

## CHAPTER-3

### METHODS OF PRODUCTION

There are 4 different types of productions which are most commonly used. Which type of production should be used by the company depends on the type of product being manufactured, the demand of the product as well as the supply of raw materials. Taking these factors into consideration, below are the 4 types of Production.

- 1) Unit or Job type of production
- 2) Batch type of Production
- 3) Mass Production or Flow production
- 4) Continuous production or Process production

#### 1) Unit or Job type of production

This type of production is most commonly observed when you produce one single unit of a product. A typical example of the same will be tailored outfits which are made just for you or a cake which is made just like you want it.

Example of Unit type of production

It is one of the most common types of products used because it is generally used by small businesses like restaurants, individual products providers or individual services providers.

It is also a type of production used by very premium companies like **Harley Davidson**, or **Dell**. Harley Davidson actually has a lot of accessories which can be customized, and which suit the individual. Same ways, you can design your own DELL laptop on their website with **the given specifications**.

#### Features of Unit production or Job Production

Depends a lot on skill.

Dependency is more on manual work than mechanical work.

Customer service and customer management plays an important role.

#### 2) Batch type of Production

It is one of the types of production most commonly used in consumer durables, FMCG(Fast-moving consumer goods) or other such industries where there are large variety of products with variable

demands. Batch production takes place in batches. The manufacturer already knows the number of units he needs to a manufacturer and they are manufactured in one batch.

So, if a manufacturer has the shortage of Product X and 100 units of this product is consumed in one month, then the manufacturer can give orders for batch production of 100 units of Product X.

Example of Batch production



LG has many different types of home appliance products in its portfolio. It has to manufacture all these different variants of the same type of product. There would be 10-20 types of mixer grinders alone in the product portfolio of LG home appliances. Thus, a company like LG manufactures these variants via Batch production.

First, one type of mixer will be manufactured completely and then the second type will be manufactured. They are manufactured on the basis of demand. Depending on demand, the batch production can produce the number of units required in one batch.

The batches may be as small as 10 units or they may be as large as 1 lakh units of the same products. However, as long as there is a defined quantity of product which has to be manufactured before moving on to the next item in the list, it is known as batch production. Examples of batch production include FMCG like Biscuits, confectionaries, packaged food items etc. It is used in Medicines, Hardware, Consumer durables and many such industries.

## **Features of Batch production**

Production is done in batches

The total number of units required is decided before the batch production starts

Once a batch production starts, stopping it midway may cost a huge amount to the company.

Demand plays a major role in a batch production. Example – seasonality of products.

### **3) Mass Production or Flow production**

One of the best examples of mass production is the manufacturing process adopted by Ford. Mass production is also known as flow production or assembly line production. It is one of the most common types of products used in the automobile industry and is also used in industries where continuous production is required.



An Assembly line or mass production plant typically focus on specialization. There are multiple workstations installed and the assembly line goes through all the workstations turn by turn. The work is done in a specialized manner and each workstation is responsible for one single type of work. As a result, these workstations are very efficient and production due to which the whole assembly line becomes productive and efficient.

Products which are manufactured using mass production are very standardized products. High sophistication is used in the manufacturing of these products. If 1000 products are manufactured using mass production, each one of them should be exactly the same. There should be no deviation in the product manufactured.

### **Features of Mass Production**

Mass production is generally used to dole out huge volumes of the product

It is used only if the product is standardized

Demand does not play a major role in a Mass production. However, production capacity determines the success of a mass production.

Mass production requires huge initial investment and the working capital demand is huge too.

#### **4) Continuous production or Process production**

There is a lot of confusion between mass production and continuous production. It can be differentiated by a single element. The amount of mechanical work involved. In Mass production, both machines and humans work in tandem. However, in continuous production, most of the work is done by machines rather than humans. In continuous production, the production is continuous, 24x7 hours, all days in a year.

A good example of the Continuous production is brewing. In brewing, the production goes on 24 hours a day and 365 days a year. This is because brewing takes a lot of time and production is important. As a result, there is a continuous input of raw materials such as malt or water, and there is continuous output in the form of beer or other alcoholic drink. The key factor in this is that the brewing and fermentation process itself is time-consuming, and the maximum time is spent in the fermentation which is a continuous process.



There are many chemicals which are manufactured in the form of a continuous process due to the huge demand across the world. Similarly, the Plastic industry is known to adopt the continuous production methodology where production can go continuously for weeks or months depending on the demand. Once the production starts, you only need to feed in the raw material, and the machines turn out the finalized products.

## **Features of Continuous production**

Majority of the work is done by machines rather than humans

Work is continuous in nature. Once production starts, it cannot be stopped otherwise it will cause huge loss.

A very controlled environment is required for continuous production.

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