

APPRENTICESHIP STANDARD: MINERAL PROCESSING MOBILE AND STATIC PLANT OPERATOR

Occupation: The main duties and tasks of mineral processing mobile and static plant operators are to operate either fixed or mobile heavy plant equipment efficiently and safely complying with current legislation, company policies and procedures. Producing high quality products for a diverse range of end uses and related manufacture such as construction products, ready mixed concrete, mortar, asphalt, cement, precast or prestressed concrete products. Duties include carrying out preventative and routine maintenance inspections of equipment and housekeeping. Furthermore, they are expected to report plant defects, conduct risk assessments, work alone and in a team, demonstrate a good product knowledge and a strong discipline towards safety, health and environment. It is also the responsibility of the mineral processing plant operator to report stock availability and quality.

Plant machinery is specialist equipment (potential value up to 2 million pounds) that can fall into two main categories with various associated job roles.

Static plant: Concrete batcher, asphalt plant operator, mortar plant operator, crushing and screening plant operator, washing plant operator precast & prestressed concrete production operative, etc.

Mobile plant: Mobile plant operators required to operate plant equipment such as quarry dumpers, articulated dumpers, 360 excavators, telehandlers, loading shovels and dozers, etc.

Apprentices will be expected to become competent at operating one item of plant during the apprenticeship.

Entry requirements: As a minimum they must achieve level 1 English and maths and take the test for level 2 English and maths. Individual employers will set any additional entry requirements for this apprenticeship.

Sub sectors that use this standard	Extractive operations, quarrying, mining, waste operations, precast & prestressed concrete, dimension stone operations, delving, recycling
Duration	18 to 24 months (Minimum 12 months)
Apprenticeship Level	Level 2

Core competencies – knowledge, skills and behaviours

KNOWLEDGE	What is required
Operations	<ul style="list-style-type: none"> Demonstrate understanding of the operational and technical aspects of the fixed or mobile plant equipment. Demonstrate understanding of all the hazards and risks of operating fixed or mobile plant equipment.
Health and safety	<ul style="list-style-type: none"> Explain the importance of reporting and evaluation of all potential work hazards and site-specific hazards, including near-misses and dangerous occurrences. Demonstrate the identification of risks of activities using approved assessment processes and encourage other employees to demonstrate safety-conscious behaviours. Demonstrate understanding of risk assessments, legislation, regulations, safe systems of work, and limits of responsibility.
Sustainability	<ul style="list-style-type: none"> Explain how to evaluate the environmental impact of operating mobile and static equipment. Explain the importance of minimising fuel/waste and environmental impact of work activities.
Effective communications	<ul style="list-style-type: none"> Explain the reporting lines in both day-to-day and emergency situations. Explain how to communicate effectively and how to develop and maintain effective working relationships.
Product knowledge	<ul style="list-style-type: none"> Demonstrate understanding of the products and product specifications required and identify changes or issues with quality or stock levels when they arise.
SKILLS	What is required

Operations	<ul style="list-style-type: none"> • Be able to conduct pre-start and post operation checks of plant equipment. • Be able to operate fixed or mobile plant equipment to the required company standards, safe systems of work and current regulations. • Be able to operate fixed or mobile plant equipment in an effective and efficient manner.
Sustainability	<ul style="list-style-type: none"> • Be able to assess, identify and report any environmental impact of work undertaken. • Minimise the demand for fossil fuels and natural resources wherever possible.
Maintenance techniques	<ul style="list-style-type: none"> • Be able to conduct routine and reactive maintenance in accordance with company policy, procedures and manufacturer specifications. • Be able to use materials, fluids and lubricants required for everyday operation and maintenance in accordance with company policy, procedures, control of Substances Hazardous to Health data (COSHH) and manufacturer specifications.
Planning and organising Work	<ul style="list-style-type: none"> • Be able to plan and complete required tasks in line with company key performance indicators, measures and record progress against them. • Be able to monitor stocks of materials and products required, and report issues with these in line with company policy and procedures.
Products	<ul style="list-style-type: none"> • Be able to produce a consistent high quality end product in line with customer and company specifications, be they aggregates, ready mixed concrete, cement, mortar, asphalt, cement, precast or prestressed concrete products. • Be able to monitor end product quality and stocks and report issues in line with company policy and procedures.
BEHAVIOURS	What is required
Professional judgement	<ul style="list-style-type: none"> • Be able to work within own level of competence and know when to seek advice from colleagues.
Commitment to code of ethics	<ul style="list-style-type: none"> • Demonstrate working within the company rules, regulations and maintaining professional competence.
Continuing professional development (CPD)	<ul style="list-style-type: none"> • Be able to identify own development needs and take action to meet those needs. • Be able to use own knowledge and expertise to help others.
Commitment to equality and diversity	<ul style="list-style-type: none"> • Explain the importance of equality and diversity and manage/challenge others to meet the requirements of fairness at work.
Communicate Effectively	<ul style="list-style-type: none"> • Explain the importance of communicating with operational team effectively ensuring information is passed clearly and promptly.
Accepting responsibility	<ul style="list-style-type: none"> • Be able to take responsibility for own behaviours, actions and standards of work.
Health, safety & environment	<ul style="list-style-type: none"> • Be able to comply with risk assessments, safe systems of work, company safety policy and procedures at all times. • Explain the importance of promoting a positive health, safety and environmental culture through situational awareness and by personal example, taking appropriate actions if others are acting unsafely.

Qualifications: To demonstrate competence the appropriate qualifications must be achieved during the apprenticeship as they are a regulatory requirement within the sector.

For Mobile plant operations:

MPQC Level 2 Diploma in Plant Operations Extractives.

For Static plant operations (extractive operations):

MPQC Level 2 Diploma in Processing Operations for the Extractive and Minerals Processing Industries

For Static plant operations (Precast & Prestressed operations)

MPQC Level 2 Diploma in Precast and Prestressed Concrete Operations

For Static plant operations (Dimension stone operations)

MPQC Level 2 Certificate In Dimension Stone Operations

For Marine Dredging static plant operations

MPQC Level 2 Diploma In Marine Aggregate Extraction

Review date: This apprenticeship standard should be reviewed three years after approval of the standard and every three years thereafter.