

# **PRODUCTION TECHNIQUES AND SYSTEMS**

## **Key Revision Facts: GCSE Technology**

Production Techniques and Systems

### **CAD – Computer Aided Design**

CAD is the use of computers to aid in the creation, modification, analysis, or optimization of a design. CAD software is used to increase the designer's productivity, improve the quality of design, improve communications through documentation, and create a manufacturing database. CAD output is often in electronic files for print, machining, or other manufacturing operations.

### **CAM – Computer Aided Manufacture**

CAM is the use of software to control machine tools and related ones in the manufacturing of workpieces. Its primary purpose is to create a faster production process and components with more precise dimensions and material consistency, which in some cases, uses only the required amount of raw material (thus minimizing waste) while simultaneously reducing energy consumption.

### **FMS – Flexible Manufacturing Systems**

A flexible manufacturing system (FMS) is a production method designed to quickly adapt to changes in the product's type and quantity. Machines and computerized systems can be configured to manufacture various parts and handle changing levels of production.

### **JIT – Just In Time**

JIT is an inventory system is a management strategy that aligns raw-material orders from suppliers directly with production schedules.

### **Lean Manufacturing**

Lean manufacturing is a methodology that focuses on minimizing waste within manufacturing systems while simultaneously maximizing productivity.

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## VERSION INFORMATION

Date	Arthur	Comment
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