

Stock control procedures

Learner Guide

Supporting
FPICOT3236A:
Coordinate
Stock control
procedures



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Acknowledgements

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The Stock control procedures e-learning unit is available in two formats:

- as a free 'learning object' download from the Flexible Learning Toolbox Repository at: <http://toolboxes.flexiblelearning.net.au/repository/index.htm>
- as part of the Timber Toolbox, a website resource covering six units from the Forest and Forest Products Training Package (FPI05), available for purchase on a CD through Australian Training Products at: <http://www.atpl.net.au/>

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Introduction

Keeping the company's stock holdings at an appropriate level sounds easy enough. All you have to do is make sure there is sufficient stock on hand to cope with the demand from your customers or production crew, and when it gets low you top it up again. But there's a lot more to monitoring and controlling stock movements than it might appear at first glance.

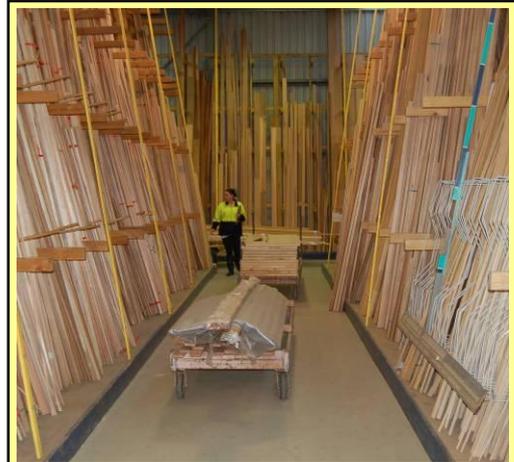
In this unit, we will look at the processes involved in monitoring stock levels and dealing with changes in supply and demand, as well as methods of controlling stock movements and reducing the likelihood of theft.

Working through this unit

There are two sections in the unit *Stock control procedures*:

1. Monitoring stock levels
2. Controlling stock movements

Each section begins with *Your job*, which introduces you to the topics covered. There are also several lesson pages in each section, and a *Task* at the end. Your trainer may ask you to submit the completed *Tasks* as part of your assessment evidence for the unit.



Stock is the lifeblood of every business that produces, manufactures or resells products. And the stock controller is the person who has to make sure that the level of supply is just right.

Section 1: Monitoring stock levels

Your job

Maintaining stock holdings at an appropriate level requires constant monitoring and good management in order to balance the supply with continual rises and falls in demand.

If your stock holding gets too high in a particular product, the goods will sit around and their quality may suffer over time. The excess stock will also take up valuable storage space, making it unavailable for other more productive uses. And, of course, the cost will be an added burden on the company's finances if the items are not selling quickly enough and 'paying for themselves'.

If your stock holding gets too low, the product will sell out and customers won't be able to get it when they want it. Racks will become empty, or only have a few poor quality pieces left lying in them. And the company's profitability will suffer because of the lost sales.



This rough sawn hardwood is in an outdoor timber rack in a retail timber yard. The stock holding is maintained at a level that will provide the business with several weeks of supply under normal conditions.

In this section, we will look at the characteristics of timber that can have an effect on its 'shelf life' as a stock item. We will also examine typical reasons for fluctuations (that is, variations) in stock usage levels, and ways of predicting changes, so that you can make adjustments to your stock holdings before the changes in usage occur. Finally, we will discuss methods for ensuring that stocktaking events are accurate and provide reliable information to management on the company's inventory levels.

Here's your job



1. Have a look at the Task for this section to preview the questions you'll need to answer at the end.
2. Work through each of the lessons for more detailed information on the concepts covered, and complete the learning activity at the end of each topic.
3. Complete the Task in your workbook.

Timber as a stock item

When timber is used as a building material, it is generally designed to last for the life of the structure itself. If it's installed properly and protected from the ravages of nature, timber can last for hundreds of years.

But that doesn't mean that while it's sitting in a timber yard or warehouse waiting to be sold, it will stay in top condition indefinitely. The main reason for this is that timber is 'hygroscopic' – it takes up and gives off moisture, depending on whether it's drier or wetter than the surrounding environment.

