

# Scales of Production

## Prototype Production

How many of a product are made?

Examples of products made this way:

Typical Tools & Processes used:

Advantages

Disadvantages

## Batch Production

How many of a product are made?

Examples of products made this way:

Typical Tools & Processes used:

Advantages

Disadvantages

## Mass Production

How many of a product are made?

Examples of products made this way:

Typical Tools & Processes used:

Advantages

Disadvantages

## Continuous Production

How many of a product are made?

Examples of products made this way:

Typical Tools & Processes used:

Advantages

Disadvantages

# Scales of Production

Prototype Production	Batch Production	Mass Production	Continuous Production
How many of a product are made?  One only	How many of a product are made?  A specific batch size e.g. 10-1000	How many of a product are made?  Millions	How many of a product are made?  Millions on an ongoing basis
Examples of products made this way:  Bespoke (made to order) Furniture Sculptures	Examples of products made this way:  Handmade furniture High end hifi equipment	Examples of products made this way:  Injection moulded chairs Toys	Examples of products made this way:  Coke cans Drinks bottles Mass market cars
Typical Tools & Processes used:  Normal workshop tools and equipment LOW SETUP COST	Typical Tools & Processes used:  Templates Jigs Formers CAM	Typical Tools & Processes used:  CNC machine Robotics Production lines Conveyors	Typical Tools & Processes used:  ←Same as Mass but even more automated, fewer workers
Advantages  Unique, appealing product No specialist tools or equipment needed	Advantages  Can be repeated easily Relatively inexpensive equipment Consistent quality	Advantages  Low unit cost (cost per product) Fast Low labour cost	Advantages  Extremely low unit cost Extremely fast manufacture time
Disadvantages  High labour cost High unit cost	Disadvantages  Too time consuming for millions to be made this way Equipment takes a bit of time and money to set up if only a few are sold	Disadvantages  High setup cost Complex machinery needs maintenance	Disadvantages  Extremely high setup cost and complexity of system