufacturer which use large areas of interlining and which are usually wholly or partly lined.

In includes men's jacket, trousers and waistcoats, many skirts, women's tailored jackets and trousers and other lined rainwear. Style change in many of these garments is infrequent and a range of specialized, shaped, press equipment has been developed.

The Means of Pressing

The means of pressing are heat, moisture (usually as steam) and pressure, singly or in combination. These means deform or reform fibres, yarn and fabrics in order to achieve the effect intended by the designer.

Equally important, after application of heat and moisture, is the application of vacuum, which sucks ambient air through the garment as it lies on the buck (the lower part of a press) or pressing table. This rapidly dries out residual moisture from the garment and ensures that the set imparted by pressing is retained. The suction is created by an exhauster operated by an electric motor. In the simpler finishing process, it will be seen that hot air or infra-red heating may serve the same purpose.

Pressing Equipment's and Methods

In practice, many companies combine the use of several types of pressing equipment to achieve satisfactory and economical pressing.

Iron

The traditional form of iron, heated by the gas flame inside the metal casting temperature was estimated only by the rate of evaporation from its bottom surface. A damp rag provided moisture and a piece of linen was the drying agent.

The most common type of iron in general use nowadays is steam electric. The iron is heated by an electric element controlled by a thermostat and supplied with steam, either from the

factory’s main steam supply or from a small boiler. The steam function of the iron is activated by the touch of a button.

There is a range of workplaces available for ironing. In a situation where a variety of parts and shapes of garments has to be pressed, a simple pressing table, similar in shape to a domestic ironing board, is used. Modern tables have a supply of vacuum to hold the garment in position and dry and set it after ironing.

Steam Presses

A steam press consists of a static buck and a head of complementary shape which closes onto it, thus sandwiching the garment to be pressed. It consists of a frame carrying the buck which is generally rounded in shape for pressing a variety of garments.

A pipe system is used to distributing steam to head and buck; whereas a vacuum system is to provide suction through the buck.

This system contains foot controls for head closure and vacuum, with hand and/or foot controls for steam. There is also a means of varying head pressure.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What are assemble garment parts?
2. How do prepare assemble garment parts?
3. What are components of garment?
4. Identify garment parts?
5. Mention tools and equipment's used for assemble garment pars?

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 5 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-3	Sew garments with sewing standard and procedures

Introduction

Making a sample is an essential first step for each season, and is generally doable even with limited resources. However, taking that sample up to and through production requires some prep work both pre and post sampling.

Before your sample, there are some key steps you can take early on to set yourself up for success- which will in turn lead to better deliveries and happier retailers.

It all starts with proper patterning. Take the time to true your seams and run those quick pattern shape tests to get a good idea if your sample will work before cutting and sewing.

• Only use fabrics or trims that are from a reliable wholesale source.

• Know your calendar and meet those deadlines. Make sure your calendar clearly marks when you need to order your fabric with plenty of time for the worst-case scenarios, give your maker all the time than they ask for to complete the project, and remember to pad each deadline for shipping and mistakes.

• Figure out your costing for the garment early. Start with what your selling price is, then work backwards. This should tell you how much your fabric can cost, and also how complicated you can get in your construction.

Once your sample is complete, there is no time to waste in getting it ready for production! Passing your project off to a factory can be intimidating and it is best to make as many decisions early and prepare your style for production before your sales are in.

Pre-production work can be done in six basic steps:

Fit your garment. This is a critical first step. Find a fit model that is you're target customer's average body shape within your sample size. Fit the garment on that model, then fit the same garment of other people who consider themselves that same size. Generally you should find the same comments ring true in each fitting- and if not, take another look at that fit change.

Correct your pattern and test it for perfection. This might happen more than one time. Once your pattern is corrected, make another sample and refit. Repeat as many times as needed in order to get a correctly fitting garment. Keep your tech pack and cutter's must up to date and review the seams, stitching and extra notes you may add to have the confidence that the producer will understand each detail. Also, make your tech pack easy to read,

factories may not take the time to figure out a puzzle of a tech pack, which leaves you vulnerable to mistakes.

Grade your pattern. On your tech pack, you should include a grading chart. This is the page you should pass to your grader and is a chart of how much your key measurements will go up or down in grading for each size. Your sample size should be marked as Zero, then as your size goes up and down, indicate the size change with a plus/minus number in inches. It is a good idea to sample each size to ensure you're happy with your grading.

Create a marker– a good marker can make or break your success financially; many yards of fabric can be lost with a bad layout. Having a marker made is generally simple and fairly inexpensive. It is very important to be clear about what pattern pieces are in which fabrics and interfacings AND your fabric's cut table widths. Make sure you have a sew-by sample to give to the factory to follow that is 100% correct. Giving a factory a sample that is not correct will very often result in your whole production looking exactly like that sample- even if your tech pack indicates differently.

- Sewing department will be prepared input and take size set covering all size cut from cutting department. Also accessories from store department against to Assort bundle statement.
- Sewing finish pattern maker will be responsible for collecting cutting pattern from cutting department and will be prepared finish pattern as required. Also he will be responsible for hand over finish patter for stitching of size set with Quality Head.
- Sample man will be responsible for stitching size set help with Line Head with Quality Head in present of IE Technical in charge and respective IE. Also will update PM Accordingly
- After stitching the size set sample man will be hand over sample to Quality Head for construction and before wash measurement check.
- Quality Head shall prepared a report against to measurement and sample will be handover to production account department got sending size set to washing plant.
- After receiving wash size set from washing production account department will be responsible for hand over size set to sewing Quality Head for check after wash measurement.

- Base on the after wash measurement if any pattern amendment QA in charge must inform to AO, AM for further action.
- AO, AM will be responsible for discuss with and AO, AM for if any pattern amendment.
- If any amendment manager will pass to cutting department amendment pattern with measurement sign of by manager.

Self-Check –3	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. How do sew garments with sewing standard and procedures?
2. What are sewing standard?
3. What are sewing procedures?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below -3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-4	Sew Garments with company’s time frame

Introduction

A sewing machine is a machine used to sew fabric and other materials together with thread. Sewing machines were invented during the first Industrial Revolution to decrease the amount of manual sewing work performed in clothing companies. Since the invention of the first working sewing machine, generally considered to have been the work of Elias Howard, and Englishman Thomas Saint in 1790, the sewing machine has greatly improved the efficiency and productivity of the clothing industry.

Home sewing machines are designed for one person to sew individual items while using a single stitch type. In a modern sewing machine the fabric easily glides in and out of the machine without the inconvenience of needles and thimbles and other such tools used in hand sewing, automating the process of stitching and saving time.

Industrial sewing machines, by contrast to domestic machines, are larger, faster, and more varied in their size, cost, appearance, and task.

A predetermined motion time system (PMTS) is frequently used to perform Labor Minute Costing in order to set piece-rates, wage-rates and/or incentives in labor (labour) oriented industries by quantifying the amount of time required to perform specific tasks under defined conditions. Today the PMTS is mainly used in work measurement for shorter cycles in labour oriented industries such as apparel and footwear. This topic comes under wider industrial and production engineering.

One of such a system is known as "Work Factor" and more popular Methods-time measurement, (MTM) released in 1948 exist today in several variations and used in some commercial applications.

New legislation in developed markets following sustainability issues, Living Wage movement and the 2013 disaster in Rana Plaza, Bangladesh have brought labor costing and standards back to the focus of activists and global fashion retailers. Occupational safety and health (OSH, OHS), Ergonomics, Skills development and job satisfaction are some of the other factors influenced by Labor Standards Act (Japan).

Predetermined Motion Time Standard and Predetermined Time standards (PTS), Pre-determined Time Systems are other terms that describe same concept by different authors.

Main outcome of PMTS application is quantifying labor inputs in terms of SMV (Standard Minute Value) or SAM (Stranded Allocated Minute).

General Sewing Data is a PMTS for the sewn products and apparel industries and is based on MTM Core Data both proprietary data systems of GSD (Corporate) Ltd who are based in Derby UK. The Time standards for General Sewing Data are used in GSD Enterprise and GSD QUEST.

Following an acquisition by Coats Group PLC., the world's leading industrial thread and consumer textile crafts business, GSD became part of Services. Together with Fast React Systems, Coats Global Services have unparalleled reach through the global fashion supply chain. They specialize in providing technology based solutions and industry best practice expertise that deliver significant and measurable cost, speed and productivity improvements to fashion brands, retailers, sewn product manufacturers and textile mills.

