

LESSON 10: Production

A- Products

A product can be:

- something natural.
- something made to be sold.
- a service.

Produce refers to agricultural products such as crops or fruit. For example, you can buy fresh products at a farmers' market.

Something that is made is produced or manufactured.

A country or company that produces something is a producer of it.

A company that manufactures something is a maker or manufacturer of manufactured goods.

B-Mass production

I'm Steve and I'm head of car production at a manufacturing plant. 'Plant' sounds more modern than factory or works. On the assembly line, we mass-produce cars. The plant is highly automated: we use a lot of machinery. These machines are expensive to buy but very cost-effective - we don't have to pay them wages! We use industrial robots. These robots are part of the **CAD/CAM** system of computer-assisted design and manufacturing."

Computer **aided design**

Computer **aided manufactory**

BrE: labour-intensive

AmE: labor-intensive

"My name's Paul. I have a little **workshop** where I produce furniture ordered by individual customers. We don't use machinery: the furniture is **hand-made**. Producing furniture like this is a **craft industry**. It is very **labour intensive**; it takes a lot of work to produce each piece. Many people dislike the furniture companies **churn out** in large numbers on their large production lines, so we have a lot of costumers."

C. The production process

Manufacturing takes place in a plant. The process can be capital-intensive (requiring a lot of finance) or labour-intensive (demanding manpower). If the operation is efficient at transforming inputs (materials, labour and information) into finished goods, then there is a high level of productivity. The manufacturing process consists of many stages:

- 1. Planning** this involves trying to bring together customer demand with operational issues of volume, timing, and the purchase of materials. A bill of materials is produced, this is compared with the existing inventory, and any necessary purchases are made.
- 2. Sequencing** A supervisor decides which workstation (machine or employee) will carry out which tasks 2 in which order
- 3. Scheduling:** the supervisor decides when particular tasks should start and finish.
- 4. Dispatching:** the supervisor authorizes asks to begin (giving detailed instructions).
- 5. Loading:** materials or parts are introduced to an operation so that it can begin. A robot loads an assembly line with a new component, an operator loads a machine with raw materials.
- 6. Monitoring:** this involves checking progress, eliminating bottlenecks, and identifying and solving problems.