



# A Guide to Manufacturing Accounting

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# A Guide to Manufacturing Accounting

As a manufacturer, you're well aware of the crucial link between a seamless production line and achieving lasting success. The seamless flow of operations, spanning from raw materials to the final product, is vital for meeting customer needs and securing a competitive advantage in the industry.

However, you should not underestimate the significance of maintaining a firm grip on your financial affairs.

Effective cost management lies at the core of the manufacturing sector's financial stability and long-term profitability. By implementing sound strategies and prudent practices, you can optimize financial performance, enhance decision-making processes, and safeguard your business against potential risks.

# Manufacturing accounting

[Manufacturing accounting](#) refers to the specialized branch of cost accounting that focuses on the financial management and control of manufacturing operations within a business. It involves the application of accounting principles and practices to accurately track, analyze, and report the financial aspects of the manufacturing process.

Compared to regular accounting, manufacturing accounting needs to:

- Track intricate production costs, including materials, labor, and overhead
- Monitor the value of partially completed products
- Allocate overhead costs to products and manage indirect costs
- Analyze variances in materials, labor, and overhead expenses
- Track labor costs by task and employee for comprehensive insight
- Calculate per-unit costs with meticulous cost components

Next, let's go over the costs manufacturers should be aware of.

## Manufacturing costs

Manufacturing costs encompass the expenses associated with producing goods:

- **Direct materials** — Raw materials and components directly used in production. Tracking these costs is vital for inventory management and cost control.
- **Direct labor** — Wages and benefits of employees directly involved in production. Efficient management of these costs ensures production efficiency and quality.
- **Overhead costs** — Indirect expenses like rent, utilities, and maintenance that support production but can't be tied directly to a product. Allocating overhead costs accurately is important for cost distribution and profitability.

## Accounting for manufacturers in practice

In the practical realm of manufacturing accounting, the process comes to life with key strategies that directly impact production and profitability. One such strategy is cost accounting, which meticulously tracks expenses encompassing raw materials, labor, and overhead. This process empowers businesses to elevate efficiency and boost profitability through well-informed cost-reduction measures.

Job costing is another powerful tool employed by manufacturers, assigning costs to individual production runs. This method ensures comprehensive expenditure tracking, enabling informed pricing decisions and optimal resource allocation.

Efficient [inventory management](#) stands as a cornerstone in this practice, expertly balancing raw materials and finished goods to meet demand without unnecessarily tying up financial resources. Manufacturing accounting systems offer invaluable insights into vital inventory aspects, including goods acquisition, stock valuation, and moving average costs (MAC). By fine-tuning inventory strategies, these insights enhance operational efficiency and drive profitability.

## Best practices

Manufacturing accounting is a complex process that requires specialized knowledge and skills. In order to ensure accuracy and efficiency in the process, certain best practices should be followed:

- **Automate tasks** — Automating the process of invoicing, payments, and other financial transactions helps to ensure accuracy and consistency.
- **Implement robust inventory control** — Keeping track of inventory is crucial, so you need a reliable system in place to track and manage inventory.
- **Track production costs** — Production costs are one of the main expenses in manufacturing, and they must be monitored to stay on top of your expenses.
- **Utilize data analytics** — Data analytics helps gain a better understanding of financial performance and make informed decisions.

**One of the best ways to follow these practices is by utilizing cloud inventory software.**

Katana covers it all — from automation to data analytics. [Book a demo](#) today to learn more about how Katana can elevate your business.