- Sewing skirt – 30 minutes (basic design)
- Sewing blouse – 45 minutes (basic design)
- Sewing pants – 75 minutes (with 2 side set-in pockets and 1 back set-in pocket)
- Sewing polo shirt – 60 minutes (with short sleeve, turbinated collar and 1 patch front pocket)
- Sewing men's long sleeve – 70 minutes
- Sewing blouse with sports collar – 60 minutes
- Sewing dress with princess cut design – 105 minutes
- Sewing basic dress – 65 minutes
- Sewing blazer – 150 minutes (with continuous collar and 2 pockets in front

Self-Check -4	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. How to Sew Garments with company's time frame?
2. How do companies set their time frame?
3. Categorize each products of company's time frame?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-5	Identify sewing Sleeves, collars and pockets

Introduction

Sleeves have always been used for changing the silhouette of a garment. Important sleeve Silhouettes keep appearing, disappearing and reappearing over a period of time. There are two Major classifications of sleeves: the set in sleeve cut separately and stitched into the armhole of the bodice, and the sleeve combined with part or the entire bodice.

Types of sleeves:

Cap sleeve - These jut away from the arm and can be shaped in a variety of ways. It is usually designed for a bodice, dress or blouse.

Puff sleeve - Puff sleeves are developed by adding fullness to the sleeve's width.

Puff sleeves can be of any length desired.

Bell sleeve - Bell sleeves have a smooth cap and an unconfined hemline flaring out in the shape of a bell. The bell may be developed into any length and flare desired.

Leg-of-Mutton Sleeve - This sleeve is developed by enlarging the biceps and cap area, tapering the fullness towards the elbow level.

Raglan sleeve - The raglan sleeve pattern is developed by including part of the neckline and armhole to complete the sleeve draft. The raglan sleeve can be designed for bodice, dress, blouse, jacket, coat etc.

- Sleeves – puff sleeve, tailored sleeve, cup sleeve and cuffs
- Waistbands – straight or shaped
- Collars – sports collar, shirt collars
- Plackets
- Facings – neck, armholes
- Binds
- Zips – dress, skirt, trouser, invisible
- Buttons and buttonholes
- Pocket – cut away, patch, in seam, flap any deviation or faults

A collar is the part of a garment that encircles the neck and frames the face, offering great opportunities for design variations Collars can be developed close to or away from the neckline.

They can be wide, narrow, flat, or high, and with or without an attached stand. The collar edge may be stylized or may follow a basic shape (round, curved, scalloped, square, pointed etc.).

Collars can be convertible (can be worn closed and open, so that it lies flat across the chest when opened) or nonconvertible (stay in the same location whether garment is buttoned or unbuttoned).

Types of collars

- Peter Pan collar
- Sailor collar
- Chinese collar
- Shirt collar
- Collar for square neck

A small bag sewn into or on clothing so as to form part of it, used for carrying small articles is known as pocket.

Pocket is part of a garment used to carry things and consisting of a piece of material sewn onto or inside the garment.

The different types of pocket are shown below:

Welt pocket is a pocket whose opening is adorned and reinforced by one or two thin strips.

Patch pocket is a pocket of various shapes and sizes, made of a piece of material sewn onto the garment's outer surface.

Flap pocket is a pocket whose opening is covered by a piece of fabric hanging from the top of it.

Gusset pocket is a patch pocket made fuller by an expandable bottom and sides or by an inverted or round pleat in the middle of the pocket.

Hand-warmer pouch is a patch pocket on the front of a garment; it opens vertically on one or both sides to protect the hands against the cold.

Broad welt side pocket or an **angled pocket** is the outer edge of the opening has a wide welt.

Seam pocket is a pocket where the opening is in a side seam of the garment.

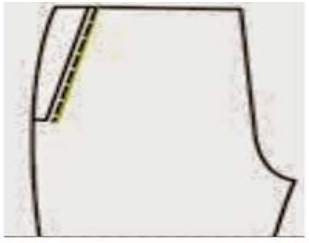
Inset pocket is a pocket whose opening contains a decorative seam, giving the garment a distinctive line.

The photographs are showing two shots of waist line pockets.

Right side pocket is closer to the Button over the Zip and the left side pocket is closer to the Button hole. Both are around 3.5 inches X 4.5 inches.

Similar pockets are stitched inside the Hand pockets with a small inclination outside.

Epaulette Pocket



Side pocket

Curved inset pocket

Slanted Inset

Cargo pocket

Ticket pocket

Epaulette Pocket: This pocket is similar to the hidden in seam pocket, the seam being part of a raglan sleeve and set close to the shoulder. Consequently the pocket has the name epaulette, i.e. shoulder ornament.

Side: This pocket is set into the side seam of the garment, similar to the hidden in seam pocket

Curved inset: The pocket here is constructed as a part of the front of the trouser or skirt, the back of the pocket is also part of the construction. The back of the pocket bag is an extension of that part of the garment, the front of it is effectively a facing to the front part of the garment.

Slanted Inset: As the curved inset but the shape of the pocket is that of a slant instead of a curve.

Cargo pocket is Similar in construction to the mechanic's pocket but applied to the waist of jeans or dungarees. The belt passes through the top of the pocket.

Ticket Introduced to carry railways tickets around 1860, the ticket pocket is frequently seen on denim jeans

Self-Check -5	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. How do identify sewing Sleeves?
2. How do identify sewing Collars?
3. How do identify sewing pockets?
4. What are the types of sleeve, collar and pockets?

Note: **Satisfactory rating - 4points** **Unsatisfactory - below 4 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-6	Sew based on customer's specification

Introduction

Specifications describe the requirements to which a product should conform. They are three specification types, item, supplier, and customer. Specification can be further defined using subtypes. By carefully defining you specification you can ensure that correct specification is applied as you collect data.

Each type of specification can be based on either an Item or Item Category. If your specification is based on an Item, you must assign an item and, depending on the item, an item revision. If your specification is based on an Item Category, and you have specified a default category set using the QA: Quality Category Set profile option, you must assign a category.

You can also attach illustrative or explanatory files -- in the form of text, images, word processing documents, spreadsheets, video, and so on -- to specifications. Attachments can be used to document processing instructions as well as inspection and disposition procedures. They can be viewed by operations personnel during quality data collection.

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To define item specifications:

1. Choose the Item Specification button.

2. Choose to base the specification on either an Item or an Item Category.

3. If the specification is based on item, select the Item and, optionally, the Revision.

4. If the specification is based on Item Category, select the Item Category.

   If you are defining an item category specification, the system automatically defaults the category set defined by the QA: Quality Category Set profile option. It can be overwritten. See: QA: Quality Category Set.

5. Save your work.

To define supplier specifications:

1. Choose the Supplier Specification radio button.

2. Choose to base the specification on either an Item or an Item Category.

3. If the specification is based on item, select the Item and, optionally, the Revision.

4. If the specification is based on Item Category, select the Item Category and enter the Supplier.

   If you are defining an item category specification, the system automatically defaults the category set defined by the QA: Quality Category Set profile option. It can be overwritten.

5. Save your work.

To define customer specifications:

1. Choose the Customer Specification button.

2. Choose to base the specification on either an Item or an Item Category.

3. If the specification is based on item, select the Item and, optionally, the Revision.

4. If the specification is based on Item Category, select the Item Category and enter the Customer.

   If you are defining an item category specification, the system automatically defaults the category set defined by the QA: Quality Category Set profile option. It can be overwritten.

5. Save your work.

To define specification subtypes:

1. Select a collection element.

2. Enter a value for the specification element.

   Details for Tailors, Dressmakers, and Custom Sewers

Description

Design, make, alter, repair, or fit garments.

Tasks

Fit and study garments on customers to determine required alterations.

Sew garments, using needles and thread or sewing machines.

Measure parts such as sleeves or pant legs, and mark or pin-fold alteration lines.

Take up or let down hems to shorten or lengthen garment parts such as sleeves.

Let out or take in seams in suits and other garments to improve fit.

Assemble garment parts and join parts with basting stitches, using needles and thread or sewing machines.

Remove stitches from garments to be altered, using rippers or razor blades.

Record required alterations and instructions on tags, and attach them to garments.

Examine tags on garments to determine alterations that are needed.

Fit, alter, repair, and make made-to-measure clothing, according to customers' and clothing manufacturers' specifications and fit, and applying principles of garment design, construction, and styling.

Maintain garment drape and proportions as alterations are performed.

Press garments, using hand irons or pressing machines.

Trim excess material, using scissors.

Develop, copy, or adapt designs for garments, and design patterns to fit measurements, applying knowledge of garment design, construction, styling, and fabric.

Make garment style changes, such as tapering pant legs, narrowing lapels, and adding or removing padding.

Measure customers, using tape measures, and record measurements.

Estimate how much a garment will cost to make, based on factors such as time and material requirements.

Repair or replace defective garment parts such as pockets, zippers, snaps, buttons, and linings.

Confer with customers to determine types of material and garment styles desired.

Position patterns of garment parts on fabric, and cut fabric along outlines, using scissors.

Sew buttonholes and attach buttons to finish garments.

Put in padding and shaping materials.

