Receiving materials

Storeroom operations

Factory Improvement Toolset

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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 Receiving materials is a training for garment manufacturers to improve storeroom operations. Participants will work on receiving materials in a more caring and systematic way. This module takes about 2 hours to complete.

Upon completion of the training, participants should have:

- Discussed how to improve the material receiving process
- Understood how to unload materials with care.
- Learnt to use tags after unloading in order to better trace materials.

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 series on storeroom operations.

Indicator 1	**Space utilization (%)**
Definition	The proportion of space (floor + shelf surface) that is occupied by materials and other items (carts, machines, etc.) in your storerooms.
Purpose	To understand how efficiently space is used in your storerooms, and identify how you could improve storage efficiency while ensuring employees' safety. Both very low and very high space utilization is inefficient. It should not go above 85%.
Calculation	(# surface occupied in *sqm* / total surface of the stores in *sqm*) x 100% Surface occupied = floor surface + shelf surface occupied by materials or others Total surface = floor surface + shelf surface available in the stores Shelf surface: e.g. a 3sqm shelf with 4 levels counts for 12sqm!
Frequency	Calculate every 6 months, or once a year.
Responsible	Storeroom manager

Indicator 2	**Average material retrieval time (Mins)**
Definition	The average time (in minutes) that it takes for a storeroom worker to find, retrieve and prepare materials from the stores for issuing.
Purpose	To understand how well-organized and orderly your stores are (or how good your storage system is), and begin to identify how you could further improve organization and make storeroom operations faster and more efficient.
Calculation	Time how long it takes for a worker to locate, retrieve and prepare all items for a specific requisition. Record this for each requisition (trims and fabric separately) and calculate the average weekly, then monthly.
Frequency	Calculate monthly.
Responsible	Storeroom manager

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 receiving materials with care is 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

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.

Sita is a new storeroom manager at the HS garment factory. During her first day at the factory, Sita spots several problems. First, materials are unloaded outside the factory, carried to the stores, and then stacked on the floor. This way, fabric gets damaged or dirty, and it takes a long time and many workers to unload a truck. This wastes workers' time, and makes the factory lose money. Some workers also complain of back pain. Second, materials are not tagged or labelled. This makes it difficult to trace the materials going through inspection, storing, and issuing. As a result, sometimes there is missing material in the inventory, some rolls are not stored properly, and the wrong materials are issued.

Sita decides to make some changes. She makes space so that trucks can unload materials directly into the store. She tells workers to keep materials in their packaging, and to unload them on pushing carts rather than on the floor. Then, she sets up a tagging system that allows the storerooms to trace a piece of material from unloading to issuing using a specific ID number.

Thanks to these changes, the receiving process is quicker, safer for workers, and material damage is avoided. It is now also easier to store and issue materials, and to take the inventory. This makes the factory save time and avoid fabric waste.

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

Table 1. Questions about Sita's situation
1. What problems has Sita identified? What impact do these problems have on the factory and its workers?
2. What does Sita do or change in order to solve these problems?
3. What are the results of Sita's solutions for the factory and its workers?

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blank and can be used for note taking.

Session 2

Learning about the topic

Goals

Discussing and improving your material receiving process.

Reflecting on how to unload materials with more care.

Learning how to use and design tags for incoming materials.

Session 2
Overview

This module aims to help you improve the way your storeroom operates by focusing on material receiving, unloading or tagging. Storing is a process consisting of many different operations. Good storeroom management is important to make sure that they run smoothly, and to increase productivity and quality. Throughout this module, you will go through the three steps below.

Receiving
materials

Unloading
materials

Tagging
materials

First, you will discuss your own materials receiving process. Then, you will work on these three steps by discussing how to improve your receiving process, unload materials with more care, and tag materials to facilitate tracing through inspecting, storing and issuing.

Activities

Receiving materials

Material receiving is the transfer of the materials from your suppliers' delivery to your own stores. In this activity, you will think about your receiving process and how you can improve it.

✏️ Instructions:

1) Have a participant read aloud the list of steps for material receiving in table 2. Then, discuss: Can you think of any other steps?

2) Individually, draw or write down all the steps of your receiving process in their order in table 3.

3) Together, discuss your receiving process: Is there anything that you already know you could do to improve it?

Table 2. Receiving process

Verify purchase order number at the gate of the factory.

Open the truck and count the rolls / boxes / bags for each.

Verify that the content matches the purchase order (quantity + type).

Take note of the transport conditions (example: Cleanliness).

OK → Accept the delivery, give the green light for unloading, tag & label each roll / box / bag.

Not OK → Reject the delivery, inform Merchandising / Stores department and the supplier.

Table 3. Your receiving process

Draw or write down the steps of your material receiving process below.

Unloading materials

After receiving, materials are **unloaded** into the stores. In this activity, you will discuss how to unload materials with care in order to avoid damage to materials and injury to unloading workers.

Instructions:

1) As a group, read through the checklist of actions to unload materials with care in table 4, and put a ✓ in the column on the right if you do it in your factory.

