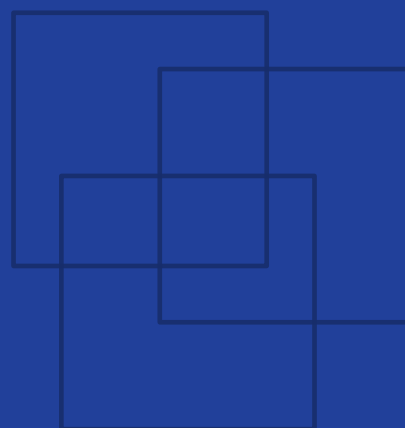




International
Labour
Organization

Packing garments

Finishing operations



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Factory Improvement Toolset

The Factory Improvement Toolset (FIT) is an innovative self-facilitated, activity-based learning approach designed by the International Labour Organization (ILO) to create more decent and sustainable employment. FIT supports manufacturers in global supply chains to improve productivity, competitiveness and working conditions by upgrading production systems and factory practices.

FIT has been developed to be a sustainable, time- and cost-efficient option for supporting factories to enhance productivity through improved business practices and working conditions. FIT focuses on areas of production improvement and actions to be taken specific to each participating factory. It can be utilized as stand-alone learning tools or to complement other training programmes.

With each module lasting no more than 2.5 hours, FIT enables factories to train personnel, whilst minimizing interference with production realities. The easy-to-use methodology makes it possible to rapidly scale the implementation to reach a large cohort of trainees across multiple production facilities.

Working in small groups, participants review real-life situations and engage in discussions to determine improvements to be made in factory without an external trainer or specialist. This self-facilitated, activity-based and highly participatory learning approach positions participants as both student and teacher and makes the toolset self-tailored to the needs and interests of each group.

About this module

This FIT module on Packing garments is a training for garment manufacturers to improve finishing operations. Participants will work on improving tagging, folding, packing and cartoning operations. This module takes about 2 hours to complete.

Upon completion of the training, participants should have:

- Understood packing operations and their importance.
- Learnt how to improve efficiency and ensure garment quality during folding, tagging, packing and cartoning operations.

The **Factory Improvement Toolset** of the **International Labour Organization (ILO)** are developed and provided by the ILO's **Enterprises Department**.

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Guidelines for successfully using the training tool

Read out-loud

The FIT tool is designed for participants to take turns reading the instructions in the modules out loud to the group. At least one member of the group should be selected in the beginning of the session to take this responsibility.

Work as a group

Always work in groups of 5-7 during a FIT session. The programme will not be successful if participants work independently or do not collaborate with each other.

Be active

Encourage everyone in the group to actively contribute to the discussion. Ensure that no group member dominates the discussion or does not participate at all.

Monitor the time

Select one member of the group to monitor the time for each activity and remind the group when it is time to move to the next exercise.

Complete the action plan

Complete the action plan at the end of the session. This will help ensure that FIT results in improvements in the factory. Review the plan a while after the session to make sure that actions in the plan has been completed accordingly.

Icons

A set of icons is used throughout the modules to provide easy to recognize reference points for different tasks within each session and activity.



Read out loud

One member of the group should read out loud to the rest of group.



Knowledge link

Knowledge and skills are linked to other FIT learning resources and support.



Time allotted

Indicates how much time each sessions and activity should take.



Supplies needed

Indicates that supplies may be necessary to complete the session.



Begin step-by-step instructions

Indicates that the step-by-step instructions for an activity are beginning.



Think about it

Indicates additional information for the participants to think about.

Measuring your performance

Measuring operational efficiency is a key aspect of running a productive factory. The box(es) below guides you in understanding which measurement indicator(s) can be used to measure and evaluate the performance of your factory in relation to the topics covered in the FIT finishing operations series.

Indicator 1	Defect per hundred units - DHU (%)
Definition	The amount of defects found in average per 100 inspected pieces or garments. The lower the DHU, the higher the quality in your factory. It can be calculated separately for each line, or for all lines together.
Purpose	To understand quality in your finishing room, set a quality improvement target, and begin to identify ways to reduce defects and improve garment quality.
Calculation	$(\text{total \# defects found} / \text{total \# of pieces or garments inspected}) \times 100\%$ <p>Notes:</p> <ul style="list-style-type: none"> • It is better to calculate this separately for in-line and end-line inspections. • If only the end-line calculation is taken but in-line inspection is also recorded, add defects found in in-line and end-line, however, do not add up garments inspected at in-line (only take the end-line count).
Frequency	Calculate daily (for each line or all lines), then calculate a monthly average.
Responsible	Finishing room manager / Line supervisor / Quality checker