Self-Check -6	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. How do you sew based on customer's specification?
2. What are customer's specification?
3. How do determine customer's specifications?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-7	Sew Pocket flaps

Introduction

Sewing pocket flaps are make clothes for small bag sewn into or on clothing so as to form part of it, used for carrying small articles is known as pocket.
Pocket is part of a garment used to carry things and consisting of a piece of material sewn onto or inside the garment. Today shows you how to make a flap pocket, similar to a welt pocket.

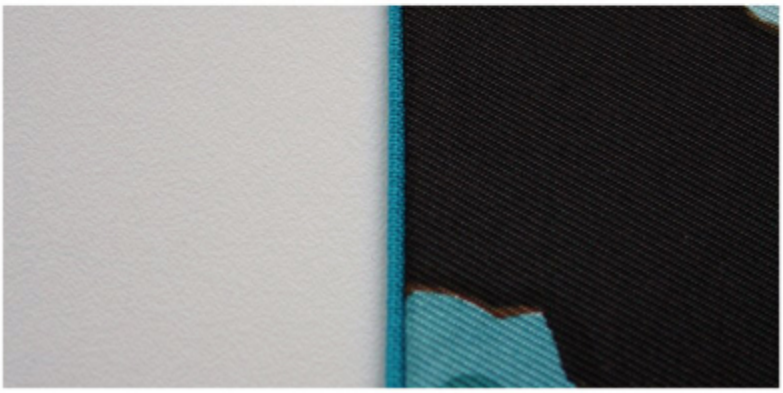
This is a pocket that looks very nice on a jacket. The construction of a flap pocket is very similar to the construction of a welt pocket.

- There are two pieces of fabric for the flap. The pattern piece for the lining is 4 mm smaller in width and 2 mm smaller in height.
- One piece will be the under strip of the pocket and facing of the pocket lining in one.
- One piece of fabric is for the facing of the pocket bag; this is what you see when you lift the flap of the pocket.
- Of course there are the pocket lining and the pocket bag as well.
- Interfacing is ironed on the flap lining and a piece of interfacing is also used on the garment in the area on which the pocket will be placed.
- Of course we wouldn’t usually use 3 different fabrics. This is only to make sure you can clearly see where every piece is coming.

We cut a paper template of the flap lining to help us make a perfect curve. Using the template, we sew over the stitching line on the flap lining interfacing.

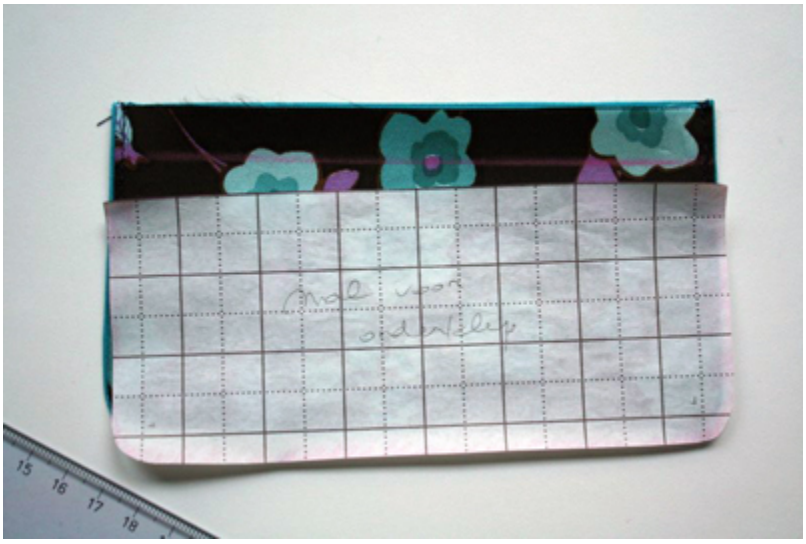
Stitch the flap, being sure to ease the difference. Trim the corners, and trim the seam allowance to reduce bulk

Turn and press. We can see now that the smaller lining makes the seam line come to the back side of the flap.



Edge stitch if desired.

Use your template to mark the stitching line on the back of the flap.



Fuse a piece of interfacing to the back side of your fabric where you want your pocket. The interfacing is at least 2 cm wider than the pocket opening. Mark the following lines on your fabric:

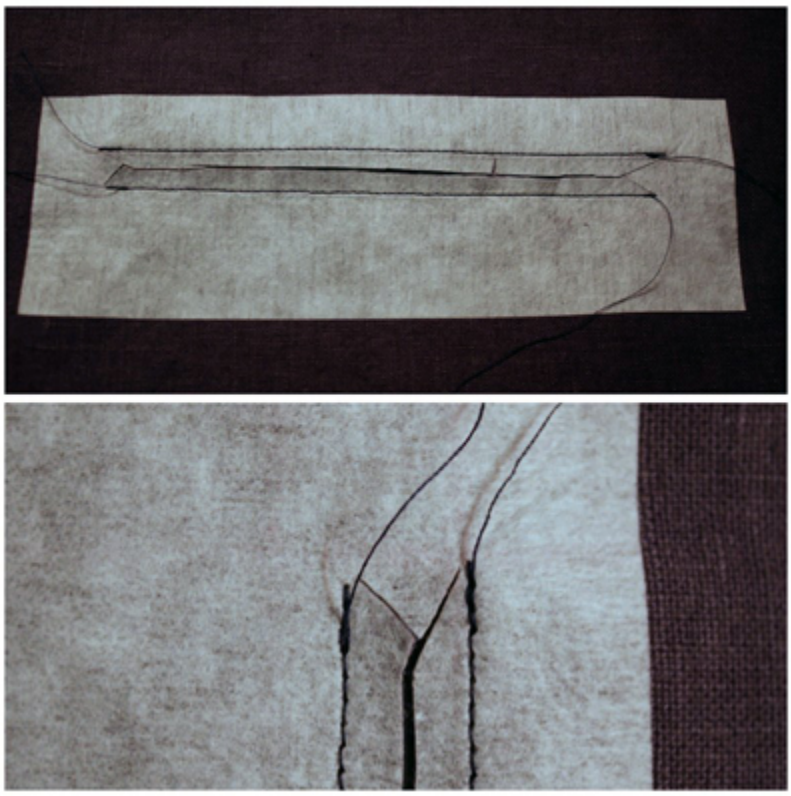
- The upper line is the stitching line for the flap.
- The lower line is a help line to meet the fold of your pocket strip (scroll down). The distance between the 2 lines is 1.5cm.
- The vertical lines are the width of the flap.

Pin your flap into place and sew on the line. Make sure your first and last stitch come over the edge of the flap.

Fold the strip at 2 cm from the edge. The larger half is the facing for the pocket lining and lays on top.

The second horizontal line is a helping line. Since the pocket opening will be 1 cm we place the strip to meet this helping line and sew it at 5 mm from the edge of the strip. Be sure the stitching is parallel and that the second line is 1 stitch shorter at each side (notice that this is a difference with the double welt pocket).

Now it’s time to cut in the opening of the pocket. At both edges you end with making little triangles. Cut until right next to your first and last stitch.

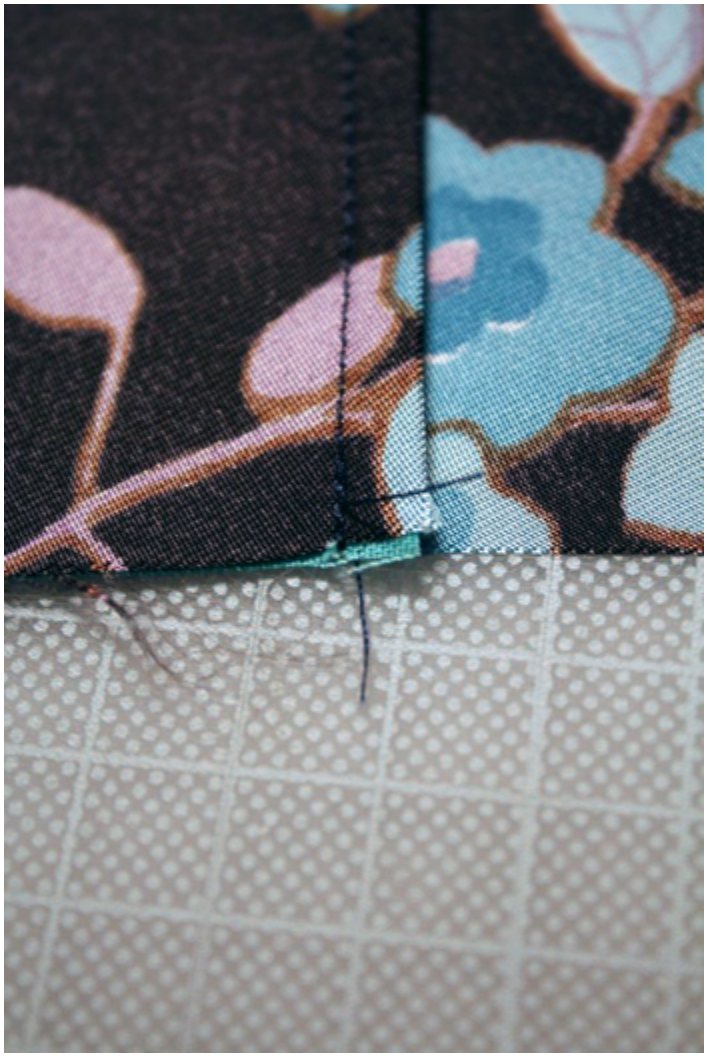


Pull your fabrics through the opening and give it a nice press.

