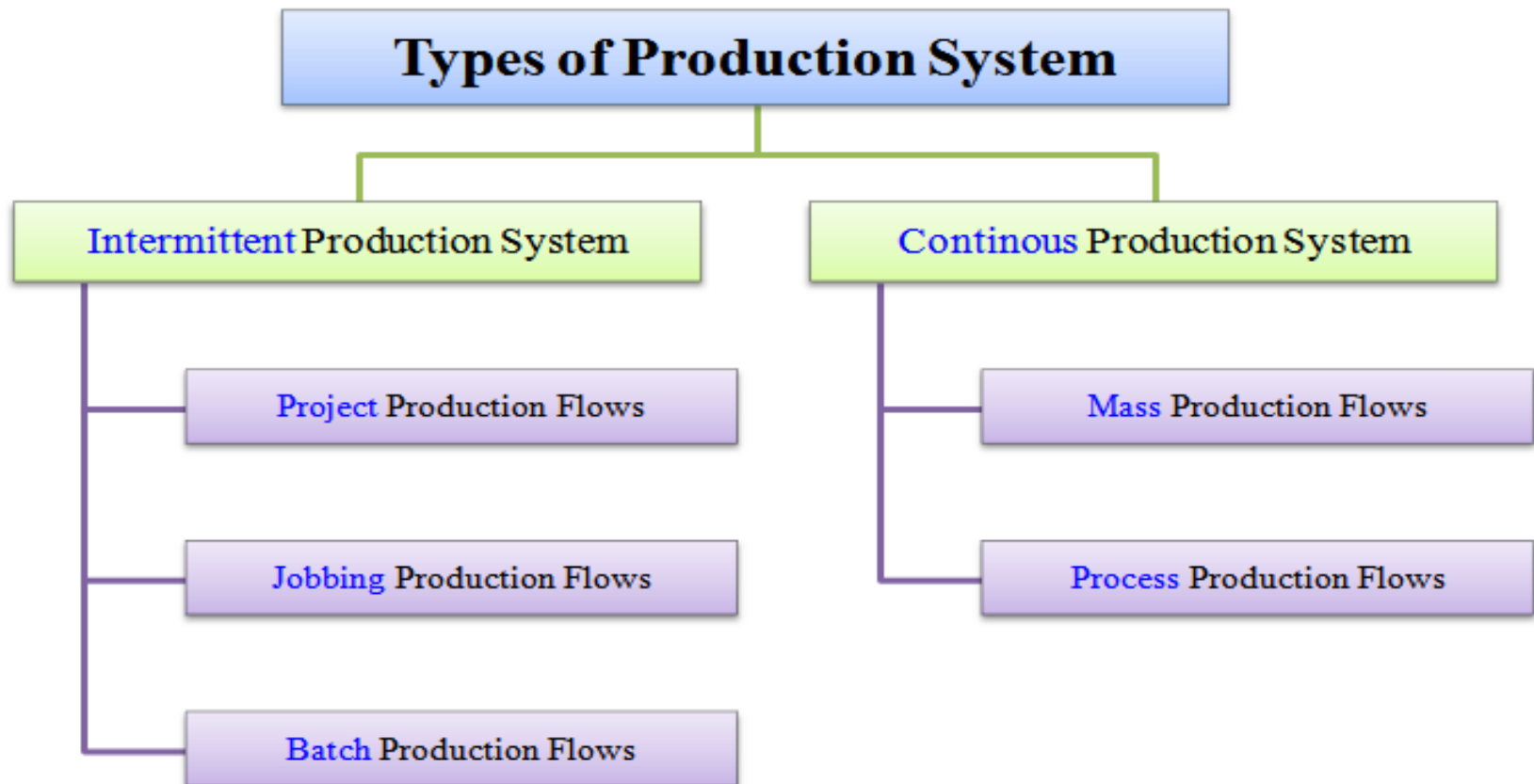


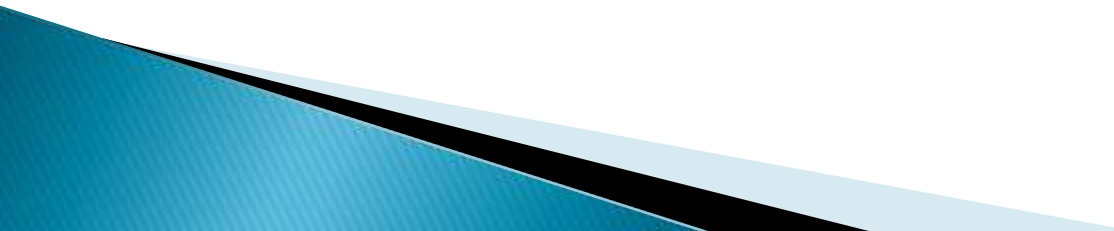
Types of Production System

–Raghav

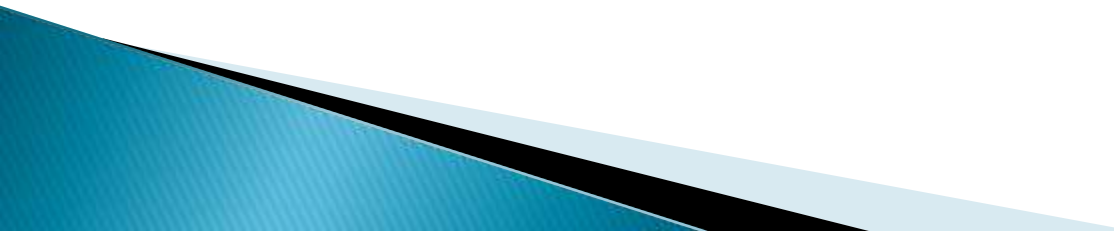
Types of Production system is grouped under two categories :

1. Intermittent Production System
2. Continuous Production System



- Intermittent means something that starts (initiates) and stops (halts) at irregular (unfixed) intervals (time gaps).
 - In the intermittent production system, goods are produced based on customer's orders.
 - These goods are produced on a small scale.
 - The flow of production is not continuous.
 - In this system, large varieties of products are produced. These products are of different sizes.
 - The design of these products goes on changing according to the design and size of the product. Therefore, this system is very flexible
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Examples on the intermittent production system.

- The work of a goldsmith is purely based on the frequency of his customer's orders. The goldsmith makes goods (ornaments) on a small-scale basis as per his customer's requirements. Here, ornaments are not done on a continuous basis.
 - Similarly, the work of a tailor is also based on the number of orders he gets from his customers. The clothes are stitched for every customer independently by the tailor as per one's measurement and size. Goods (stitched clothes) are made on a limited scale and is proportional to the number of orders received from customers. Here, stitching is not done on a continuous basis.
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Features of Intermittent Production System

1. Flow of Production is not Continuous.

2. Variety of Products are Produced.

3. Volume of Production is Small.

4. General Purpose Machines are Used.

5. Sequence of Operation changes as per Design.

6. Production Depends on Customer's Orders.

Types of Intermittent Production system

1. Project Production Flow
 2. Jobbing Production Flow
 3. Batch Production Flow
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- **1. Project production flows**

Here, in project production flows, company accepts a single, complex order or contract. The order must be completed within a given period of time and at an estimated cost.

- Examples of project production flows mainly include, construction of airports, dams, roads, buildings, shipbuilding, etc.

Characteristics of Project Production Flows

1. A Requirement of Resources Varies with Production Phases.

2. Many Agencies are involved, and their jobs are Interrelated.

3. Generally, Delays take place in Completion of Project.

4. As Routing and Scheduling changes, Inspection is required.

2. Jobbing production flows

- Here, in jobbing production flows, company accepts a contract to produce either one or few units of a product strictly as per specifications given by the customer. The product is produced within a given period and at a fixed cost. This cost is fixed at the time of signing the contract.
- Examples of such jobbing production flows include, services given by repair shops, tailoring shops, manufacturer of special machine tools, etc.