Indicator 2	Shipment audit passing rate (%)
Definition	The proportion (percentage) of shipment audits (or buyers' audit) that your factory passed on the first trial (the first time the audit was conducted).
Purpose	To understand the quality of your production operations, set a quality improvement target, and begin to identify ways to improve garment quality in the factory.
Calculation	$(\text{\# of shipment audit passed the xth time} / \text{total \# of shipment audits}) \times 100\%$ <p>Note: $\# \text{ of shipment audits passed} = \# \text{ of shipment audits passed on the first trial (the first time the audit is conducted)}$ Similarly, the factory must also calculate the shipment audits passed 2nd time and so on</p>
Frequency	Calculate monthly.
Responsible	Finishing room manager / Shipping clerk



Session 1

Business case study

Goals

Preparing you for the type of discussions you will have with other group members throughout the learning module and understanding the benefits of being exposed to different perspectives.

Understanding better why good packing practices are important in the factory.

Session 1

Overview



One member should read the full session out loud to the rest of group



15 minutes



Learning manual, pens, markers and poster paper

A business case study presents a real-life situation for learners to reflect on and discuss with other group members. By discussing the case, students learn from others' ideas and perspectives, and develop an understanding of the topic at hand within the workplace.



One group member reads the case study out loud



The whole group discusses the case study



Everyone develops a deeper understanding of the topic

Activities

Activity

1



15 minutes

Case study review and respond

The case study below presents a situation that could happen in real life.



Instructions:

- 1) As a group, listen to one member read the case study below while following along in your learning module.

Rani is a new finishing manager at the HS factory. She sees that many shipment audits have failed because garments were not folded, tagged and packed according to specifications. She consults the packing-in-charge, Sid. Sid explains that mistakes are made during tagging because workers do not know in which direction and location to place the hang tag and some orders have multiple tags that are not all included at times. Deadlines are often tight, and they sometimes try to save costs by selecting cheaper cartons, and by packing all garments in large poly bags or directly into the cartons, without considering size or colour ratios.

Rani and Sid make several changes. First, they buy kimble guns and folding boards to make folding and tagging faster. Then, after consulting Merchandising, they agree that the packing-in-charge will also receive an approved trim card and specification sheets. Based on specifications, simple forms will be made giving detailed folding, tagging and packing instructions to workers. Sid will train the workers in using the forms and the new tools. Merchandising will consult buyers to select appropriate packaging while keeping costs and waste as low as possible by reducing packing materials.

Thanks to these changes, tagging and folding has become faster and efficient, and all operations are carried out accordingly to buyer specifications. Cartons pass shipment audits. The factory saves time in correcting defects, and costs in packing materials.

- 2) Together, discuss Rani's situation by answering the three questions in table 1 on the next page.

Table 1. Questions about Rani's situation

1. What problems have Rani and Sid identified? What impact do these problems have on the factory and its workers?

2. What do Rani, Sid and merchandising do or change in order to solve these problems?

3. What are the results of these solutions for the factory?

This page has been intentionally left blank and can be used for note taking.



Session 2

Learning about the topic

Goals

Understanding the packing and shipping process, and discussing your own operations.

Discussing ways to ensure that garments are folded and tagged efficiently and in conformity to specifications.

Discussing packing operations, and learning how to ensure customer safety and buyer satisfaction.

Learning more about cartoning methods to protect garments during transportation.

Session 2

Overview



One member should read the full session out loud to the rest of group



90 minutes



Learning manual, pens, and markers

This training module helps you improve your finishing operations by focusing on garment packing operations. After the final inspection, garments are folded, tagged and packed into poly bags, then into cartons. Carrying out these operations well is important to maintain quality, avoid garment damage, and ensure buyer satisfaction by conforming to their specifications. Throughout this module, you will work on the three steps below.

Folding & tagging garments

Packing garments

Cartoning garments

First, you will discuss the packing and shipping process in your factory. Then, you will discuss and identify ways to improve folding and tagging efficiency. Finally, you will discuss ways to improve packing and cartoning practices to maintain garment quality while avoiding waste and unnecessary costs.

Activities

Activity

2a



15 minutes

Packing & shipping

After the finishing inspection and before garments can be shipped, a series of **packing operations** need to be carried out to ensure quality, good presentation and customer safety. In this activity, you will discuss the packing process and how to improve your own.