# Inventory accounting

[Inventory accounting](#) involves tracking goods entering and leaving a company. Here's an overview of the usual steps involved:

- 1. Set up an inventory system** — Use spreadsheets or software to record transactions
- 2. Categorize inventory** — Organize items like finished goods, raw materials, and WIP
- 3. Choose valuation method** — Choose a method that fits your particular business requirements
- 4. Record purchases** — Debit inventory and credit accounts payable or cash account
- 5. Track production costs** — Include direct materials and labor, and overhead
- 6. Conduct regular counts** — Conduct stocktakes to verify the quantities on hand
- 7. Calculate cost of goods sold (COGS)** — Subtract ending inventory from beginning inventory + costs
- 8. Prepare financial statements** — Reflect inventory on balance sheets and income statements
- 9. Perform audits** — Ensure records match financial statements and fix any mistakes immediately

It's worth noting that inventory bookkeeping practices may vary depending on the specific industry, accounting standards, and company size. Consulting with a qualified accountant or using inventory management software ensures accurate and efficient accounting processes.

Take a look at the [partner directory](#) to find qualified accountants experienced in the manufacturing space.



## Inventory accounting methods

[Inventory accounting methods](#) are crucial for accurately valuing and managing your company's assets. Here are some of the most common methods used in inventory accounting:

- **First in, first out (FIFO)** — Oldest inventory items sold first, suitable for rising prices, as it results in lower COGS and higher reported profits.
- **Last in, first out (LIFO)** — Newest items sold first, useful when prices are rising to offset taxes, and can be suitable for businesses aiming to minimize taxable income.
- **Moving average cost** — Calculates up-to-date average cost as stock changes, ideal for fluctuating prices.
- **Specific identification** — Each item is tracked and assigned a specific cost. Common for unique or high-value items, like luxury goods or customized products.
- **Standard cost** — Sets predetermined cost for items where any differences between actual and standard costs are recorded as variances. Provides a consistent cost basis for inventory valuation.

Choosing the right inventory accounting method depends on industry practices, tax implications, pricing trends, and financial reporting requirements. It's important to consult with a qualified accountant or financial advisor to determine the best fit for the needs and goals of your business.

## How to choose an inventory accounting method

Choosing an inventory accounting method is a pivotal decision with lasting implications. Key considerations include:

- **Nature of business** — Assess the nature of your business operations and the types of inventory you deal with. For example, FIFO could prove optimal for perishable goods. Conversely, LIFO might align better if your inventory comprises items with extended shelf life.
- **Sales and purchasing patterns** — MAC may be a fitting choice if your inventory experiences significant fluctuations with frequent procurements. On the other hand, if you reorder infrequently and face gradual price increases, LIFO might be better suited to your needs.
- **Tax implications** — Each method has distinct tax implications. For instance, LIFO can result in lower taxable income during periods of inflation, while FIFO can yield this benefit during deflation. Consult with a tax professional to determine the method that harmonizes best with the tax requirements of your business.

- **Software and records** — Different methods vary in complexity, demanding varying degrees of detailed record-keeping. Ensure that your chosen method aligns with your software's capabilities and that you have the necessary resources to maintain accurate records.
- **Industry standards** — Some industries prescribe specific inventory cost accounting methods that are widely adopted or even mandated by regulators. Familiarizing yourself with these standards is essential before selecting a method.

By thoughtfully considering these factors, you can determine an inventory accounting method that best aligns with your company's unique characteristics, goals, and industry dynamics.



# Costing methods

A [costing method](#) refers to the approach or technique used by businesses to determine the costs associated with producing a product or providing a service. Below are the 6 most commonly used methods.

1

## **Standard costing**

Standard costing employs predetermined costs based on historical experience, updated periodically to reflect changes. It's straightforward and provides a consistent cost basis. However, it lacks accuracy if circumstances change significantly and challenges arise in timely updates. It doesn't pinpoint cost variances.

2

## **Job costing**

Standard costing employs predetermined costs based on historical experience, updated periodically to reflect changes. It's straightforward and provides a consistent cost basis. However, it lacks accuracy if circumstances change significantly and challenges arise in timely updates. It doesn't pinpoint cost variances.

3

## **Process costing**

Standard costing employs predetermined costs based on historical experience, updated periodically to reflect changes. It's straightforward and provides a consistent cost basis. However, it lacks accuracy if circumstances change significantly and challenges arise in timely updates. It doesn't pinpoint cost variances.