This means that until it is fixed in position and either given a surface finish or maintained under controlled conditions, the wood cells will continue to swell or shrink, and make the timber liable to distort or develop surface checks and end splits. If it is left out in the weather, timber can also be affected by surface mould and fungal decay.

So there are good reasons for making sure that the company's stock holdings are turned over regularly, before any of the products have a chance to deteriorate.

The amount of time that the product will remain in good condition while waiting to be sold or re-manufactured will vary greatly, depending on where it is stored, what species it is, how dry it is, and various other factors relating to the product itself and the surrounding environment. For example, plywood sheets stacked flat in a warehouse will stay in good condition for a very long time. On the other hand, radiata pine mouldings stacked upright in an A-frame may start to twist and bow very quickly, particularly if the rack is left untidy and the air humidity is changing rapidly.

The stock controller needs to consider these factors when deciding on how much new stock to bring in, in addition to all of the other issues that influence the size of a stock order, such as cost, payment terms, and customer or production demand.



Green, rough sawn oregon is a very stable timber, and is able to cope with being stacked in an open yard while it's waiting to be sold. But the stock still needs to be 'turned over' - that is sold and replaced with new stock - on a regular basis, so that it doesn't go grey in the sun or begin to develop fungal decay.



Learning activity

There are various forms of degrade that can occur over time when timber stocks are kept for too long and exposed to the sun, rain or hot winds.

Describe the main characteristics of the following defects that can occur:

- Cup
- Bow
- Twist
- End split
- Discolouration
- Surface checks
- Decay

Stock level fluctuations

There are various reasons why the availability of stock from suppliers can fluctuate, and why customer demand will rise and fall at different times. The better prepared you are for changes that are coming, the less likely it is that you will be caught with either too much stock on your hands or not enough to cope with demand.

Below are some typical causes for fluctuations that may occur in your stock holdings, and some suggestions on ways to predict changes so that you can take corrective action in advance.

Some causes for fluctuations

Seasonal changes

Particular lines may be more popular at one time of the year than another. For example, outdoor timbers such as treated pine are likely to sell more strongly with the DIY market in spring and summer. And January tends to be quiet with tradespeople and builders.

Availability of materials

Products may become unavailable from suppliers for various reasons. Some imported timbers are particularly prone to hold-ups due to strikes or shipping delays. Other products can become scarce when there are problems at sawmills, or when government decisions change the amount of resource allocation given to a particular producer.

Building activity

Building activity is highly influenced by economic conditions, and is often targeted by governments through interest rate changes, subsidies and tax breaks. Changes in the number of building approvals and home renovations can also be very localised, such as when a new housing estate opens up, or a well-established area has a pick-up in renovation activity.

Predicting changes in stock usage

Talk regularly to your company's sales reps and other staff members to check whether they are quoting on large jobs or tendering on projects that have a high chance of success. Also find out what the customers are saying about their general level of activity.

Look at past usage and patterns that tend to occur over time, and try to establish reasons for any trends that you see.



The trade manager at this timber and building materials supplier has a loyal customer base, because the local builders know that nine times out of ten she will have exactly what they want when they want it.

That's because she works very hard to keep supplies at the right level, and she's always looking ahead to gauge what the demand is likely to be in the coming months.

Use industry benchmarks to help you determine the most appropriate stock levels. These may be available from industry consultants or associations.

Keep up-to-date with developments in the industry, including forecasts on future levels of activity and new products that are being released into the market. Subscribe to industry journals or e-newsletters that are relevant to your business.

Keep an eye out for government announcements and changes in economic indicators like interest rates and employment levels.



Learning activity

List some of the reasons for fluctuations in stock usage at your workplace. For each reason you nominate, list the main product lines that are affected, and state whether the sales or usage of those products tend to go up or down as a result.

Here are some suggestions on possible reasons for fluctuations to help you with your own list:

- Christmas and Easter holidays
- End of the old financial year and beginning of the new one
- Long periods of dry weather or wet weather
- Economic conditions and interest rate levels
- Large contracts or tenders
- New markets opening up
- New products becoming available
- Promotional campaigns from suppliers.