Characteristics of Jobbing Production Flows

1. The Production of Items takes place in Small Lots.

2. Items are Manufactured as per Customer's Specifications.

3. Highly Skilled Labour is needed for Specialized Jobs.

4. There is Disproportionate Manufacturing Cycle Time.

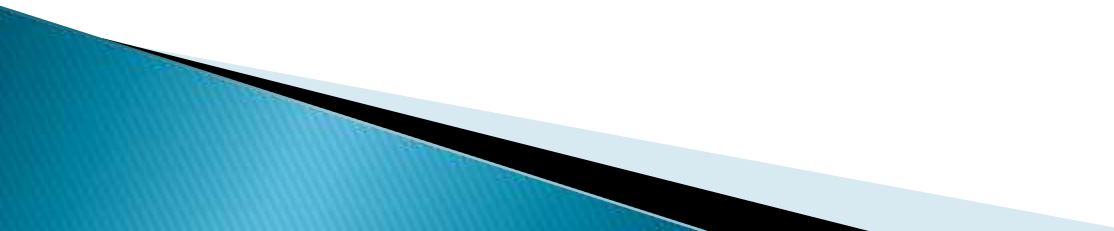
3. Batch production flows

- In batch production flows, the production schedule is decided according to specific orders or are based on the demand forecasts. Here, the production of items takes place in lots or batches. A product is divided into different jobs. All jobs of one batch of production must be completed before starting the next batch of production.
- Examples of batch production flows include, manufacturing of drugs and pharmaceuticals, medium and heavy machineries, etc.

Characteristics of Batch Production Flows

1. Products are **Made and Stocked** until Demand arises.
2. **General Purpose Machines** and Equipments are installed.
3. There is a **Possibility of Large Work-in-Progress.**
4. It **Needs** detailed **Production Planning and Control.**

Continuous Production System

- Continuous means something that operates constantly without any irregularities or frequent halts.
 - In the continuous production system, goods are produced constantly as per demand forecast.
 - Goods are produced on a large scale for stocking and selling.
 - They are not produced on customer's orders. Here, the inputs and outputs are standardized along with the production process and sequence.
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Examples on the continuous production system

- The production system of a food industry is purely based on the demand forecast. Here, a large-scale production of food takes place. It is also a continuous production.
- The production and processing system of a fuel industry is also purely based on, demand forecast. CRUDE OIL and other raw sources are processed continuously on a large scale to yield usable form of fuel and compensate global energy demand.

Features of Continuous Production System

1. Flow of Production is Continuous and not intermittent.

2. Products are Standardized.

3. Products are produced as per Quality Standards.

4. Products are produced in Anticipation of Demand.

5. Standardized routing sheets and schedules are prepared.

Types of Continuous Production System

1. Mass Production Flows
 2. Process Production Flows
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□ 1. Mass production flows

- Here, company produces different types of products on a large-scale and stock them in warehouses until they are demanded in the market.
- The goods are produced either with the help of a single operation or uses a series of operations.
- E.g. of mass production is the production of toothpastes, soaps, pens, etc.

Characteristics of Mass Production Flows

1. Continuous Flow of Production, depends on Market Demand.
2. Here, there is Limited Work-in-Progress.
3. The Supervision is Easy; Few Instructions are Necessary.
4. The Material is Handled mostly by Machines.
5. The Flow of Materials is Continuous with Little or No Queuing.

2. Process production flows

- Here, a single product is produced and stocked in warehouses until it is demanded in the market. The flexibility of these plants is almost zero because only one product can be produced.
- Examples of these plants include, steel, cement, paper, sugar, etc

Characteristics of Process Production Flows

1. Highly Mechanized System for Handling Materials.
2. Low-skilled Labour and Skilled Technicians are required.
3. Very Less Work-in-Progress, since Material Flow is Continuous
4. Production planning and scheduling can be pre-decided.
5. Full production system is designed to produce only one item.

ANY QUERIES ?





Thank You