Attach the bag lining to the facing.

Attach the facing of the pocket bag to the pocket bag. We do this by folding the pocket bag around the facing and sewing over the fold at 5 mm.

We can see on the image that the facing is now caught in this stitching.



Pin the pocket bag to the lining.

Turn your fabric with the right side up. Now flip away the upper part and stitch the pocket bag to the edge of the flap as close possible to the pocket opening

Lay everything flat again and now flip the other parts of the fabric so you can sew around the pocket, attaching the pocket bag to the pocket lining; be sure you catch those little triangles in your stitching.

It is now done! On this image we see the finished flap pocket:

This is what we see on the inside of the pocket and we can clearly see the different facings:

Here is the finished pocket on a blazer I made for my daughter:

Self-Check -7	**Written Test**

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is pocket flap?
2. What procedures are you follow to sew pocket flap?
3. Mention pocket flaps?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-8	Sew zipper

Introduction

Purchase a zipper that is the correct size and style for your project. Zippers come in a wide variety of colors, styles, and sizes. Pick the one that works best for your project.
Pre-wash the zipper to prevent shrinkage. This is only necessary if your zipper is made of natural materials. Simply follow package recommendations, as most zippers are made from man-made materials but some are made from natural fibers such as cotton press the fabric sides of the zipper. Make sure it is as flat as possible. Use a gentle heat to prevent melting the zipper if the teeth are made of plastic.
Zippers with metal teeth can stand up to more heat from an iron.
Cut pieces of fusible lightweight interfacing into one inch strips that are as long as your seam. This is only necessary if you are using a lightweight fabric that is not very strong or stiff. The interfacing will be used to make it stronger and stiffer, better able to handle the repetitive pressure that is caused by a zipper being opened and closed.
Insert the interfacing into the seam area of your project.[5] Simply follow the directions on your fusible interfacing to complete this step. In most cases you will simply place the thin strips of interfacing on the wrong side of your fabric right next to the seam. You will then iron over the fabric and interfacing, which will attach the interfacing to the fabric.

- If you can't find a zipper that is the perfect length, purchase a zipper that is slightly longer than the seam opening you want to put it in.[3] This will give you some leeway in positioning the zipper and will help you avoid hitting the end stop of the zipper with your sewing needle, which would break it.

Sewing in a zipper may seem like a daunting task for someone just learning to sew. However, while it will take some patience and practice, learning how to do it is worth your time and effort. Being able to sew in a zipper is a very useful skill to have if you want to successfully make your own clothes or other sewing projects that include zippers.
Machine baste the zipper opening closed. Sew right along the edge where you want the zipper to be eventually. Remember to sew so that your seam allowances stay the same as the rest of the garment.

This may seem counterintuitive but remember that a basting stitch is only temporary. It is used here simply to keep your seam in place. You will remove it after you have attached your zipper.

Press the seam open, ironing the seam allowance back against the wrong side of the project. Be sure to get the seam allowance pieces as open and flat as possible, as the folds on either side of the basting stitch will need to be nice and crisp.

Pin your zipper into place. Install the zipper in its closed position. Position the top of the zipper so the pull is just above the top line of the garment.

Any excess zipper that is laying below the end of the seam is not a problem. You want a little bit extending down, perhaps an inch or so, but any length in excess of that can be removed. Just cut off the excess zipper before you pin the zipper on and whip stitch the end to make a zipper stop

Machine baste the zipper to your project. Once again, the basting stitch will be removed later, it is just used here to keep the zipper in place. These basting stitches are necessary because they will keep the teeth of the zipper centered on the seam when you can't actually see the zipper as you sew over the right side of the project

Flip the project over, so that the right side of the fabric is facing up. You should only see the top of the zipper sticking out the top of your project. The rest of the zipper should be hidden away.

Use a zipper foot on your sewing machine to top stitch the seam through all fabric layers. Sew from bottom to top on both sides of the zipper to prevent rippling. The stitches should be kept at close to the center of your seam as possible, but your zipper foot will basically lead the way. You will need to finish the sewing by putting a line of stitches across the bottom of the seam. This will give your zipper an end point which the pull cannot go below

Remove all of the basting stitches with a seam ripper. Begin by taking out the basting stitches that kept the zipper in place. Once those are removed, take out the basting stitches

that go down the middle of the seam. This should expose the teeth of your zipper underneath.

- When taking out your basting stitches, be careful not to snag thread in your fabric or any of your permanent top stitches. A seam ripper is a great tool but it can easily cut threads that you don't want it to, so be careful.

  Test out your zipper! It should open and close smoothly and be centered nicely in your seam.

Self-Check -8	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List types of zipper?
2. How to sew zipper?
3. Show procedures of sewing zipper?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-9	Finish seam edges

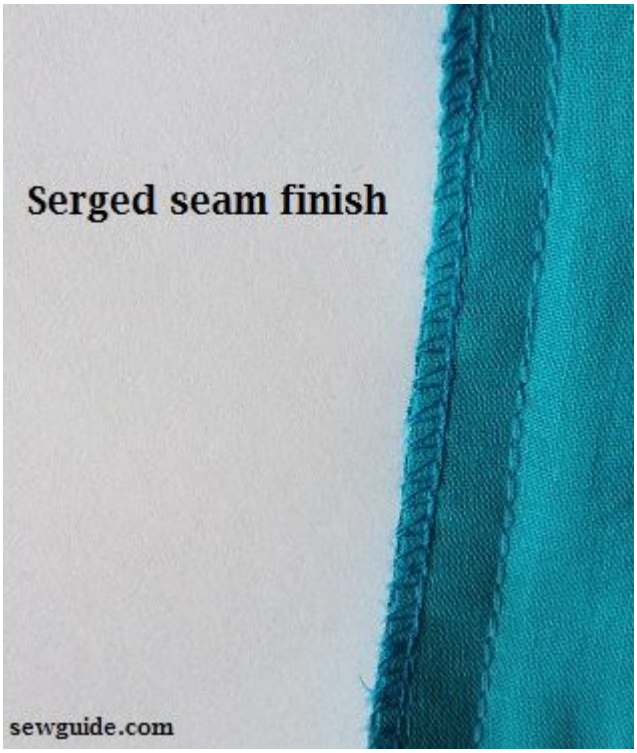
Introduction

If you use the French seam or the flat felled seam there is no need for a separate seam or edge finishing, as in these seams, the edges as enclosed and sewn?

1. Serge Seam Finish

This seam finish is done on a Serge. A serger encloses the edge of the fabric inside a thread casing. It adds a lot of strength to the seams, especially children's clothing.

If this seam finish is applied on your home sewn garment it will look like it is manufactured rather than handmade.



How to finish seams on a Serger

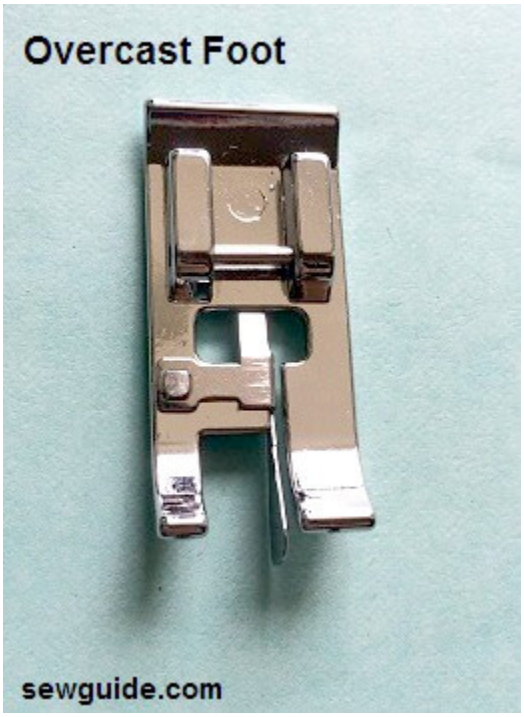
This edge finish can be applied before or after sewing the seam

To sew this finish, keep the fabric to the left of the needles and serge along the fabric edge. The thread will wrap the raw edge in a way that neatly finishes it.

How to sew seams if you do not have a Serger -7 ways

1. Overcast foot

The next best option you have is to use an overcast foot along with the overcast stitch. This will create a serger like finish, without cutting the extra fabric that the serger does. If you do not have overcast stitch setting on your machine use zigzag stitch.