Stocktaking

The purpose of a stocktake is to confirm how much stock is physically in the system and then reconcile that figure with the amount shown in the records. Because this needs to occur at a fixed moment in time, the stocktake is generally carried out after hours or during a halt in trading, so that no stock is moved in or out while it is taking place.

Stocktakes are usually done when financial statements need to be prepared, such as for annual taxation returns or shareholder reports. This allows management to confirm that the inventory records are a true reflection of the physical quantities that the business is holding.

Accounting for variances

Most product lines tend to show some variance between actual stock levels and recorded stock levels. If the margin of variance is unacceptably high, the company will need to look closely at its systems of operation to work out where the problem is.

However, before any variances are taken as true, you should always double check the figures to make sure that there haven't been any mistakes in the stocktaking process itself. This may include recounting particular areas of stock, or checking that all stock received has been properly entered into the system, or making sure that any stock movements have been controlled and accounted for.

Minimising variances

Below are some suggestions on ways to minimise variances between the inventory records and physical stock on hand.

Use rolling stocktakes to progressively check different areas throughout the year, and match the actual levels of stock against the recorded levels.

Keep the records up-to-date, by ensuring that all stock movements are accounted for at the time the movement occurs.

Produce periodic reports on the inventory levels and check that they look right and that there aren't any obvious discrepancies.



This worker is recording the pack number and description of a pack of timber as part of a stocktake. His stocktake sheet will later be checked against the inventory records to make sure everything matches.

The 'inventory' of a business is all the stock it has on hand that is immediately available for purchase, or re-use in a manufactured product.



Learning activity

Discuss the following questions with other learners in your group and compare your answers.

1. How often do you carry out a stocktake in your workplace?
2. How do you make sure that no stock movements will occur while the stocktake is underway? For example, do you shut the store for the day or do the stocktake outside normal trading hours?
3. Which product lines are most prone to variances between the actual levels of stock on hand and the recorded levels in the inventory system? What are the reasons for this?

Task 1: Monitoring stock levels

Choose one stock item or product line that you are responsible for at work. It may be:

- a species of timber in a range of sizes used for a particular purpose - such as framing, skirtings and architraves, outdoor landscaping, shelving, etc
- a board product, such as particle board, MDF, plywood, etc
- a manufactured product that is timber-based, or used in the production of a timber-based item.

Answer the following questions:

1. **Product:** What is the name of the stock item or product line?
2. **Description:** Briefly describe its purpose or typical end-uses.
3. **Storage:** Describe the system for holding the stock. Is some of the material put on display, such as in a rack, and the remainder kept in bulk storage? How is it packaged or protected to keep it in good condition while in storage or on display?
4. **Safety:** Are there any special OHS requirements to do with storage, handling or transportation of the product?
5. **Suppliers:** What type of suppliers does the product come from? Is it imported or produced locally, or both?
6. **Availability:** Is the item readily available from suppliers when you want it? What sort of waiting time is there between the time you order it and its delivery?
7. **Customers:** Who are the customers or end-users - tradespeople, do-it-yourselfers, production workers using it in a manufactured product?
8. **Demand:** Is the demand for the product fairly constant, or does it tend to rise and fall? What are the main reasons for fluctuations in demand? Do the fluctuations follow a predictable pattern?
9. **Stocktaking variances:** Are the stock movements easy to keep track of - that is, do the recorded levels in the inventory system reliably match the actual stock levels? If there are variances between these levels, what are the main reasons?

You will find a hard-copy template for this Task in your Workbook and an electronic version on the accompanying CD. Once you have filled in your answers, send your completed assignment to your trainer for marking.

Section 2: Controlling stock movements

Your job

In a normal trading environment, stock flows into and out of the business as purchases and sales are made. However, in addition to these movements, there are various other factors that affect stock levels. These include down-graded or reject materials being removed from the stock holding, returns from customers, materials being taken for further manufacturing, and theft.

In this section, we will look at each of these issues, and the effect they can have on the company's stock levels. We will also discuss strategies used to reorder stock, and methods to minimise the chance of theft occurring.