2) Together, brainstorm other actions you can take to unload materials with care, and add them to the table.

Table 4. Unloading materials	
Actions	**✓**
1. Check the conditions in which materials have been transported (example: Packaging, cleanliness of the truck, humidity, etc.).	
2. Keep materials covered or packaged during unloading to protect them.	
3. Build or assign a special area for unloading only, which leads directly to the material stores or inspection areas to avoid additional transportation.	
4. Train workers to identify defects during unloading.	
5. Unload the materials on pallets / carts rather than directly on the floor.	
6. Unload materials in a covered area with direct access to the stores to avoid them getting damaged (e.g. by rain).	
7. Teach workers how to lift and carry materials properly to avoid injuries or back pain.	

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Tagging materials

Tags are a type of label (sticker/cardboard/…) that can be attached to each new material to identify it and provide information on it. Each tag has an ID number to help you trace the material through inspection, storing, and issuing. In this activity, you will discuss the importance of tags and how to use them efficiently.

Instructions:

1) Together, discuss: Do you currently have any tagging or identification system in your factory? If so, does it work well?

2) Together, discuss the three questions in table 5 below.

Table 5. Tagging materials
1. What kind of information do you think should be included on tags for fabric? On tags for trims?
2. Who should be responsible for making the tags? Who is responsible for attaching them to materials? When should it be done?
3. How does identifying each material by tagging help with <u>inspection, storing, and issuing</u>?

Using tags

The information shown on **tags** should be adapted to the type of material (fabric / trims / packaging items / etc.) that is being tagged. In this activity, you will practice creating your own tags.

 Instructions:

1) Together, look at the example of a fabric tag in table 6 and make sure everyone understands.

2) Together, draw an example of what your own factory's fabric tag looks like (or could look like if you do not have one) in table 7.

3) Together, based on what you learnt in activities 2c and 2d, create a trims tag for a box of 120 black plastic buttons in the space provided in table 7.

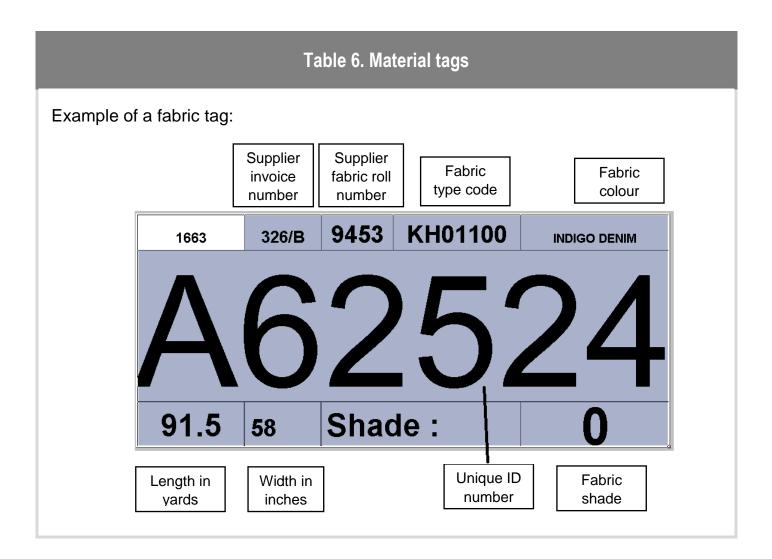| Table 6. Material tags |
|---|

Example of a fabric tag:

Table 7. Creating your own tags

Draw an example of what your own <u>fabric tags</u> could look like below:

Draw an example of what a <u>trims tag</u> for a box of 120 black plastic buttons (1cm wide) could look like below:

When materials have been tagged, a certain quantity (10%) is inspected for defects. To learn more about inspection in your factory, ask your facilitator for the "Inspecting materials" module!

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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 receive, unload, and tag materials more efficiently, systematically, and with care to improve storeroom operations.

Receiving materials

Unloading materials

Tagging materials

In this session, you will think of ways to apply your new knowledge to improve receiving, unloading and tagging operations by reviewing best practices and drafting your own action plan.

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Activities

Best practices checklist

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

✏. Instructions:

1) Together, look at the list of best practices in table 8, and put a ✓ in the column on the right if you use these practices in your factory.

Table 8. Receiving materials	
Best practices	**✓**
1. There is a clear, detailed receiving procedure in place. Storeroom workers know each step of the receiving system and what their responsibilities are.	
2. Storeroom workers are trained to unload materials with care and protect them from damage.	
3. Identification tags are attached to each new material after unloading, to allow workers to identify each material.	
4. Tags are used to trace and identify materials through inspection, storing, record-keeping and issuing.	

Your action plan

In this activity, you will think of ways to apply your new knowledge to improve material receiving in the stores by drafting your own action plan.

✎. Instructions:

1) Together, fill in the action plan (table 9) 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 9. Receiving materials – Action Plan				
Problem identified				
Solutions identified	**Action(s) to be taken**	**Person responsible**	**By when?**	**How will improvements be measured?**

Receiving materials

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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.