Overcast stitch is similar to zigzag stitch but much neater in appearance; If you do not have a serger this is the next best alternative for seam finishes, especially for knits. This may not work well with sheer fabrics.

How to sew an overcast seam?

Fit the overcast foot for your sewing machine

Stitch the plain seam. Trim the seam allowance to 1/4″.

Place the fabric so that the raw edge of the fabric is touching the little flap of metal on the overcast foot.

Set the machine to overcast stitch. Overcast stitch is very similar to zigzag stitch. Sew along one seam side with overcast stitches. The edge guide of the overcast foot will make sure that the seam lies flat and straight without any bunching up. Repeat with the other side.

Alternately you can do both the seam allowances together especially for thin fabrics. If done separately after stitching is done, press the seam open.

More reading in detail – How to stitch an overcast stitch by hand and by sewing machine

3. Pinked seam finish

This seam finish is made using Pinking shears, a particular type of scissors, which gives a zigzag pattern on the cut edge. The very nature of the cutting prevents fraying of cloth in the raw edge to a small degree. It is mainly used in woven clothes.

4. Edge stitching Seam finish

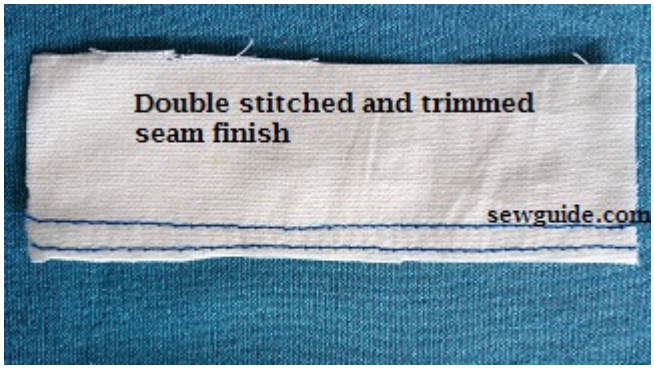
This is a very simple seam finish. It is best when done along with pinking the raw edge

How to make an edge stitching seam finish

Keep the two fabric pieces with the right sides together. Stitch a plain seam. Press it open. Pink both the seam edges on one side of the seam allowance 1/4″ from the pinked or cut edge, make a straight stitch. Repeat on the other seam allowance.

5. Double stitched and trimmed seam finish

Another very simple edge finish in which a parallel stitching line is made to the seam line.



How to make this simple edge finish?

Keep the two fabric pieces with the right sides together. Stitch a plain seam.

Exactly 1/8 inch away from the seam line, another stitching line is made parallel to the seam line – a straight stitch or a tight zigzag stitch is used here.

Cut away excess seam allowance close to the second stitching line.

An overcast stitch also may be used, after trimming the seam allowance.

6. Zigzag seam Finish

This is a seam finish which helps to neaten the seam; the zigzag seam finish is done with the zigzag stitch function in your sewing machine and nature of the stitch prevents the raw edges of the seams from fraying. This is an easy alternative to over locker machine

How to sew a zigzag seam finish

- Stitch the plain seam. Trim the seam allowance to 1/4″.
- Use the zigzag foot and set your machine to zigzag stitch.
- Use a wide stitch width and small stitch length.
- Sew along one seam edge with zigzag stitches, making sure that the pointy edge of the zigzag is always at the edge of the fabric. Repeat with the other side
  you can also do this seam finish with both the seam allowances pinned together though the separately done zigzag seam is the right way to avoid bulky seams. You can use the ‘together seam finish’ on delicate and sheer fabrics though.

Hand overcast seam finish (Flannel seam)

An overcast hand stitch is used in this edge finish. Use a matching thread to sew this edge stitch. This is used to finish the seam edges of flannel cloth.

How to sew a hand overcast seam finish

Keep with two fabric pieces with the right sides together. Stitch a plain seam. Press it open.

Using a single threaded hand needle, Sew an overcast stitch along the edge, wrapping the fabric edge in thread, all the while maintaining the flatness of the fabric edge. Adjust the

closeness of the overcast stitch according to the raveling quality of the fabric. For a very raveling fabric use very tight close overcast stitches.

9. Self-bound Fabric edge finish

Best used for light weight fabrics and sheer fabrics. This seam finish wraps one seam allowance over the other, thus enclosing the raw edge.

How to sew a self-bound seam finish

Keep the fabrics together right sides together along the stitching line and make a plain seam. Trim one of the seam allowance to 1/8 inch.

Turn the other seam allowance edge over the trimmed seam allowance. Now the smaller edge is enclosed in the fold of the other seam allowance.
Make a straight stitching line along the raw edge of the folded seam, parallel and close to the seam stitching line.

10. Hemmed fell seam Finish

Similar to the self-bound seam edge finish this is hemmed by hand.

How to get it done?

Make a plain seam. One seam side is trimmed to half of the other side. The other seam is turned down and hemmed by hand. Checkout the different hemming stitches.

11. Turned under seam Finish (Clean finish)

A very easy and very neat looking seam finish

How to sew a Turned under seam

- Stitch the plain seam. Press the seams open.
- Make sure that the seams are of 1/2″
- Now turn under raw edges 1/4 inch of the seam allowance and press.
- Edge stitch along the fold line of the turned under seam allowance, each side separately. Voila you have a very clean seam without any complications.

12. Bound seam (Hong Kong seams) Finish

This method uses bias binding tapes to enclose the seams for a very neat look; all the frayed raw edges are hidden in between the bias binding. This is usually used in high end couture clothes. You can use this in your handmade clothes for a very professional and neat appearance inside.

Make sure that the bias binding tape is made of a very light weight fabric otherwise you will add unwanted bulk to your seams. I would use a contrasting coloured bias tape for a very interesting look inside. Checkout the tutorial for different ways of bias binding

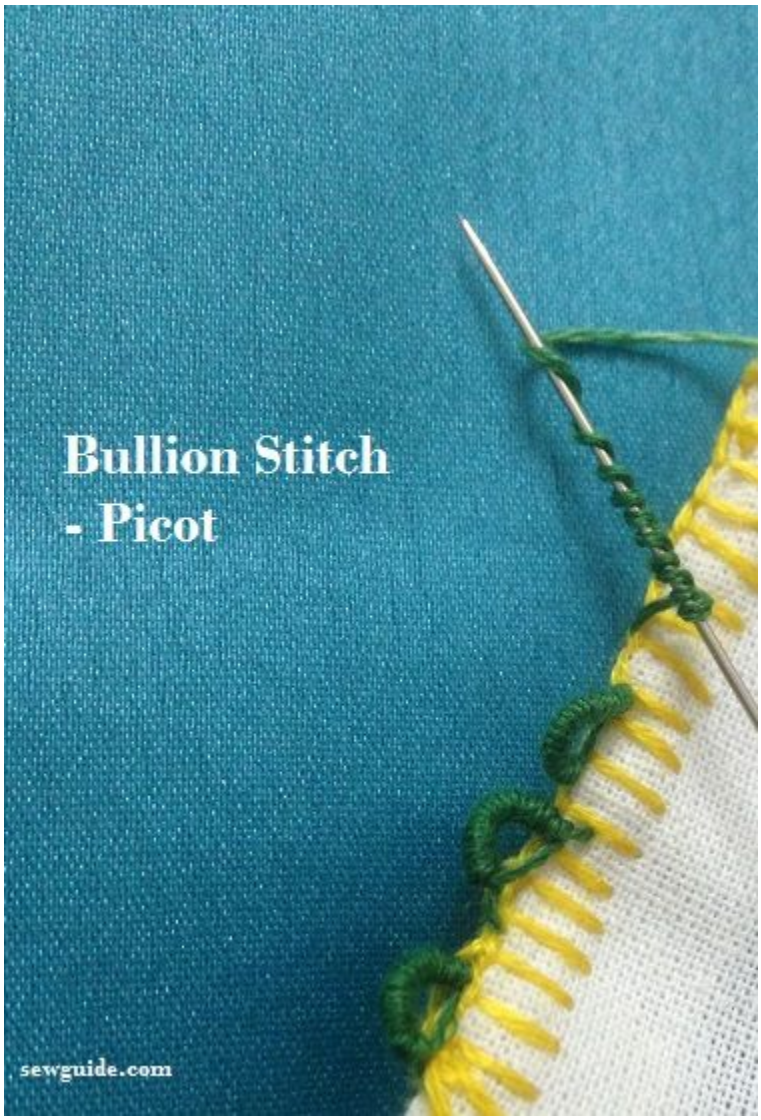
How to sew Bound – Hong Kong- seams

Join the two fabrics right sides together and stitch leaving the required seam allowance.
Press the seams open with an iron; Make sure that you have not trimmed or over locked the edges
Determine the length of the seam. Prepare and cut bias binding for the length
Place one edge of the seam into the double folded bias binding and pin in place Now sew the seam enclosed in the bias tape close to the edge. For that open the bias binding and first pin one length to the wrong side of one of the seam allowances. Now fold and press the binding around to the right side of your seam allowance and pin it into place. Stitch close to the edge. Repeat for the other side and press in place.