4

## **Direct costing**

Standard costing employs predetermined costs based on historical experience, updated periodically to reflect changes. It's straightforward and provides a consistent cost basis. However, it lacks accuracy if circumstances change significantly and challenges arise in timely updates. It doesn't pinpoint cost variances.

5

**Target costing**

Standard costing employs predetermined costs based on historical experience, updated periodically to reflect changes. It's straightforward and provides a consistent cost basis. However, it lacks accuracy if circumstances change significantly and challenges arise in timely updates. It doesn't pinpoint cost variances.

6

**Activity-based costing (ABC)**

Activity-based costing allocates overhead costs based on activities involved in production, offering a sophisticated approach similar to job costing. Overhead costs are assigned to cost pools linked to activities, and these costs are then divided by activity units to determine activity rates applied to individual products. ABC offers accurate unit cost insights but can be costly to implement due to its detailed activity identification and allocation process.

## How to calculate product cost?

Knowing the cost of your products is crucial, not only for maintaining your financial records but also for ensuring profitability.

Determining your business' product cost is a straightforward process that involves applying a concise formula. By aggregating [production-related costs](#) and dividing the total by the unit count, you can swiftly unveil the unit cost of your product. The following formula serves this purpose:



$$\text{Product unit cost} = \frac{\text{Direct labor} + \text{direct materials} + \text{overhead}}{\text{number of units produced}}$$

# WIP manufacturing

[Work-in-progress \(WIP\)](#) is inventory that is still in production — consider it the middle ground between ingredients and finished goods.

## WIP manufacturing elements

The elements of WIP manufacturing largely overlap with regular manufacturing components:

- **Raw materials** — Refer to the starting components or ingredients that have been partially processed but aren't yet in their final form
- **Labor** — Represents the ongoing work and effort to transform raw materials into finished products
- **Overhead costs** — Incur continuously as production progresses and include utilities, indirect labor and materials, equipment depreciation, and other administrative costs



## Examples of WIP inventory

- **Manufacturing industry** — Partially assembled electronic devices, fabricated metal parts undergoing machining or welding processes, and partly woven textile products
- **Construction industry** — Buildings or structures at different stages of construction, road construction projects with partially laid asphalt or concrete, and multi-story buildings with incomplete floors or unfinished interiors
- **Pharmaceutical industry** — Medications or drugs in various stages of formulation, liquid or powder formulations in the process of being filled into vials or capsules, and biotechnological products undergoing fermentation or purification processes
- **Food and beverage industry** — Beverages in different stages of production, baked goods in various stages of preparation, canned or packaged food items that have undergone some processing but are not yet fully packaged and labeled
- **Electronics industry** — Printed circuit boards (PCBs) at different stages of assembly, semiconductors undergoing fabrication processes, and electronic components or subassemblies awaiting integration into final products

## How to calculate WIP in manufacturing?

There's a simple formula to follow to figure out your WIP costs:



**WIP** = Beginning WIP + purchases – end WIP + labor costs + manufacturing overheads

- **Beginning WIP** — WIP inventory at the beginning of the period
- **Purchases** — WIP purchased during the period
- **End WIP** — WIP inventory at the end of the period

WIP calculations are done regularly, mainly on a monthly and annual basis.



## How to reduce WIP costs?

Taking control of your WIP costs doesn't have to be complex if you follow these 3 steps:

### 1. Identify faulty machinery

An often overlooked bottleneck is equipment effectiveness and reliability. If you find that a specific set of items produced using the same machinery are racking up significant overhead expenses, then you need to look into that. Machines that are frequently breaking parts and require maintenance might need upgrading. While this might appear counter-intuitive to saving costs, the investment will be worth it in the long run.

### 2. Plan for demand

Properly analyzing your sales forecasts will allow you to implement demand planning strategies and increase your awareness on the manufacturing floor. Knowing your high and low seasons will allow you to set correct reorder points for your inventory and stay on the lean path to success.

