

LEAN MANUFACTURING OPERATIVE

The Manufacturing Industry offers an exciting and varied career both in the UK & abroad providing a broad spectrum of opportunities for people to work in a technically advanced and innovative environment.

Businesses within the sector range from small family run manufacturing operations to large multi-national companies driving the countries growth & wealth.

Course Overview

Core Knowledge & Skills: A Lean Manufacturing Operative will have the following knowledge and understanding of:

- Relevant Health & Safety policies and procedures.
- Environmental factors and procedures such as ISO regulation.
- Individual Production roles & responsibilities.
- Understand and demonstrate Lean Manufacturing Operation process
- Demonstrate and understand Quality Control process (e.g ISO 9002)
- Demonstrate and show Problem Solving abilities with the ability to resolve issues found.
- Generate ideas and contribute to Continuous Improvement within all aspects of the business.
- Demonstrate communication skills and share the information effectively via a variety of methods.
- Maintains and always monitors the work site efficiently and effectively.

Course code
AS2 LEAN

Award on successful completion
Apprenticeship Standard
LEAN Manufacturing
Operative Level 2

Study type
Onsite Delivery

Block Release for Maths
& English if required

Level
2

Start date
Rolling Start through the
year

Duration
18 months

Fees
£6000 (16-18 years old =
fully funded by government.
19+ years old 5% (£300)
employer contribution to
training)

Location
Onsite

Core Behaviours Requirements:

A Lean Manufacturing Operative requires the behaviours that will ensure they are:

- Punctual, reliable and takes responsibility for their own actions.
- Show respect for others, having regard for diversity and equality.
- Respond positively to change in the working environment.
- Integrates within the team and supports others.
- Can work independently and effectively in challenging situations.
- Maintains quality of work under pressure.
- An open and honest communicator.
- Listens to other people's opinions.
- A positive and respectful attitude.
- Follows instructions and guidance and demonstrates attention to detail.
- Seeks opportunities to develop and adapt to different situations, environments or technologies.

In addition to the core knowledge and skills Lean Manufacturing Operatives must complete ONE of the following job roles options:

Job role option 1: Lean Manufacturing Operatives working within a Production/Assembly role will have:

Knowledge of:

- The importance of following the specified assembly sequence and procedure at all times.
- How to check the quality of the assembly, against the required quality standards and what tools and equipment are used.
- The procedure for positioning, aligning and securing component parts during the assembly operations.
- Where to obtain the necessary job instructions, operating procedures and assembly specifications that are used, and how to interpret them.
- How to identify and resolve current and potential production/assembly problems within the limits of their responsibility.

Skills that will require them to:

- Check components for damage and that they are in a usable condition.
- Correctly position, align and secure the components.
- Secure the components in position using the specified fastening device/method
- Obtain and follow the correct Job instructions/Standard operating procedures production/assembly specifications in accordance with time constraints and the roles and responsibilities identified for the production/assembly activity.
- Produce components which comply with the specification and quality requirements.
- Carryout quality checks on component parts and completed assemblies and deal with quality concerns and defects in line with their responsibility.

Job role option 2: Manufacturing Operatives working within an Inspection/Quality assurance role will have:

Knowledge of:

- The correct methods of handling and storing the samples.
- Where to obtain the necessary job instructions, inspection/quality procedures and product specifications that are used, and how to interpret them.
- How to identify which samples, products and materials do not meet the quality requirements.
- Procedures for the handling and segregation of defect components.
- Specific safe working practices and environmental regulations that need to be observed.

Skills that will require them to:

- Obtain and follow the correct Job instructions, inspection/quality procedures and product specifications in accordance with time constraints and the roles and responsibilities identified for the inspection/quality assurance activity.
- Collect production samples at the required frequency in accordance with inspection specification and operating procedures.
- Carryout inspection and testing activities using the specified methods and equipment.
- Prepare, Handle, transfer and store samples safely and correctly in accordance with quality control procedures.
- Accurately interpret the data/results gained from the inspection and testing procedures being used.
- Record and report inspection findings to relevant person.

Job role option 3: Manufacturing Operatives working within a Logistics/Material handling role will be required to:

Knowledge of:

- The procedures and documentation required to allow the transfer of materials to take place.
- Where to obtain the necessary job instructions, specification details and specific transfer/handling procedures that are used, and how to interpret them.
- The procedures for the movement and transferring of materials to the correct location within given timelines.
- What tools and equipment are used for the material movement operations undertaken and how to check that they are in a safe and usable condition.
- The lifting and handling procedures, and load bearing capacities of the equipment being used.

Skills that will require them to:

- Safely move materials to the correct location using the relevant equipment.
- Obtain and follow the correct Job instructions, specification details and specific transfer/handling procedures in accordance with time constraints and the roles and responsibilities identified for the logistic/material handling activity.
- Move materials using the appropriate procedures, ensuring the materials are correct, safely loaded and secure.
- Check materials selected to be moved are in line with job requirements.
- Carryout quality checks on materials that are to be moved and deal with quality concerns and damage in line with their responsibility.
- Return equipment to its correct location on completion of the activities and leave it in a safe and usable condition.

Job role option 4: Manufacturing Operatives working within a Production processing/finishing role will have:

Knowledge of:

- What tools and equipment are used for the processing/finishing operations undertaken and how to check that they are in a safe and usable condition.
- Where to obtain the necessary job instructions, processing/finishing procedures and equipment operating procedures that are used, and how to interpret them.
- Specific safe working practices, processing/finishing procedures and environmental regulations that need to be observed.
- The procedure for the recovery or restart of manufacturing due to quality or process concern.
- The importance of following the pre-determined sequence of events in the processing/finishing operation and the consequences of not following them.

Skills that will require them to:

- Perform one processing/finishing operation method e.g. hand processing, manually operated machine processing, fully automated machine processing, combined processing.
- Obtain and follow the correct Job instructions, processing/finishing procedures and equipment operating procedures in accordance with time constraints and the roles and responsibilities identified for the processing/finishing activity.
- Perform the processing/finishing operation according to instructions and safe operating procedures.
- Monitor and control the processing/finishing operation.
- Carryout quality checks on component parts and completed assemblies and deal with quality concerns and defects in line with their responsibility.
- Produce processed/finished products which comply with processing specification.

Entry requirements

Maths & English GCSE Grade 3 and above.

Methods of assessment

Observation with Question & Answer:

This is a 2-hour observation by the end point assessing organisation.

The following activities **MUST** be observed during the observation:

- Using safe working practices
- Reading and interpreting instructions
- Tooling Changeover/Process & equipment clean down/Equipment maintenance e.g. TPM (Total Productive Maintenance)
- Completing relevant records
- Setting up and running of equipment in accordance with company specification and standards

Plus, specific tasks relating to your job role.

Professional Discussion

This assessment will take the form of a professional discussion, which must be appropriately structured to draw out the best of the apprentice's competence and excellence and cover the Knowledge, Skill & Behaviour's relevant to this assessment method.

It will involve the questions that will focus on the knowledge, skills and behaviours relevant to this assessment method which will take into account the supporting evidence in the portfolio and will last for approximately 40 minutes.