The next section of fabric edges are not necessarily used as seam finishes. These are fabric edge finishes you can use to finish the fabric edges of skirts, dresses, scarfs etc. For more details checkout the post on hemming stitches

13. Picot edge Stitch

A picot stitch makes a zig zag stitch along the edge enclosing the fabric edge in a fold and uses a rolled hem foot for this.



For details on how to make this edge – How to sew picot edge with sewing machine and by hand and the best ways to use the rolled hemmer foot

14. Scalloped Fabric edge

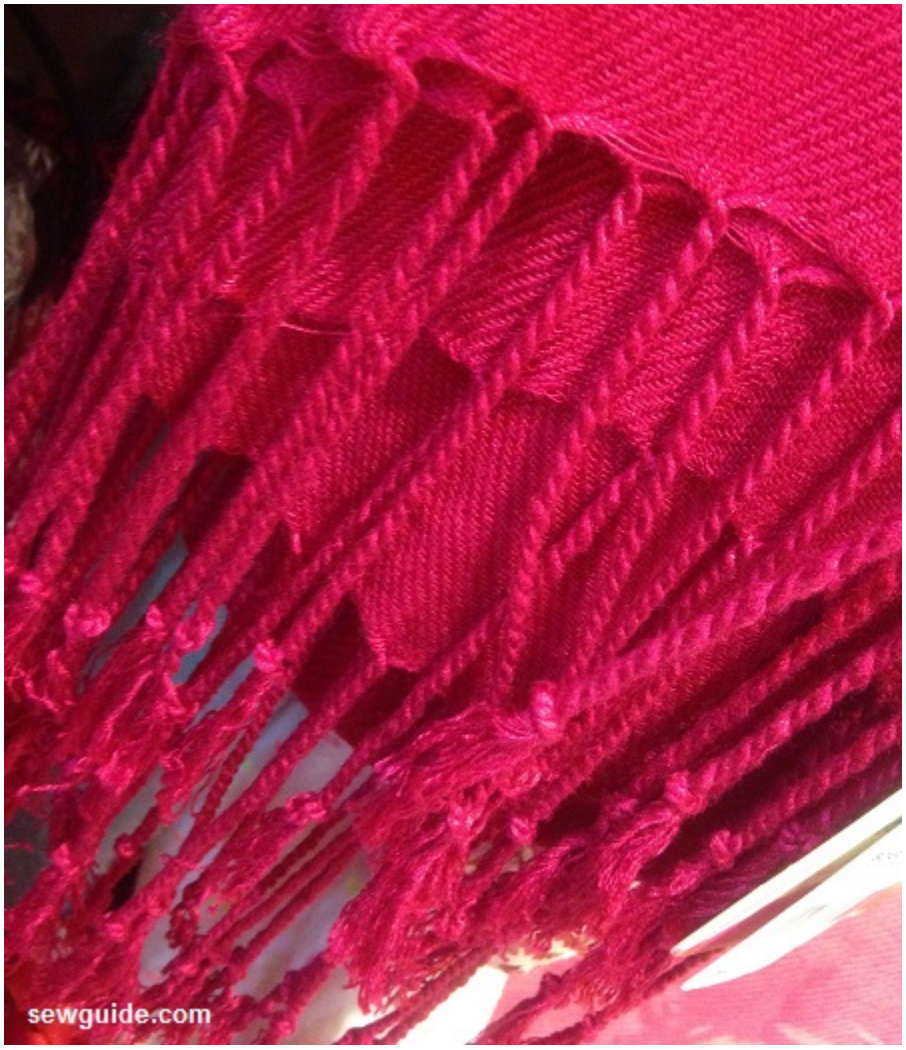
This is a hand finished fabric edge suitable for hems. Blanket stitches are used in a graded fashion on the fabric edge and excess fabric is cut away. Check out the post on scalloped edges for more ways of doing this finish

15. Ornamental braided edge

This is a fabric edge which is usually used as a hem. Braids made with hand stitching are attached to the edge after finishing the fabric edge.

Check out this post “8 beautiful decorative edges” for more edge stitches like this that you can use.

16. Fringed edges



Checkout the post on making 9 types of fringed trims

17. Piped edge

This is an edge where you sew a cord covered in a fabric strip (known as piping ; checkout the post on making piping cord and sewing it)

In sewing, a seam is the join where two or more layers of fabric, leather, or other materials are held together with stitches. Prior to the invention of the sewing machine, all sewing was done by hand. Seams in modern mass-produced household textiles, sporting goods, and ready-to-wear clothing are sewn by computerized machines, while home shoemaking, dressmaking, quilting, crafts, haute couture and tailoring may use a combination of hand and machine sewing.

In clothing construction, seams are classified by their type (plain, lapped, abutted, or French seams and position in the finished garment (center back seam, inseam, side seam). Seams are finished with a variety of techniques to prevent raveling of raw fabric edges and to neaten the inside of garments.

All basics seams used in clothing construction are variants on four basic types of seams:[1]

- Plain seams
- French seams
- Flat or abutted seams
- Lapped seams

A **plain seam** is the most common type of machine-sewn seam. It joins two pieces of fabric together face-to-face by sewing through both pieces, leaving a seam allowance with raw

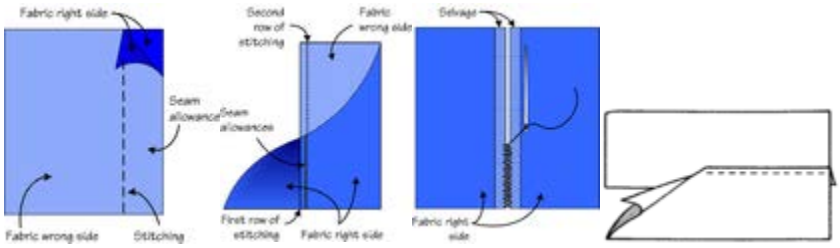
edges inside the work. The seam allowance usually requires some sort of seam finish to prevent raveling.

Either piping or cording may be inserted into a plain seam.

In a **French seam**, the raw edges of the fabric are fully enclosed for a neat finish. The seam is first sewn with wrong sides together, then the seam allowances are trimmed and pressed. A second seam is sewn with right sides together, enclosing the raw edges of the original seam.

In a **flat** or **abutted seam**, two pieces of fabric are joined edge-to edge with no overlap and sewn with hand or machine stitching that encloses the raw edges. **Antique or old German seam** is the 19th century name for a hand-sewn flat seam that joins two pieces of fabric at their selvages. This type of construction is found in traditional linen garments such as shirts and chemises, and in hand-made sheets pieced from narrow loom widths of linen.[5]

In a **lapped seam**, the two layers overlap with the wrong side of the top layer laid against the right side of the lower layer. Lapped seams are typically used for bulky materials that do not ravel, such as leather and felt.



Plain seam French seam Ancient or Old German Flat seam Lapped seam

A seam finish is a treatment that secures and neatens the raw edges of a plain seam to prevent raveling,[6] by sewing over the raw edges or enclosing them in some sort of binding.

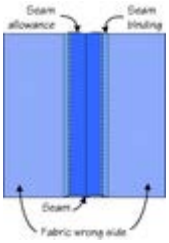
On mass-produced clothing, the seam allowances of plain seams are usually trimmed and stitched together with an overclock stitch using a serger. Plain seams may also be pressed open, with each seam allowance separately secured with an over lock stitch. Traditional home sewing techniques for finishing plain seams include trimming with pinking shears, over sewing with a zigzag stitch, and hand or machine overcasting.

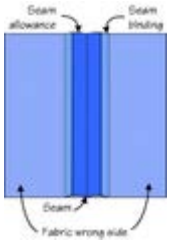
A **bound seam** has each of the raw edges of its seam allowances enclosed in a strip of fabric, lace or net 'binding' that has been folded in half lengthwise. An example of binding is double-fold bias tape. The binding's fold is wrapped around the raw edge of the seam

allowance and is stitched, through all thicknesses, catching underside of binding in stitching.[7] Bound seams are often used on lightweight fabrics including silk and chiffon and on unlined garments to produce a neat finish.

A **Hong Kong seam** or **Hong Kong finish** is a home sewing term for a type of bound seam in which each raw edge of the seam allowance is separately encased in a fabric binding. In couture sewing or tailoring, the binding is usually a bias-cut strip of lightweight lining fabric; in home sewing, commercial bias tape is often used.

In a Hong Kong finish, a bias strip of fabric is cut to the width of the seam allowance plus 1/4". The bias strip is placed on top of the seam allowance, right sides together, and stitched 1/8" from raw edges. The bias strip is then folded over the raw edge and around to the underside and stitched in place.