A forklift brings a pack of timber into the warehouse. Before it is broken open to supply customer orders, the pack number on the end will be noted and passed to the stock controller, who will mark it off in the inventory records.

Here's your job



1. Have a look at the Task for this section to preview the questions you'll need to answer at the end.
2. Work through each of the lessons for more detailed information on the concepts covered, and complete the learning activity at the end of each topic.
3. Complete the Task.

Reordering stock

The regularity between placing one stock order and the next is referred to as the reorder cycle. There are a range of issues that will determine how often you need to order a particular product from your supplier, some of which are internal, and others external.

The main factors that influence the reorder cycle are:

- **Lead time between ordering the material and its delivery from the supplier.** This could be very short, as in the case of a local supplier who keeps good stock holdings, or very long, such as with an overseas supplier who needs to receive your order before they produce the materials and export them.
- **Rate of usage.** Fast moving stock is likely to have a much shorter reorder cycle, particularly if your storage space is limited.
- **Allowance for fluctuations in supply or demand.** These may be due to seasonal variations or disruptions to supply.
- **When the stock is paid for.** Some stock may be paid for on a 30 day account. Other stock could be on a special arrangement, such as a promotional offer or consignment.
- **What type of stock it is.** Some products have a longer 'shelf life' than others. Materials that tend to deteriorate over time will need to be ordered on shorter cycles than those which can be stored in bulk.



A timber buyer talks to one of his suppliers about a stock order. He always likes to check on the price and availability of the stock before he raises a 'purchase order', so that he can be sure there won't be any misunderstandings later on.

Just in time

The Just in time (JIT) approach to stock control is very common in manufacturing and service industries, and is sometimes used for specific products in the forest and forest products industry. The JIT approach aims to minimise the amount of stock kept on hand, so that there is just enough at any given time to satisfy the business's immediate requirements.

For the system to work, you must have very reliable suppliers, and be able to order regular, small deliveries. The main advantage of JIT is that there is very little money tied up in stock, which means that the company can divert the money it has saved to other areas of the business. The low stock holdings also save on storage space, as well as insurance costs and the expense of having to get rid of deteriorating or out-of-date materials. One of the main disadvantages of JIT is that the company is dependent on its suppliers to deliver the right amount of stock exactly when needed. If there are any hold-ups in delivery, the company will run out of stock very quickly. It is also possible that the company may have to pay a higher price for the materials, to compensate the supplier for the small, frequent orders.

So although there are some advantages associated with the JIT approach to stock control, it is only suitable for particular materials and with particular suppliers, and it needs to be weighed up against the potential disadvantages before you decide to use it.



Learning activity

Discuss the following questions with other learners in your group.

1. What systems do you use to reorder stock?
2. What are the maximum and minimum reorder cycles that you use?
3. Do you use a JIT approach for any of these items?
4. What alternative arrangements do you have in place for ordering stock outside the normal reorder cycles?
5. Does it cost more to order stock this way?

Inflows and outflows

The simplest way that stock flows into and out of a business is through purchases from suppliers and sales to customers. But there are other reasons for stock coming or going, some of which are listed below.

All of these stock movements will impact on the inventory records, and so all need to be recorded accurately as soon as staff members initiate the action, or become aware of the movement.

Inflows can include:

- General stock from suppliers
- Special orders from suppliers for particular customer orders
- Consignments from suppliers that only need to be paid for if the stock is sold
- Returns from customers
- Transfers from other branches.

Outflows can include:

- Sales to customers
- Stock used for manufacturing other products
- Returns to suppliers
- Rejected stock that is written off
- Transfers to other branches
- Theft.

Types of documentation

The system your company uses for recording stock movements will be largely dependent on the type of business it is and the size of the operation. Many small businesses still use paper-based forms to record the details of transactions and then enter the information into their computer for accounting purposes. Large companies tend to use computerised systems that are networked between departments and branches, and automatically update all related records when each entry is made into the system.



Stock in - stock out. This forklift driver sends stock both ways, and he plays a crucial job in making sure that pack numbers, piece counts and other details are in compliance with the paperwork that accompanies the load. If he finds any mistakes, he notes them down straight away on the paperwork, and hands it to the relevant person to get checked out.