Instructions:

- 1) Together, look at the list of packing & shipping operations in table 2, and put them in the right order from 1 to 10. Solutions are at the bottom of the page.
- 2) Together, discuss: Does your factory follow the same steps? Is there anything that you think you could change to improve?

Table 2. Packing & shipping garments

Folding, Dispatching (shipping), Recording cartoning, Preparing the packing list, Tagging, Cartoning, Warehousing, Presentation check, Packing, Shipment audit.

#	Operation	#	Operation
1		6	
2		7	
3		8	
4		9	
5		10	



This module focuses on folding, tagging, packing and cartoning operations. To learn more on packing lists, warehousing and dispatching, ask for the “Dispatching garments” module.

Solutions: Folding, Tagging, Packing, Presentation check, Cartoning, Recording cartoning, Preparing a packing list, Shipment audit, Warehousing, Dispatching.

Activity

2b



25 minutes

Folding & tagging garments

After inspection, garments are **folded and tagged** according to buyer specifications. Sometimes, they are not folded, and placed on a hanger instead (hanger pack). In this activity, you will learn more about how to maintain quality and efficiency during folding and tagging operations.



Instructions:

- 1) Together, look at the two packing methods in table 3, then discuss:
 - Which method(s) do you use in your factory?
 - For which type of garment is each method suitable? Is folding always required / necessary for quality?
- 2) Together, discuss the following questions: Do buyers provide you with detailed folding and tagging instructions? If so, how? Are instructions detailed and clear enough?
- 3) Together, look at table 4, which shows tools that can help you fold and tag more efficiently, then discuss:
 - Do you use these tools or other tools in your factory?
 - If not, could you use these tools? Why or why not?
- 4) Together, look at the list of good practices for ensuring quality in table 5, then tick ✓ on the right if you do it in your factory. Then, discuss what you could improve in your factory.

Table 3. Folding methods

Method 1: Garments are pressed, folded, then packed into polybags / master bags, then placed into cartons.

Method 2: Garments are not folded, but placed on a hanger then packed into a long polybag.



The method that you use should depend on buyer specifications as well as garment type. At the same time, think about how you can reduce unnecessary packaging (plastic, paper, cardboard, etc.).

Table 4. Tools for efficiency

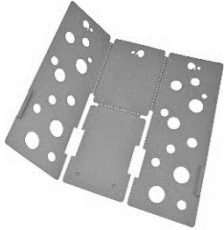

<p>Folding boards:</p> <p>Helps fold a garment simply and neatly by placing it on the board and manipulating its moving parts. Most boards are made of plastic, but you can also make your own boards using hard cardboard. Cost: \$</p> 	<p>Kimble / tagging gun:</p> <p>Helps attach hang tags much faster than manual tagging. There are standard and fine fabric guns (thinner, shorter needles). Workers should be properly trained in using a gun, and wear a protective leather glove. Cost: \$</p> 
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Table 5. Maintaining quality

Good practices	✓
1. Make sure that folding and tagging operations are always carried out according to specifications. Never assume – ask the buyer if you are unsure.	
2. Ensure detailed folding instructions are provided by the buyer in the tech pack – included necessary materials such as cardboard or paper sheets.	
3. Ensure detailed tagging instructions are provided by the buyer in the tech pack – included type, size, location, sequence, direction of hang tags.	
4. Make sure the tagging section receives the final, approved trim card to ensure hang tags are correct (shape, size, colour, content, etc.).	
5. Prepare standard forms for workers based on the tech pack, explaining folding and tagging specifications clearly, using simple images.	
6. Make sure workers are trained in reading and understanding standard forms, and use them to fold and tag garments properly.	
7. If buyer instructions are very specific, request a folding guide from the buyer, explaining step-by-step folding operations.	
8. When using kimble guns, make sure workers are trained in using it properly, and know how to address malfunctions or mistakes.	
9. Test the kimble gun on the fabric before tagging, to ensure needle size (standard / fine) is correct and won't damage the garments.	
10. Press garments before folding. Provide workers with folding templates, or sample folded garments as a visual reference for folding.	

Activity

2c



25 minutes

Packing operations

Folded and tagged garments are **packed** into polybags, to keep the garment in good state until it reaches its destination. Packing also involve a quality check (presentation checking). In this activity, you will learn how to pack and inspect garments more efficiently.