Bound seam – The binding is wrapped Around each raw edge and sewn in place With one line of stitching

Hong Kong finish

In clothing construction, seams are identified by their position in the finished garment.

A **center front seam** runs vertically down the front of a garment.

A **center back seam** or **back seam** runs vertically down the center-back of a garment. It can be used to create anatomical shaping to the back portion of a garment particularly through the waist area and hips. It can also be used for styling and functional purposes involving pleats, vents, flare toward the hem or for back closures such as buttoned plackets or zippers.

A **side seam** runs vertically down the side of a garment.

A **side-back seam** runs from the armscye to the waist, and fits the garment to the curve below the shoulder blades. Side-back seams may be used instead of, or in combination with, side and center back seams.

A **shoulder seam** runs from the neckline to the armscye, usually at the highest point of the shoulder.

Princess seams in the front or back run from the shoulder or armscye to the hem at the side-back or side-front. Princess seams shape the garment to the body's curves and eliminate the need for darting at the bust, waist, and shoulder.[9]

An **inseam** is the seam that binds the length of the inner trouser leg. The distance from the bottom crotch to the lower ankle is also known as the inseam. The inseam length determines the length of the inner pant leg to appropriately fit the wearer. In the UK this is usually known as the inside-leg measurement (for trousers fit)

Self-Check -9	**Written Test**

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Mention types of seam used for edge finish?
2. What is the purpose of edge finish?
3. How do sew finish edge?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-10	Sew waist band width

Introduction

Most waistbands do multiple duties in a garment. Other than just holding up a skirt or a pant, or serving as place holders of accessories like bows, they are also eye stoppers – they bring the eyes to the leanest part of your torso. A neat and carefully made waistband is an essential prerequisite to a well-tailored outfit. Checkout the different types of waistbands and how to go about adding them easily.

4. Straight Waistband

How to add a basic straight waistband to your dress or skirt

Straight waistbands are classy, there is no question about it. The fitting finish of this waistband makes this one give a slim look to the whole silhouette. They will be fitting smugly at the waist and make the whole garment look the best. It is a perfect finish for fitted garments. The most popular straight waistband width is 1.5 inches though I have sewn ones which are 1 inch and more than 2 inches as well.Checkout the pattern /sewing tutorial for pencil skirt for sewing a waistband of this type

One of the most important criteria for getting a good looking waistband is to **interface** it. You can use a fusible interfacing of medium weight. Either interface the whole waistband fabric or cut the interfacing to the width and length of the dimensions of the final waistband you want.

In the second instance the seam allowance is done away with and hence no added bulk when sewing the seams of the waistband.

How to attach the waistband to the skirt

When attaching the waistband to a skirt, stitch the waistband to the skirt after the skirt is finished, including gathers, pleats, darts and tucks, zipper is attached, or opening finished with a turn under finish or facing.

- Cut out the waistband pieces
- Length of the waistband = top edge of the skirt piece + 1″ seam allowance (+ 1″ overlap if you want an overlap for attaching fasteners like hooks, buttons etc) width of fabric piece = 4 1/4 inch for a 1.5 inch waistband
- Adhere the interfacing to the waistband piece to the wrong side of the waistband piece
- Keep the waistband piece on the skirt waist edge, rightsides together. Keep the seam allowance extended at both ends ,as well as the overlap.
- Overlap would be extending past the edge
- Join the waistband and the skirt waist along the long edge. Donot forget to back stitch at the start and ending
- Press the 1/2 inch seam allowance of the other long edge to the inside with a medium hot iron.
- Press the waistband by almost half right sides together (almost half means less than 1/4 inch more than half, so that when we machine stitch from the top, the edge on the back will be caught in the stitching line correctly.)You can also hand stitch the edges using whip stitches
- Stitch the side edges at both ends with a 1/2 inch seam allowance.
- Trim the corner and the seam allowance
- Turn the waistband right side out. Pull out the corners with a sharp pointed object ; You need square corners
- On the wrong side of the skirt, the folded edge will be overlapping the seam line, even extending a little bit. Pin the whole waistband in place with the folded under edge
- Top stitch, stitch in the ditch from the top along the seam line. The turned under edge at the back will be neatly caught in this stitching now.

5. Facing waistband

Adding a facing waistband can give a seamless and neat finish to the waist area,. You will have a very smooth skirt edge without any separate waistband. It is better if the facing is made with a lightweight fabric . Checkout the sewing tutorial for a straight skirt with yoke with the faced waistband for how to sew this type of waistband with a zipper and also the post on drafting and sewing facing to fabric edges

6. Stretch Waistbands

The two main types of elastic waistbands are **self-waistband**which uses a tuned under finish to create the casing for elastic and**separate waistband** which uses a separate strip of fabric to create the waistband. You can also use wide decorative elastic directly as a waistband without a casing. Then there is shirring which is used to gather the fabric at the waist. A stretch paperbag waistband is a variation of the elastic waistband.Checkout the post on different ways of sewing elastic waistbands for more details

7. Drawstring waistbands

A drawstring waistband is very similar to the turned under waistband. It is basically made by just turning under the waist fabric edge and make a casing for a drawstring cord which will tighten the loose waist of the garment. Eyelets or buttonholes are added for the cord to pass through. Checkout the tutorial for a drawstring lounge pants for sewing instructions for a drawstring waistband (separate) or sewing instructions for salwar pants for a turn under drawstring waistband.

How to make a drawstring waistband

Step 1

Two buttonholes have to be sewn on the either side of the center front of the waistband for the drawstring to pass through. You can use eyelet holes instead of buttonholes. Metal grommets are very easy to apply on clothes. Checkout the tutorial to make different types of eyelet holes including metal eyelets . These holes has to be completed before making the casing mark the folding line of the upper edge of the casing. After you have marked the center front, mark buttonholes 1/2 inch to either side of the center front right on the casing. Finish the buttonholes or eyelets

Step 2

Fold the fabric edge twice, to the inside, Pin in place. Stitch the casing along the folded edge.

Top stitch the top edge of the casing as well; so that there is a channel for the drawstring cord to pass through

Step 3

Cut a length of cord length of the cord should be 30 inch added to the hip round measure you can use shop bought cord or simple fabric tubes made using the tutorial found here

Step 4

Insert the cord / tube through the casing with the help of a pin. You can join the ends of cords or tie knots at the end of the cord or make cord stoppers like the ones in this gift bag tutorial to prevent the drawstring from slipping outside the casing.

