Continuous System

In this system the items are produced for the stocks and not for specific orders.

Here the inputs are standardized and a standard set of processes and sequence of processes can be adopted. In continuous manufacturing systems each production run manufactures in large lot Sizes and the production process are carried on in a definite sequence of operations in a pre- determined order. First in first out priority rule is followed in the system.

Mass Production

1. Standardization is the fundamental characteristic of this system.
2. Here items are produced in large quantities and much emphasis is not given to consumers orders.
3. Uniform and uninterrupted flow of material is maintained through pre-determined sequence of operations.
4. Specialization and standardization also leads to economies in production

Process Production

This system is analogous to Mass production system with more stress on automation in production process.

1. The volume of production is very high.
2. Used for manufacturing those items whose demand is continuous and high e.g. petroleum products, particular brand of medicines, heavy chemicals industries, plastic industries etc.
3. Single raw material can be transformed into different kinds of product at different stages of the production process e.g. in processing of crude oil in refinery one gets kerosene, gasoline etc. at different stages of production.

Features of continuous type of Manufacturing Systems

1. There must be continuity of demand.
2. The product must be standardized.
3. Material should be per specifications and delivered in time.
4. All operational stages in the process must be balanced.
5. Work must conform to quality standards.
6. Appropriate plant and equipment must be provided.
7. Maintenance must be by anticipation and not by default.
8. Inspection must in line with production.

Advantages

1. Direct labour content is reduced.
2. High accuracy.
3. Work in progress is at a minimum.
4. Storage at different stages of operation not necessary.
5. Reduced material handling.
6. Control process simple.
7. Any weakness in the system is easily located.
8. Material requirements can be accurately planned.
9. Investment in material can be more rapidly translated into income from sales.

Differences between Intermittent and Continuous Process

	Intermittent		Continuous
i.	Same product is not produced continuously.	i.	Same product produced continuously.
ii.	Items produced for order.	ii.	Items produced for stock.
iii.	Production process flexible.	iii.	Process not flexible.
iv.	Equipment used for limited time.	iv.	Regular use of equipment.
v.	Wide range of products can be produced.	v.	Only particular type of product is produced.
vi.	Smaller scale of production.	vi.	Large scale production.
vii.	Planning and control operations complicated and tedious.	vii.	Planning and control operations simple and easy.
viii.	More detailed and too many instructions are required for operations.	viii.	Single set of instructions is sufficient for operations.
ix.	Capital investment may be low.	ix.	Capital investment is high.
x.	Per unit cost of production is high.	x.	Per unit cost of production is low.
xi.	Less security of jobs.	xi.	More security of jobs.
xii.	Functional type of organization.	xii.	Divisional type of organization.
xiii.	Requires staff of high technical skill and ability.	xiii.	Requires more managerial capability and better co-ordination.
xiv.	Control not in line of production.	xiv.	Control in line of production.
xv.	Storage is required at each operation.	xv.	Storage required only at limited locations.
xvi.	Change in location easy.	xvi.	Change in location difficult.
xvii.	Product and the process not standardized.	xvii.	Product and process standardized.
xviii.	Acuracy low.	xviii.	Accuracy high.