Instructions:



- 1) Together, look at the types of packs in table 6, then discuss:
 - Which types do you use most in your factory?
 - What type is cheaper? What type creates more costs?
 - What type takes the most time? The least time?
- 2) Before cartoning, it is important to inspect packed garments for presentation. Together, look at the list in table 7 and tick ✓ on the right if you think it should be checked during the inspection. Then, have a participant read aloud the text box below table 7.
- 3) Together, look at the packing record form in table 8, and make sure everyone understands. Then, discuss: Do you record packed quantities in your factory? Why do you think it is important to do so?



There are two types of packing:

- Merchandise packing: The product is packaged in the container in which customers receive the product. It requires more materials.
- Shipping packing: The product is packaged in the container in which the retailer will receive the garments in bulk.

Table 6. Pack types

<p>Polybag: Each garment is packed into one individual bag. The dimensions of the bag correspond to garment size and are usually decided by buyers.</p> 	<p>Master bag: Several polybags are packed into one same large bag, in a size and colour ratio determined by the buyer.</p> 
<p>Stand-up pack: Usually used for shirts. Each item is packed individually into a solid pack (such as a box) with additional materials such as paper boards, pins, collars, etc.</p> 	<p>Hanger pack: Usually used for longer items of clothing. Each item is placed on a hanger, then packed into a long individual polybag.</p> 



Buyers may need garments packed size-wise, colour-wise, store-wise, or any combination of these. To facilitate packing and cartoning, create demarcated areas in the holding area (between packing and cartoning) to store sizes and colours (e.g. blue S, blue M, blue L, etc.) so that it is easier for the packing team to combine them correctly during cartoning.

Table 7. Presentation checking

Criteria	✓
1. Poly bags / packs conform to buyer specifications.	
2. For packing in master bags, size and colour ratios are respected.	
3. Tags (and stickers) for price and size conform to buyer specifications.	
4. Tags (and stickers) are placed in the correct location and direction.	
5. The size on the tag corresponds to the garment size.	
6. Packing is sealed or not – depending on specifications.	
7. Poly bags / packs are in good condition (intact, clean).	
8. Garments are dry and cool, not humid or warm due to pressing.	

9. Hangers and other additional packing materials are available if required.

10. Garment folding has been done in conformity with buyer specifications.



All of the above should be checked during presentation checking. Inspectors should randomly select at least 10% of packs and record the results of their inspection. If defects are found, they should inspect another 10%. If defects are found again, they should inspect 100%.

Table 8. Packing report

Buyer: ILO Garments						Shipment date: 15 Dec				
Style #: #85769						Prepared by: <i>Packing-in-charge</i>				
Order qty: 2,000						Approved by: <i>Finishing manager</i>				
Colour	Date Size	10 December		11 December		12 December		13 December		Total
		Qty	Cum.	Qty	Cum.	Qty	Cum.	Qty	Cum.	
Navy	S	200	200	100	300					300
Navy	M	200	200	300	500					500
Navy	L	100	100	100	200					200
Violet	S					100	100	300	400	400
Violet	M					300	300	200	500	500
Violet	L					100	100	100	200	200
Pink	S									
Pink	M									
Pink	L									
	Total	500	500	500	1,000	500	1,500	500	2,000	2,000



It is important to record packed quantities daily. This helps you track production, identify issues (e.g. missing quantities) timely, prepare packing lists, and cost packing materials (e.g. number of poly-bags).

Activity

2d



25 minutes

Cartoning operations

Poly-bags are then packed into larger **cartons** (then perhaps into master cartons) in preparation for transportation, and so as to prevent damage to the contents. In this activity, you will learn more about how to select packaging materials, and perform cartoning more efficiently.



Instructions:

- 1) Together, look at the list of packaging materials (table 9), and circle those you use in your factory. Then, brainstorm: How could you reduce your use of materials (to avoid waste and cut costs) while keeping buyers satisfied?
- 2) Together, look at the list of things to take into account (criteria) when selecting materials in table 10, and tick ✓ if you do consider these criteria. Then, discuss: Is there anything you think you should change to the way you select packaging materials?
- 3) Together, look at the steps of cartoning in table 11, and put them in the right order by writing a number from 1 to 8 in the right column. Then, discuss: Do you follow these steps in your factory? Solutions are at the bottom of the page.
- 4) Together, look at the cartoning methods in table 12, then discuss:
 - Which method(s) do your buyers require? What other requirements do they have for cartoning (e.g. carton size).
 - How could different cartoning methods change the way you record packed quantities?