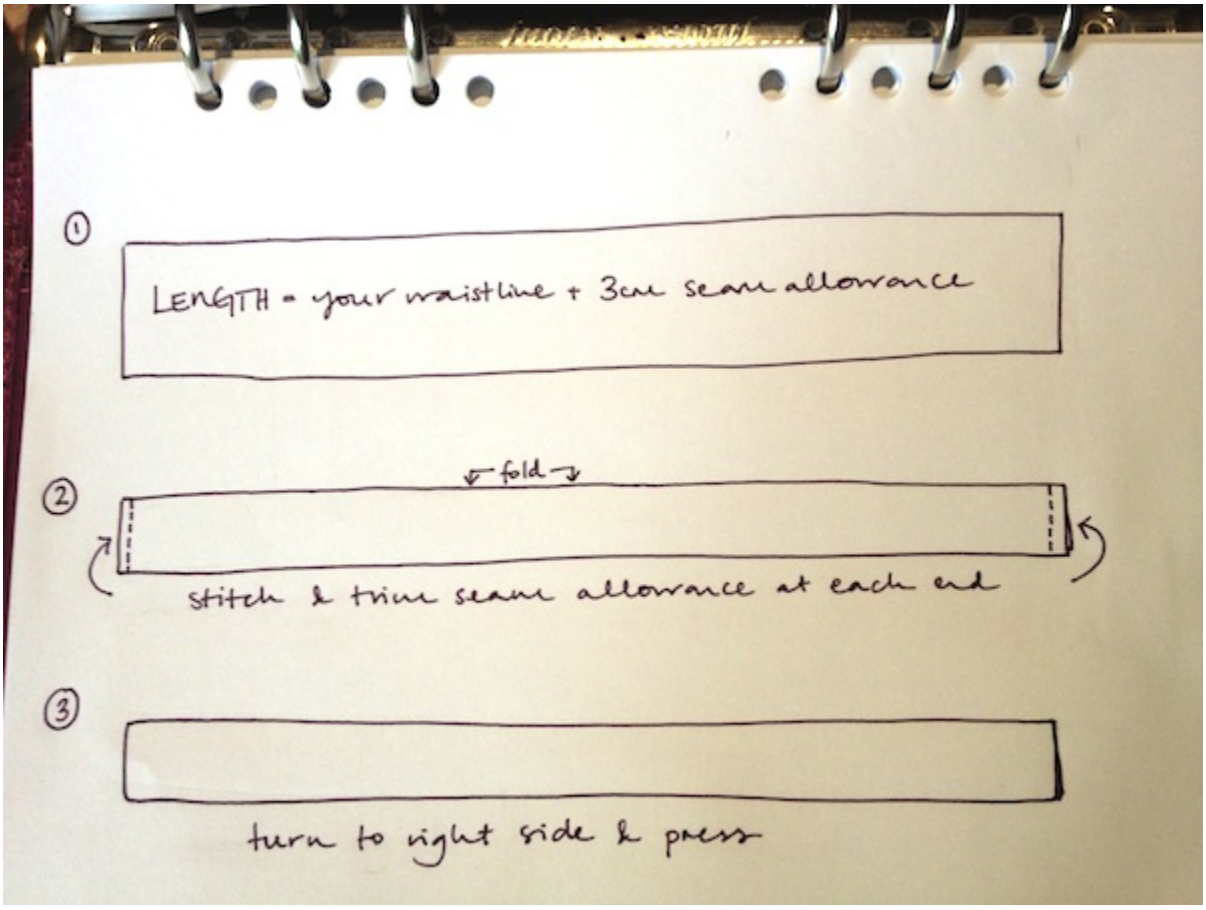
8. Wrap around waistband

Checkout this wrap skirt tutorial to see this kind of waistband which is a very comfortable and casual one because this waistband is as fitting as you seem fit. It is how you tie it that make or break it. You can also use a button fastening with a wraparound waistband as is shown in this wrap skirt tutorial

Full skirts and their infinite variations can be the quickest and most satisfying sewing project, whip-up able in under an hour. That is, once you've mastered the basics that make up a skirt's skeleton, namely inserting an invisible zipper which we've already covered here, and attaching a waistband. The following tutorial covers two ways to make a perfect waistband.

Basic waistband

This super basic waistband simply serves to finish and neaten the topline of a skirt by enclosing its raw edge. This waistband is best suited for a center back closure as it meets perfectly at the ends, to be fastened with a hook & eye



Cut a length of fabric that equals your waistline measurement + 3cm seam allowance (1.5cm at each end). Make sure you cut the fabric on the straight to avoid the fibres stretching. An easy way to be sure you are cutting on the straight is by checking that the individual threads that make up the fabric are at a right angle to your cutting lines.

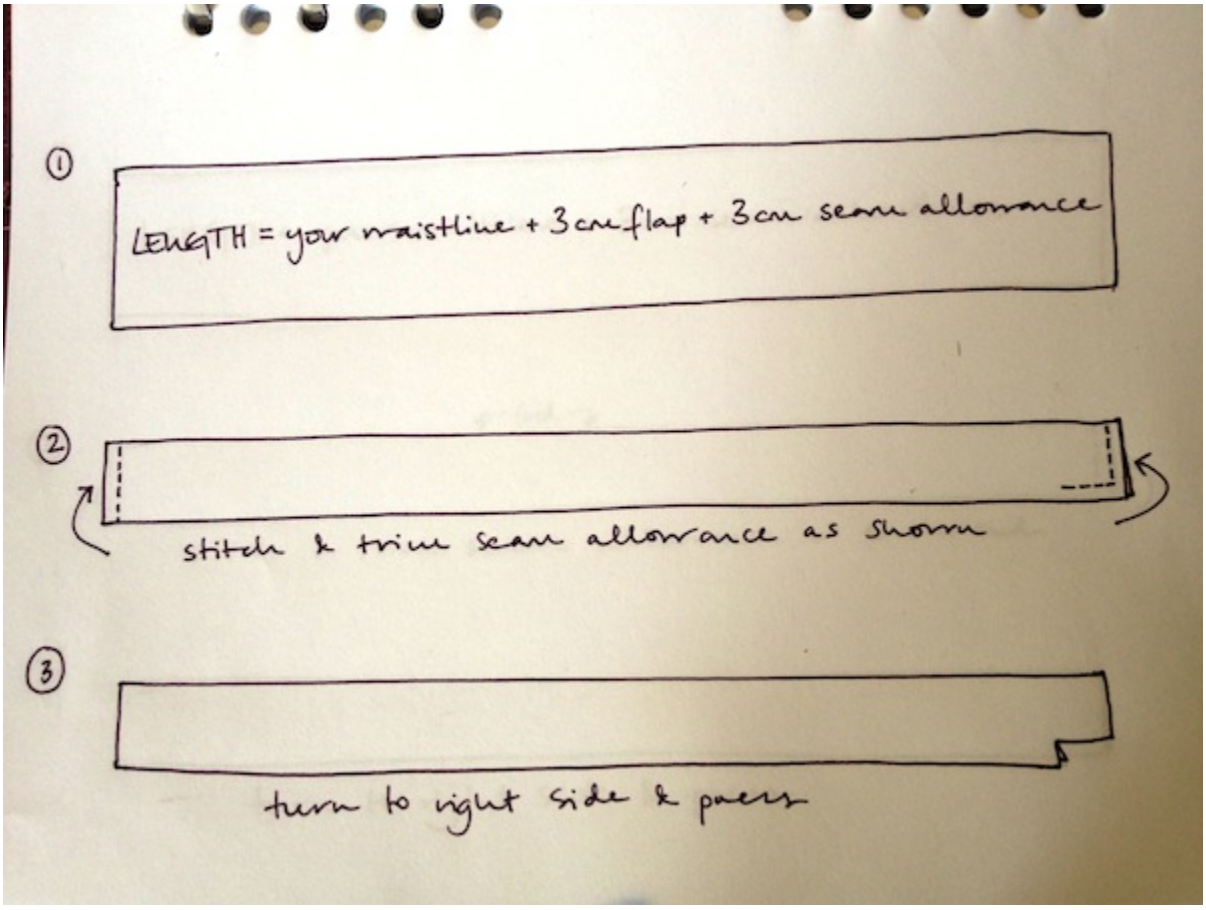
TIP: Try experimenting with the width of your waistband to create a different look.

2. With right sides together, fold the length of fabric in half lengthways. Stitch each end remembering to backstitch and leaving 1.5cm seam allowance. Trim excess seam allowance with pinking shears.

3. Turn your waistband to the right side and press fold and seams. Hand sew a hook & eye at each end to fasten the waistband. It is now ready to attach to a skirt (see below)!

Flap waistband

Similar to the basic waistband, but with a little flap fastening. Best suited to a side seam closure to avoid asymmetry at the center back.



Cut a length of fabric that equals your waistline measurement + 3cm flap + 3cm seam allowance (1.5cm at each end). As above, make sure that you cut your fabric on the straight.

2. With right sides together, fold the length of fabric in half lengthways. Stitch one end completely, leaving 1.5cm seam allowance, and the other end in a reverse "L" shape as shown - leaving 1.5cm seam allowance all round and stitching 3cm in towards the center of your waistband.

3. Turn your waistband to the right side and press fold and seams. Hand sew a hook & eye to the flap to fasten the waistband. It is now ready to attach to a skirt (see below)!

Attaching the waistband to your skirt

There are quite a few different ways to attach a waistband to a skirt. The easiest of which is to simply pin the raw, open length of the band to the right side of the skirt's waistline and machine stitch into place. While this technique is perfectly acceptable, we are always slightly irked by the messy exposed seam on the inside... If like us, you like to finish things a little more flawlessly, we recommend first machine stitching one of the raw edges to the right side of the skirt's waistline (fig. 1), then folding the waistband over (fig. 2) and blind stitching the inside edge (fig. 3). This gives a flawless finish and perfectly ensconces the topline of the skirt.

fig. 1

fig. 2

fig. 3

Self-Check -10	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What are waist band?
2. List kinds of waist band?
3. Show steps for waist band sewing?
4. How do get waist band?

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 5 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Operation Sheet 1	Sew and assemble garment parts

Operation title: Sew and assemble garment parts

Purpose: The student will prepare the required length and width of zigzag stitch using zigzag sewing machine

Tools, Materials, Equipment & Machine Required: Fabric, Sewing thread, Zigzag sewing machine, Thread trimmer (Weaver's scissor); Tape measure,

TASKS:

- Thread the machine properly,
- Set the machine stitch length and width,
- Make a sample of work, check the length and width
- Adjust if there is deviation and test again.
- Do the above operations again and again until you get the required length and width.

EVALUATION: Trainer examination and inspection, using the following criteria

1. All steps were completed in the correct sequence,
2. All safety precautions were followed in using the tools & equipment,
3. Required zigzag length and width should be achieved.
4. The stitch should be flat and no puckering.

Operation Sheet 2	CONTENT-

Procedures for ----------

Step 1-

Step 2-

Step 3-

Step N

Operation Sheet-N	CONTENT-N

Techniques for----------:

Step 1-

Step 2-

Step 3-

Step N

.

LAP Test	Practical Demonstration

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within --- hour.

Task 1.

Task 2.

Task N.

List of Reference Materials

1- BOOKS

2- WEB ADDRESSES (PUTTING LINKS)