Whatever system your company has to manage transactions, there are still likely to be standard types of documents used to account for the activities. For example, businesses usually generate a purchase order when they place an order with a supplier and issue an invoice when they charge a customer for goods sold. They also use some form of customer order form, picking slip and delivery docket to process an order and send it on its way. Each of these documents has its place in the system used to manage and record stock movements.



Learning activity

Below are some typical stock transactions and movements in a business. For each one of these, note down the document your company would use to record the event and account for the changes to stock levels.

- Buyer orders stock from supplier
- Truck arrives from supplier with stock
- Forklift driver unloads material, and removes several broken pieces from the pack
- Stock is added to the inventory system
- Customer arrives and orders material at counter
- Yard staff load materials onto vehicle
- Customer pays for materials and then leaves.

Stock security

Compared to many other products, timber and timber-based products tend to take up a lot of space for a relatively low value. This means that these items are less likely to be the target of theft than much smaller and higher-valued hardware items.

Nonetheless, the easier it is for a person to load up stock and take it away without being detected, the more chance there is that material will be stolen from your business.

Here are some typical examples of 'opportunistic' theft - that is, stealing that occurs because the opportunity presents itself to a dishonest person who decides to make the most of it.

A customer who realises that their load is not going to be checked properly puts more materials into their load than they pay for.

A staff member takes materials home at the end of the day because they know that no-one will notice the missing stock.

A person driving past the store sees stock that is poorly secured, and comes back after hours to steal it.

The best way to improve security is to identify the high risk situations and then put in place appropriate preventative measures.

Identifying high risk situations

Below are two major factors that have an influence on the likelihood of theft occurring.

1. **The layout of the store and yard areas.** For example, if particular areas are out of view of staff and contain items that are easy to load into a car or truck, they will present dishonest customers with an opportunity for theft.
2. **The processes used to check stock that leaves the premises.** For example, if it is common practice for vehicles to drive out the exit gate without the driver needing to present a docket for checking, it will encourage people to take materials that have not been accounted for.



A supervisor walks around the outside of the property to check the perimeter fence, and look for any access points that thieves might use to get into the premises. He knows that the insurance premium the company pays is linked to the level of security on-site, so he makes this part of his regular site inspection.

Putting preventative measures in place

Some control measures may be easy to implement, such as moving a particular product to a different area of the store where it is more visible to employees of the company. Other measures may require changes to the administration system or the way sales are processed, and so involve a much more considered approach.

In some cases you may need to trial a new system to make sure it is working the way you had intended, without introducing any new problems that you hadn't thought of. Where there are major changes involved, you should try to include all relevant staff members in the planning and evaluation processes, so that they can provide you with their own perspective of the issues. This will also help to give them a feeling of greater responsibility towards implementing the changes, because they have been part of the development process and so have a 'stake' in making the new system work properly.



Learning activity

Have a walk around your premises and note any areas where the theft of stock could occur without being detected. Write down the reasons for the area being 'high risk'. You may wish to draw up a simple floor plan of the area to show particular features that contribute to the risk factors. Discuss your findings with other learners in your group, and talk about action you might take to reduce the likelihood of thefts occurring.

This exercise will help you when you come to answer the Task questions.

Task 2: Controlling stock movements

1. Documentation

List the names of the documents used by your company to record incoming and outgoing stock movements. Beside each name, briefly describe the role that the document plays in the stock management system.

2. Stock security

- a) Identify two high risk situations in your business that would provide opportunities for the theft of stock to occur. The potential for theft may be from customers, employees or outsiders. The situations you choose may relate to the physical layout of the store or the systems used to record and check stock movements.
- b) For each high risk situation, suggest a method of reducing the risk.

Glossary

Term	Definition
Forecast	Using past performance as an indication of what is likely to happen in the future.
Inventory	Items that are in stock or part of a work-in-process.
Lead time	The time between placing an order and receiving the goods.
On hand	Inventory that is physically present at that time.
Shelf life	Time that an item will last before its saleability or quality are affected.