### 3. Collaborate with your suppliers

Ensuring you are on the same wavelength as your suppliers may seem unrelated, but faulty or inappropriate parts can drastically slow down your production processes.

Positive communication with your suppliers helps align your mutual needs to the closest degree. Be clear about the purpose of the materials and how they function as part of your processes. Using your suppliers' expertise, you can find suitable materials and get the most out of them.

# Cost of goods sold

[Cost of goods sold \(COGS\)](#) is an accounting term representing the direct costs incurred by a company to produce or purchase the goods it sells during a specific period.

## COGS is beneficial in:

- Determining the gross profit
- Giving real-world valuation to your inventory
- Giving you important information about your business expenditure
- Helping you produce accurate tax statements

## How to calculate COGS

To calculate your cost of goods sold, you need to know the following:

- **Opening inventory** — The inventory value (raw materials, work-in-progress, and finished goods) at the beginning of the accounting period
- **Purchases during the period** — The total cost of additional inventory purchased or manufactured during the accounting period
- **Closing inventory** — The inventory value at the end of the accounting period
- Once you have all that, you can calculate your COGS using the following formula:



**COGS =**

Opening inventory + purchases during the period  
– closing inventory

## Example

Let's consider a simple example of a lemonade stand. At the beginning of the week, you have an opening inventory of **\$50** worth of lemons and sugar. During the week, you buy an additional **\$20** worth of lemons and sugar. At the end of the week, you are left with **\$15** worth of lemons and sugar as your closing inventory.

Using the COGS formula:

**COGS = Opening inventory + purchases during the period - closing inventory**

**COGS = \$50 + \$20 - \$15 = \$55**

In this example, your weekly cost of goods sold would be \$55. This represents the total cost of the lemons and sugar used to make the lemonade sold during the week.

# Cost of goods manufactured

[Cost of goods manufactured \(COGM\)](#) can be determined using the following formula:



**COGM =**

Opening inventory + production costs – closing inventory

Using the same lemonade stand as an example, let's calculate the cost of goods manufactured. Assume your manufacturing costs are **\$10**. Let's modify the formula to be more straightforward:

**COGM = Opening inventory + (direct manufacturing costs + raw material purchases) – closing inventory**

**COGM = \$50 + \$10 + \$20 - \$15 = \$65**

In this example, your COGM is **\$65**.

Note that in more complex scenarios, you'd need to consider additional factors like labor, overhead, and more precise opening and closing inventory values.

## COGM vs. COGS

COGM is the total cost of making products for sale.

COGS is the actual expenses related to producing those products.

COGM does not include marketing or distribution costs — it only includes direct labor, materials, and factory overhead costs associated with producing finished goods inventory. On the other hand, COGS is an accounting term used to describe the total amount spent on making a product before it's sold.

For example, if you purchase \$1000 worth of raw materials but don't sell them until six months later, you would recognize that \$1000 expense in your books as the cost of goods sold.



# E-commerce accounting for manufacturers

[E-commerce accounting](#) is the process of managing, recording, and analyzing the finances of an online manufacturing business.

It involves tracking the flow of funds, reconciling bank accounts, and maintaining accurate sales, expenses, and tax records. E-commerce accounting provides a clear and accurate picture of the company's financial health. Properly managed e-commerce accounting can help manufacturers make informed decisions about their future and identify areas to improve profitability.

## How to handle accounting when selling online

To ensure accuracy and simplify the process, online sellers should follow these tips when handling their accounting.

1

### **Set up a separate bank account for online sales**

Track your income and expenses, ensuring you don't mix your personal money with business finances. A business account is also easier to handle in bookkeeping and looks more reliable to your customers.

2

### **Keep detailed records of sales and expenses**

Record all income and expenses related to sales to comply with tax and legal requirements, impress potential investors, and stabilize business growth.

3

### **Determine profit or loss for each sale**

Subtract the cost of goods sold and any expenses from the total revenue to determine your net income for each sale, gain an advantage over your competitors, and improve profitability.

