

# METALS MANUFACTURING PROCESS OPERATIVE

## LEVEL 2 APPRENTICESHIP

Partnering with the Aluminium Federation, our Level 2 Metals Manufacturing Process Operative (MMPO) qualification is an established apprenticeship standard developed specifically to meet the needs of the UK Metals Sector.

Our programme will provide learners with industry specific knowledge and skills that will help them achieve a rewarding career in manufacturing. This foundation qualification will encourage employees to progress within the organisation and take on greater responsibility.

**Duration:** 18 months (15 months practical; 3 months end point assessment)

**Entry requirements:** Entry requirements will be set by the employer.

**Functional skills:** Apprentices are required to have level 1 English and Maths prior to taking the end-point assessment. Those without, will be given the opportunity to achieve both grades during the practical period of their programme.

The apprentice will achieve the following:

- Science Manufacturing Process Operative Standard - Level 2
- Aluminium Light - CPD Accredited Course
- Maths & English Functional Skills - Level 1





# Module Highlights

Module	Summary
Aluminium light	Introduces aluminium as a strategic metal. It identifies each of the holistic properties of aluminium, explains their benefits and illustrates their applications within the industry and the basis of global demand.
Production of aluminium and global demands	This outlines the sources of aluminium, how it is refined and produced, its growth relationship with the availability of electricity. It also introduces the low carbon recyclability of aluminium, that differentiates it from other materials. Essential to understand how supply is matching demand.
How to operate industry plant and equipment	Process/manufacture, assemble and finish industry component parts or finished products and materials in a science manufacturing environment.
Process manufacturing improvement techniques	5S methodology and good house keeping improvements and their application in a metals manufacturing environment.
Health & safety	The hazards and risks associated with manufacturing plant operation and environment and the use of correct personal protective equipment (PPE) and safety equipment to ensure safe plant operation and safety in the workplace.
Manufacturing start-up and shut-down procedures	Start-up manufacturing machine based or hand-based processes, using correct equipment, following process operating instructions. Carry out assembly and finishing operations for a machine or hand-based process operation in manufacturing process.
Elastic & plastic behaviour of metals	Essential to understanding how metals behave under load, and the applicability of the significant characteristic to product design. How these characteristics are determined/proved by tensile and/or hardness testing and an explanation into the significance of different test certificates.
Heat treatment of metals	In simple easily understood terms this explains the difference between non-heat treatable alloys and heat treatable alloys. Then how non heat treatable alloys are strain hardened and heat treatable alloys age hardened. Understanding this module completes the understanding required to correct select alloys for applications.
Regulations and quality	How to comply with the health, safety and environmental regulations. How to comply and meet the requirements of their company quality standards.





## ABOUT US

### ALUMINIUM FEDERATION

The Voice of the UK Aluminium Industry

The Aluminium Federation represents businesses who process, trade and work with aluminium – we foster innovation, promote best practice, develop skills and champion member interests. From training and networking to research, advocacy, lobbying and outreach, we help our members solve problems, capitalise on opportunities and boost their competitiveness.

### YELLOW TREE

Our trainers and assessors recognise that there is no 'one-size-fits-all' when it comes to training and development. We recognise that people learn and gain knowledge in different ways. Our designated Skills Development Coach will work with you to create a bespoke development programme that meets the need of your business.

The programme will recognise your employee's development needs allowing them to work safely and effectively in a modern production environment.

Our committed and flexible Skills Development Team, will deliver job focused training, that will develop your people allowing them to progress and achieve their potential. We use peer group support sessions, one-to-one coaching and our revolutionary online learning platform.

