



## Engineering Manufacture Intermediate Apprenticeship Operator and Semi Skilled Level 2 – Job Description

(Job Code and Level: MFGASS001)

### Definition

Learning to manufacture or assemble a range of components or vehicles into finished goods across a production line ensuring required standards of quality are met. This may be part of an apprenticeship scheme which will lead to a qualification or company standard approval process.

Manufacturing is defined as: Produces goods and parts from raw materials using such processes as welding; sewing; pressing; machining and painting. This may include some setting up of machinery and basic programming.

Assembly is defined as: Puts together various goods and parts to make/create a part or vehicle.

### Overall Purpose of the Role:

To acquire the skills, knowledge and competence to operate at semi-skilled or qualified operator status to carry out a range of engineering and manufacturing processes to include Fabrication, Welding, Materials Processing and Finishing.

### Duration:

Typically the duration of this apprenticeship is 12 to 24 months. This duration may be reduced for a candidate with previous relevant experience and/or someone already part qualified.

### Key Responsibilities:

#### General and Task Management:

- Basic machine operation, manual or CNC, covering lathes, milling, grinding, cutting and punching
- Producing mechanical or electro-mechanical assemblies
- Remove, repair, replace and/or test components in an engineering environment

- Variety of welding techniques, for sheet metal and/or pipe work
- Carry out cleaning and basic maintenance of machines
- Assemble goods on a production line and finish products such as applying protective coatings and bonding

### **Self Management:**

Modern manufacturing organisations require their apprentices to have a set of behaviours that will ensure success both in their role and in the overall company objectives. The required behaviours are:

- Safety mind-set: manage self and support others to maintain and contribute to a safe working environment in line with local procedures and National and European requirements.
- Strong work ethic: motivated, proactive, committed
- Dependability and responsibility: punctual and reliable
- Positive attitude: constructive thinking, motivated to succeed
- Team player: able to work and interact effectively within a team and committed to equality and diversity
- Effective communication: spoken, listening, body language, presentation, written
- Adaptability: able to adjust to change
- Honesty and integrity: truthful, sincere and ethical
- Self-motivation: self-starter, able to make appropriate decisions and lead their own professional development
- Personal commitment: prepared to make a personal commitment to the industry

### **Skills and Attributes:**

- Using and interpreting engineering information
- Applied electrical and mechanical science and mathematics
- A choice of CAD or machining
- Understand the typical problems that can occur during the machining process and how they can be resolved
- Determine the most efficient and effective approach to machine the component using a range of tools, machining process and techniques
- Comply with statutory, quality, organisational and health and safety regulations while carrying out manufacturing techniques
- Obtain, check and use the appropriate documentation (such as job instructions, drawings, quality control documentation)
- Obtain, check and use the appropriate materials, tools, equipment and consumables required
- Select and set up the correct tooling and work holding devices
- Set and adjust the machine operating parameters to produce the work pieces to the required specification. This will involve setting feeds and speeds for roughing and finishing operations

- Selecting and using a range of measuring and testing equipment to check components are to the required quality and accuracy
- Team working

### **Qualifications and Experience Levels:**

- Individual employers will set the selection criteria for their Apprenticeships.
- In order to optimise success, candidates will typically have 4 GCSEs level D-G, Key Skills Level 1 or NVQ Level 2 in Mathematics, English and ICT.
- No previous experience required
- Full training provided

After a period of foundation skills and technical knowledge development all apprentices will be required to achieve the following qualifications:

- Level 2 NVQ Diploma in Engineering

### **Further Information:**

<http://www.tcat.ac.uk/wp-content/uploads/2013/11/New-eng-Apprenticeship-Int-L2.pdf>

### **Example roles this job description may cover:**

- Trainee Operator
- Trainee Production Operator
- Trainee Assembly Operator
- Trainee Process Operator