

QUALITY ASSURANCE IN MANUFACTURING & ASSEMBLY PROCESSES

Identify And Describe Inputs, Outputs, Stages And Quality Indicators Of The Manufacturing, Assembly Or Engineering Process.

US 13162 – Level 1 (10 Credits)

Explain the role of my company within its supply chain.

- The various stages of the process and the inputs, outputs, power sources, control systems and services are correctly identified and described.
- The concept of quality is accurately described and explained.

Identify and describe the various stages of the manufacturing, assembly or engineering process.

- Process may include any manufacturing, assembly or engineering process, e.g. machine a shaft, melt polymer, mix a batch, and assemble a toaster.
- The various stages of the process and the inputs, outputs, power sources, control systems and services are correctly identified and described.
- The concept of quality is accurately described and explained.

Describe each phase of the process.

- Indicate the point at which each part of the process occurs.
- Identify the transformation/change at each point.
- Describe the value adding function.
- The various stages of the process and the inputs, outputs, power sources, control systems and services are correctly identified and described.
- The concept of quality is accurately described and explained.

Identify and describe the inputs and outputs of each phase of the process.

- Inputs include for e.g. raw material, intermediates or stock materials, packaging, heat / energy. Outputs include for e.g. finished product or intermediate product, waste / scrap, heat / energy.

- The various stages of the process and the inputs, outputs, power sources, control systems and services are correctly identified and described.
- The concept of quality is accurately described and explained.

Identify and describe the power sources, control systems and services required by the process.

- Power sources include for e.g. electricity, hydraulics, air, fluids, steam, Control systems include for e.g. physical controls (temperature sensors, pressure gauges, flow meters, laser barcode readers) and quality controls (Statistical Process Control charts, inspection, laboratory testing). Services include for e.g. robotics, electrical power line, lubricant, steam line, air / gas line, mechanical feed, lever (e.g. lathe) lifting equipment, cam, and conveyer.
- The various stages of the process and the inputs, outputs, power sources, control systems and services are correctly identified and described.
- The concept of quality is accurately described and explained.

Define quality in terms of customer requirements and product specifications.

- Recognize internal and external suppliers.
- Recognize internal and external customers and identify their requirements.
- Identify the costs of poor quality and the benefits of good quality.
- Costs and benefits include the time value of money, the cost of rework, etc.
- The various stages of the process and the inputs, outputs, power sources, control systems and services are correctly identified and described.
- The concept of quality is accurately described and explained.
- Describe the implications for the workers, internal and external customers and the company of product and process failures.
- The concept of quality is accurately described and explained.

COURSE DURATION: 2 – 3 DAYS


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