Table 9. Packaging materials

Paper board	Polybags	Plastic film	Packing tape
Staples	Plastic pieces (e.g. collar)	Rope	Cardboard box
Kraft paper	Master cartons	Cartons	Thread
Ribbons	Boxes	Plastic clips	Hangers

Table 10. Cartoning materials

Criteria	✓
1. The packaging should protect garments from damage: Creasing, crushing, stains, tears, etc.	
2. The packaging should protect garments from climatic conditions: Dust, excessive lighting, humidity, rain, etc.	
3. The packaging should be consistent with buyer specifications (if any).	
4. The packaging should be consistent with legal requirements for the countries to which garments are exported.	
5. Physical properties of the materials such as thickness, weight, clarity, dimensions (length, width), etc.	
6. Quality of the materials such as flammability, tearing strength, resistance to odours, etc.	
7. The packaging should be environment-friendly, for instance recycled cardboard, or biodegradable plastic.	

Table 11. Cartoning steps

Steps	#
Receive packed garments from the packing section, sorted by size and colour.	
Close the cartons with tape.	
Seal the cartons with cord / plastic bands or other.	
Stick on warning stickers as required: weight warning, fragile, stack instructions, etc.	
If not already printed, stick information labels (“Marks & Numbers”) indicating store/buyer name, address, ratio, quantity, net weight, order and style number, etc.	
Verify the amount and ratio (colour, size) of garments to be packed in one carton.	
Pack garments into cartons as required.	
Record cartoned quantities, send cartons to the warehouse, and prepare the Packing list.	

Solutions: 1, 4, 5, 7, 6, 2, 3, 8.

Table 12. Carton pack methods

<p>Solid packing: Each carton contains garments of one same colour and one same size. For example: 20 Navy shirts in size S</p>	<p>Ratio packing: Each carton contains garments of one same colour but different sizes based on the ratio. For example: XS:S:M:L 5:7:7:5</p>
<p>Mixed colour / size packing: Each carton contains garments of different colours but in the same size, or garments of different sizes but in the same colour.</p>	<p>Mixed packing: Each carton contains garments of different colours and different sizes according to a specific ratio as required by the buyer.</p>



To facilitate cartoning, cutting should be planned and performed according to the Packing ratio – colour/size and Store if applicable. This means that what comes out of the lines can be transferred to finishing and get packed without piling at the end of the process.



Session 3

Action items

Goals

Summarizing and revising the new knowledge gained.

Identifying concrete applications of the new knowledge that benefit your factory.

Session 3

Overview



One member should read the full session out loud to the rest of group



20 minutes



Learning manual, pens, and markers

Throughout this module, you gained new knowledge on how to fold, tag, pack and carton garments in a more efficient way while also maintaining efficiency and garment quality.

Folding & tagging
garments

Packing
garments

Cartoning
garments

In this session, you will think of ways to apply your new knowledge to improve garment packing in your factory by reviewing best practices and drafting your own action plan.



A packing report template is available online for you to print out and use in your own factory. To obtain it, contact your factory's FIT coordinator!

Activities

Activity

3a



5 minutes

Best practices checklist

In this activity, you will review best practices for packing garments as a next step for evaluating your own and implementing improvements.



Instructions:

- 1) Together, look at the list of best practices in table 13, and put a ✓ in the column on the right if you use these practices in your factory.

Table 13. Packing garments

Best practices	✓
1. Workers know how to follow buyer specifications in order to fold, tag and pack garments appropriately.	
2. A presentation check is carried out after packing / cartoning to ensure good presentation.	
3. The factory selects the best packing / cartoning materials based on buyer requirements while trying to minimize environmental costs.	
4. The factory keeps up-to-date records on packed and cartoned quantities.	

Activity

3b



15 minutes

Your action plan

In this activity, you will think of ways to apply your new knowledge to improve garment packing in your factory by drafting your own action plan.



Instructions:

- 1) Together, fill in the action plan (table 14) on the next page. Identify a key problem that you want to solve and write down the solutions you identified while working on this module.

Table 14. Packing garments – Action Plan

Problem identified				
Solutions identified	Action(s) to be taken	Person responsible	By when?	How will improvements be measured?

Packing garments

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FIT is being piloted in Asia under the regional Decent Work in the Garment Sector Supply Chains in Asia project funded by the Government of Sweden.

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