4

### **Monitor the cash flow**

Keep track of when payments are received and when expenses are due to ensure you have enough funds to cover your costs. This helps to plan your finances better and stay within your budget.

5

### **Set aside money for taxes**

Speak with an expert and read the regulations to be prepared to collect sales tax or pay income tax on your profits, depending on your business area and product type.

## **Common e-commerce accounting tasks**

1. Recording sales transactions
2. Tracking inventory
3. Managing payable and receivable accounts
4. Reconciling bank accounts
5. Overseeing tax duties
6. Preparing financial statements
7. Forecasting cash flow
8. Performing audits
9. Monitoring key performance indicators (KPIs)

# Manufacturing accounting systems

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 **INTUIT**  
**quickbooks**

## QuickBooks Online

[QuickBooks Online \(QBO\)](#) is an accounting software developed by Intuit.

It offers essential accounting features such as:

- **Invoicing**
- **Expense tracking**
- **Bank reconciliation**
- **Financial reporting**

QBO is a popular choice for businesses of all sizes due to its ease of use, affordability, and flexibility. It allows companies to manage their finances from anywhere with an internet connection and can be accessed through a web browser or mobile app.

QBO offers multiple pricing plans for businesses with varying needs and budgets, as well as a free trial so users can try it before committing to a subscription.

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## **Katana + QuickBooks Online: The ultimate combination**

Katana's cloud inventory platform allows you to integrate your QBO account and manage your entire business from one platform while all your financial information is automatically synced to QuickBooks Online.

No more jumping between platforms to ensure all your data is up to date. Katana gives you a smooth as-silk workflow process from purchasing to manufacturing, shipping, and accounting.



# Manufacturing accounting systems



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**xero**

## Xero

[Xero](#) is a cloud-based accounting software for manufacturing designed for small and medium-sized businesses. It comes packed with features such as:

- **Invoicing**
- **Expense tracking**
- **Bank reconciliation**
- **Financial reporting**
- **Inventory management**

Xero allows businesses to manage their finances on the go and is accessible through a web browser or mobile app.

Xero is known for its user-friendly interface and ease of use, making it a popular choice for businesses of all sizes. The software provides a variety of pricing plans based on specific needs and budgets.

Xero offers a robust support system that includes online help resources, community forums, and customer support via email.

## **Katana + Xero: Keep your accounting and sales in sync**

Katana's Xero integration brings seamless efficiency to your business operations. By syncing these two powerful platforms, you can streamline your inventory and accounting processes effortlessly.

Katana's advanced inventory management capabilities and Xero's robust financial tools ensure accurate and synchronized data. This integration empowers you to manage your business more effectively, from production to financial reporting, all in one system.



# Katana Cloud Inventory Platform

[Katana](#) is a cloud-based manufacturing and inventory management software for small and medium-sized businesses.

It integrates seamlessly with accounting software and allows for automated synchronization of business data and financial transactions.

Katana can be a game-changer for your business, offering various payment plans and many benefits for manufacturing and inventory management.

- Automated recording of inventory purchases, sales, and production activities
- Live inventory updates, reorder points and integration with your preferred accounting software
- Reporting and analytics tools for inventory performance analysis and financial insights
- Streamlined inventory accounting processes, reducing manual data entry and potential errors
- Inventory and financial data provide a comprehensive understanding of the company's finances
- Accurate financial statement generation, including balance sheets and income statements

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# Experience firsthand why other manufacturers trust Katana to manage their workflows.

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of streamlined business operations.

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## Sales orders

		Stock	Materials	Production	Delivery
<input type="checkbox"/>	eBay	✓	✓	✱	
<input type="checkbox"/>	Amazon	✱	✓	✓	✱
<input type="checkbox"/>	BigCommerce	✱	✓	✓	✱
<input type="checkbox"/>	Shopify	✱	✗	+	

**Multi-channel sales order delivery**